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INSTITUTE FOR PUBLIC HEALTH

NHMS MCH

NATIONAL HEALTH AND MORBIDITY SURVEY 2022

MATERNAL AND CHILD HEALTH



MALAYSIA

NATIONAL HEALTH AND MORBIDITY SURVEY 2022

**MATERNAL AND CHILD HEALTH
MALAYSIA**

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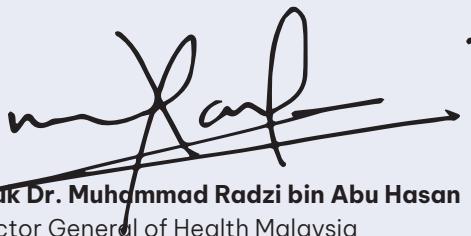
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MESSAGE FROM THE DIRECTOR GENERAL OF HEALTH MALAYSIA

The National Health and Morbidity Survey (NHMS) is a national population-based survey conducted by the Institute for Public Health (IPH) at regular intervals since 1986. In 2016, the NHMS: Maternal and Child Health (MCH) was first carried out, focusing on a range of MCH-related health indicators. With the aim of periodic monitoring, a repeated cycle for the NHMS: MCH was planned in 2021, but it was delayed for a year to 2022 due to the COVID-19 pandemic.

I am confident that the findings from this survey will aid policymakers, program managers and stakeholders, thus improving MCH status and continuing to achieve the Sustainable Development Goals' (SDG) targets.

Understanding the tough challenges in conducting this nationwide survey during COVID-19 pandemic, I wish to congratulate the research team of the Institute for Public Health, with the support of all the State Health Departments for the successful completion of this crucial survey. My sincere appreciation goes to all the survey respondents who willingly dedicated their time to participate in the survey, contributing towards a healthier and better Malaysia.

A handwritten signature in black ink, appearing to read "Xan" or "Xan" followed by a stylized surname. A horizontal line with an arrow points to the right from the end of the signature.

Datuk Dr. Muhammad Radzi bin Abu Hasan
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Last but not least, our sincere appreciation goes to all the respondents who participated in the survey and gave their time and information. We hope that these valuable findings will help program leaders and policymakers enhance maternal and child health services and other services for citizens of Malaysia.

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ACRONYMS AND ABBREVIATIONS

ARI	Acute respiratory infection
CEMD	Confidential Enquiry into Maternal Death
CFS	Central Field Supervisor
CH	Child health
CPR	Contraceptive prevalence rate
CS	Caesarean section
DBP	Diastolic blood pressure
EB	Enumeration blocks
EPDS	Edinburgh Postnatal Depression Scale
FPG	Fasting plasma glucose
FS	Field Supervisor
GDM	Gestational Diabetes Mellitus
HB	Haemoglobin
ICT	Information and computer technology
IUD	Intrauterine device
IPV	Intimate partner violence
MC	Maternal care
MCH	Maternal and Child Health
MICS	Multiple Indicator Cluster Survey
MMR	Maternal mortality ratio
MOH	Ministry of Health Malaysia
NHMS	National Health and Morbidity Survey
NIP	National Immunisation Program
LO	Liaison Officers
LQ	Living quarters
PACV	Parent Attitudes about Childhood Vaccines
PPC	Pre-pregnancy care
PSU	Primary sampling unit
SAQ	Self-administered questionnaire
SBP	Systolic blood pressure
SDG	Sustainable Development Goals
SSU	Secondary sampling unit
SVD	Spontaneous vaginal delivery
WHO	World Health Organisation
WR	Women reproductive
2-HPP	2-hour postprandial

EXECUTIVE SUMMARY

In 2022, the Institute for Public Health, Ministry of Health Malaysia conducted the second national survey on maternal and child health (MCH) also known as the NHMS 2022: MCH. The survey aimed to provide the latest health status of women, mothers and children in Malaysia. This survey also tracked the nation's progress in fulfilling its international obligations, such as the Sustainable Development Goals (SDG) and Universal Health Coverage (UHC) indicators.

The survey involved a total of 1029 Enumeration Blocks (EB) consisting of 13,832 Living Quarters (LQ). A total of 25,413 respondents were interviewed with an overall response rate of 74.9%. The respondents were fairly distributed by states, sexes and age group.

The study revealed a high prevalence of adequate antenatal care visits (98.1%) and safe delivery (98.4%). Approximately 77.0% of mothers attended their first antenatal care during the first trimester, and 96.9% did not miss or delay antenatal care visits during the COVID-19 pandemic. However, the prevalence of postnatal depression remained high at 10.4%.

The prevalence of complete primary vaccination coverage among children aged 12–23 months reduced from 95.3% in NHMS 2016 to 87.1% in NHMS 2022, while the current vaccine hesitancy prevalence was 4.9%. A marked reduction was seen in child morbidities for the history of diarrhoea in the past two weeks, from 4.4% in NHMS 2016 to 3.1% in this NHMS 2022.

In terms of nutritional status, the prevalence of early initiation of breastfeeding within one hour was 64.3%, which has been plateauing since 2006. However, the prevalence of continuing breastfeeding until two years old has increased from 39.4% in NHMS 2016 to 50.6%. The prevalence of stunting among children aged 0–59 months remained high at 21.2%, and the prevalence of underweight and wasting has been steadily increasing since 2015, with the current prevalence at 15.3% and 10.1%, respectively. Meanwhile, the prevalence of anaemia (6–59 months) was 46.5%.

The prevalence of developmental delay among children aged 6–59 months was 7.4%, with the social skills development component showing the highest prevalence of 4.1%. The child disciplinary method via physical punishment was markedly reduced from

55.0% in NHMS 2016 to 40.6% in this study. In terms of oral health, 60.8% of children under five years have no experience being examined or treated at a dental clinic.

Regarding women's reproductive health (15–49 years), the contraceptive prevalence rate (CPR) was 42.8%, and the prevalence of using modern contraceptive methods was 34.5%. The prevalence of unmet needs for family planning was 26.7%, while, the prevalence of demand for family planning satisfied with modern contraception methods was 51.6%. The prevalence of ever had miscarriage was 15.9%, while the prevalence of intimate partner violence for the past one year was 4.4%.

Overall, the NHMS 2022: MCH reported improvements in antenatal care indicators despite the COVID-19 pandemic. However, some indicators, such as primary vaccination coverage, child nutritional status (e.g., stunting), postnatal depression and unmet need for family planning were highlighted as the current concerns. This technical report also highlighted the up-to-date data for the Sustainable Development Goals (SDG) and Universal Health Coverage (UHC) indicators with three additional new indicators, namely intimate partner violence, contraception, and anaemia.

Based on this report, recommendations are made:

1. To expand vaccination records via digital health such as the National Immunisation Program (NIP) Vaccine Administration System at all levels, including the private sector. The system, was started in June 2022 and will function to 'trace and track' once fully functioning.
2. To enhance multi-agency health promotion initiatives via educating and encouraging caregivers to provide a variety of healthy foods to children starting at six months old, attend routine health screening, and monitor children's growth at home.
3. To establish integrated mental health services for women during the perinatal period, including exploring perinatal mental health screening programmes.
4. To expand the availability and affordability of modern contraceptives by focusing on long-acting methods such as implants.

INTRODUCTION AND METHODOLOGY



INTRODUCTION AND METHODOLOGY

1.1 INTRODUCTION

1.1.1 Background of the Survey

The National Health and Morbidity Survey (NHMS) is a nationwide population survey that has been implemented since 1986. It is a yearly survey with a 4-year cycle since 2011. For every consecutive year, NHMS focuses on a different area such as non-communicable diseases (NHMS 2011, 2015, 2019), maternal and child health (MCH) (NHMS 2016, 2022), adolescent health (NHMS 2012, 2017, 2022), elderly health (NHMS 2018) and communicable diseases (NHMS 2020). Its objective is to give current information on the burden of diseases, health problems, health needs and health expenditure in Malaysia. The current NHMS 2022 has once again focus on maternal and child health for the second time.

Since gaining independence, the MOH has consistently prioritised MCH services, leading to remarkable progress in this area from the 1970s to the present. For instance, Malaysia's under-5 years old mortality rate has significantly decreased from 55.0 to 7.3 per 1000 live births^[1]. However, despite these achievements, there are still gaps in the current healthcare delivery system. One such concern is the plateauing in Malaysia's maternal mortality ratio (MMR) since 2000^[1]. Additionally, the sporadic occurrence of vaccine-preventable diseases (VPD) particularly measles, and the presence of vaccine hesitancy further necessitate an evaluation of the current trend in the primary vaccination coverage^[2].

There are also alarming concerns regarding women's reproductive health issues, such as contraception, miscarriage, and intimate partner violence^[3-4]. Therefore, it is crucial to produce the baseline national data for policymakers. As a result, NHMS 2022: MCH was a timely endeavour to examine the current scenario concerning maternal health, child health and women's reproductive health. The findings are expected to contribute to evidence-based policymaking for better planning and optimisation of health resources, especially in maternal and child health and nutrition services.

1.1.2 Rationale of the Survey

The second MCH survey is necessary for evidence-based policymaking. It also tracks the national achievement of international obligations, such as the Sustainable Developmental Goals (SDG) and Universal Health Coverage (UHC) indicators depicted in **Figure 1**. Also, this second MCH survey is essential for data comparison with the NHMS 2016 data. In short, NHMS 2022: MCH strives to provide a thorough understanding of the main concerns in MCH, evaluating of the current programme and policies, and justifying the scopes of the following cycle of NHMS.

1.1.3 Scopes of the Survey

NHMS 2022: MCH focuses on topics related to maternal and child health. Stakeholders and programme managers from all the Divisions within the MOH have provided suggestions and feedback. Several discussions and engagements with stakeholders have taken place to prioritise and shortlist the suggestions, which were made based on the NHMS survey criteria. Finally, the final scopes were approved by the NHMS Steering Committee, chaired by the Director-General of Health. The NHMS 2022: MCH has included the following scopes as illustrated in **Figure 2**.

Maternal Care: Women of reproductive age (15 -49 years) with last child birth two years ago
SDG 3.8.1: Coverage of essential health services (tracer intervention) for reproductive, maternal, newborn & child health
SDG 3.1.2: Proportion of births attended by skilled health personnel
UHC: Proportion of deliveries in health facilities
Child Health (Under five years old)
SDG 3.b.1: Proportion of the target population covered by all vaccines included in their national program
SDG 2.2.1: Prevalence of stunting among children under five years of age
SDG 2.2.2: Prevalence of malnutrition among children under five years of age by types (wasting & overweight)
SDG 4.2.1: Proportion of children under five years of age who are developmentally on track in health, learning, and psychosocial well-being
SDG 16.2.1: Proportion of children who experienced any physical punishment and/ or psychological aggression by caregivers in the past months
UHC: Immunisation coverage rate for DPT3 (diphtheria tetanus–pertussis)
UHC: Immunisation coverage rate for measles
UHC: Percentage of children under five years of age with suspected pneumonia who were taken to a health facility
Women of Reproductive Age (15 – 49 years old)
SDG 3.7.1: Proportion of women of reproductive age (15 – 49 years) who have their need for family planning satisfied with modern methods
SDG 5.2.1: Proportion of ever-partnered women and girls aged 15 years and older who have experienced physical, sexual, or psychological violence by a current or former intimate partner, in the previous 12 months by the form of violence and by age

Figure 1: SDG and UHC Indicators measured in the NHMS 2022: MCH

Module HH: Household	<ul style="list-style-type: none"> Sociodemographic Water, sanitation and waste management
Module MC: Maternal Care (Mother with last child under the age of two)	<ul style="list-style-type: none"> Antenatal care Pregnancy comorbidities Pre-pregnancy care Intrapartum care Postnatal care
Module CH: Child Health (Children under the age of five)	<ul style="list-style-type: none"> Infant feeding practice Oral health among children Care of illness Child discipline Vaccine hesitancy
Module N: Assessment by Nurse (Children under the age of five)	<ul style="list-style-type: none"> Anthropometry measurement Child development Vaccination coverage Anaemia
Module WR: Women of Reproductive Age (15 – 49 years)	<ul style="list-style-type: none"> Contraception Miscarriage & abortion Intimate partner violence

Figure 2: Summary of scopes for NHMS 2022: MCH

1.1.4 Survey Objectives

1.1.4(a) General Objective

This survey aims to provide health-related community-based data and information to support the MOH in reviewing health priorities, developing programme strategies and activities, and planning for allocating resources for MCH services.

1.1.4(b) Specific Objectives

To assess the health of women in reproductive age groups (15–49 years) in relation to:

1. Antenatal care: antenatal care visits, adolescent pregnancy, pregnancy comorbidity and pre-pregnancy care
2. Intrapartum care: mode of delivery, place of delivery and birth attendants
3. Postnatal care: postnatal home visit and postnatal depression
4. Women's reproductive health: contraception, miscarriage, abortion and intimate partner violence (IPV).

To assess the health status of the children in relation to:

1. Vaccination coverage and vaccine hesitancy
2. Nutritional status including anthropometry assessment, infant and children feeding practices
3. Child development
4. Child morbidities: acute respiratory infections (ARI) and diarrhoea
5. Child discipline
6. Child oral health.

1.2 METHODOLOGY

1.2.1 Target Population and Sampling Frame

The NHMS 2022: MCH targets women of reproductive age 15 to 49 years, mothers (15–49 years) with last child under age of two, children under the age of five living in non-institutionalised quarters in Malaysia. The survey's sampling frame is derived from the National Population and Housing Census 2020, dividing Malaysia into Enumeration Blocks (EBs) with 80–120 living quarters each, encompassing an average population of 500–600 people. To identify eligible living quarters (LQ) with children aged 0–59 months, listing activities were conducted following the random selection of EBs by the Department of Statistics Malaysia (DOSM).

1.2.3 Sample Size Determination

The sample size required is based on variables' lowest expected prevalence, confidence level, and the desired margin of error. The sample size was calculated using the Sample Size Calculation Formula for Simple Random Sampling:

$$n_{SRS} \geq \frac{z^2 P(1-P)}{e^2}$$

The sample size calculation was based on the following criteria:

1. The variance of the proportion of the variable of interest (based on NHMS 2016 or other literatures)
2. The margin of error (e) was between 0.01 to 0.05
3. Type 1 error (5%) or Confidence Interval of 95%

To ensure optimum sample size, a few adjustments were made:

1. Adjusted n(SRS) for the total number of the target population (N) (based on estimated 2020 population)

$$n \geq \frac{n_{SRS}}{1 + \frac{n_{SRS}}{N}}$$

2. Adjusted for the design effect (deff) (based on the previous survey [5])

$$n(\text{complex}) = n * \text{deff}$$

3. Adjusted the n(complex) taking into account expected non-response rates of 20% [5]

$$n(\text{adj}) = n(\text{complex}) * (1 + \text{nonresponse rate})$$

4. The sample size was then adjusted according to the number of strata (14 strata for primary vaccination coverage and single strata for other scopes)

$$n(\text{final}) = n(\text{adj}) * 14$$

After adjusting for an estimated non-response of 20% and a design effect of 2.0^[5], the total sample size required was 14,000 LQ (1000, LQ per state).

1.2.4 Sampling Design

This survey used a two-stage stratified random sampling design encompassing all states and federal territories in Malaysia to ensure national representation. The primary stratum included all states and federal territories, while the secondary stratum represented urban and rural areas. Enumeration Blocks (EBs) were the primary sampling units (PSUs), and living quarters (LQs) within each selected EB were the secondary sampling units (SSUs). DOSM randomly selected PSUs based on sample size. Two sampling designs were implemented for two target populations:

1. Sampling Design 1 for children 0 – 59 months and mother (15 – 49 years) with last child under age two (MCH Modules)
2. Sampling Design 2 for Women of Reproductive Age (15 – 49 years)

Sampling Design 1 (MCH Modules):

Sampling Design 1 was for the MCH Modules, which consist of Household (HH), Maternal Care (MC), Child Health (CH) and Assessment by Nurses (N). The MCH modules required listing to identify the eligible LQ (**refer to subtopic 1.5.1**). Eligible LQ for MCH Modules is defined as LQ with children aged below five years old (0 – 59 months). The required sample size was 14,000 LQ (1,000 LQ per state) for 1,029 EB.

Sampling Design 2 (Women of Reproductive Age Module): Sampling Design 2 focused on the Women of Reproductive Age (WR) module, which was a subsample of the MCH modules. For this module, 700 Enumeration Blocks (EBs) out of 1,029 EBs with a total of 2,800 living quarters (LQs) were randomly selected. An eligible LQ for the WR module was defined as one containing at least one woman aged 15 – 49. Only one respondent per LQ was interviewed, and if multiple eligible women were present, the respondent was randomly selected using the Kish method^[6].

1.3 ETHICS APPROVAL

The Medical Research and Ethics Committee of the Ministry of Health Malaysia approved the NHMS 2022: MCH methodology, protocol, and procedures. The survey was registered with the National Medical Research Registry as NMRR-20-959-53329.

1.3.1 Consent and Assent

Respondents were briefed of the purpose, process, and requirements of the survey prior to each interview. Details of the consent and assent form are as follows:

- Participant Information Sheet: signed by parents or guardian (**Appendix 6A**)
- Respondents under age five: signed by the parents or guardian (**Appendix 6B**)
- Respondents aged 15 to 17 years old: assent form signed by the parents or guardian (**Appendix 6C**)

1.4 QUESTIONNAIRE AND SURVEY INSTRUMENTS

This survey used a set of structured validated questionnaires administered via face-to-face interviews (using a mobile device) and a self-administered questionnaire (SAQ). Questionnaires in hardcopy were prepared as a backup in case of technical problems. The questionnaires were pre-tested in two languages (Malay and English) and a manual consisting of the flow of the questionnaire and definitions of terms used was available as a guide to the data collectors.

There were five modules with a total of 20 submodules involved in the NHMS 2022: MCH (**Table 1.4.1**). The modules were:

1. Household (HH)
2. Maternal Care (MC)
3. Child Health (CH)
4. Assessment by Nurses (N)
5. Women of Reproductive age (15 – 49 years old) (WR).

The CH module was answered by either their parents or carer. The eligible age and methods are also summarised in **Table 1.4.1**.

The Multiple Indicator Cluster Survey (MICS) from The United Nations Children's Fund (UNICEF)^[6] was the tool utilised for the face-to-face interview and the miscarriage module. Edinburgh Postnatal Depression Scale^[7], Parent Attitudes about Childhood Vaccines (PACV),^[8] and World Health Organization (WHO) Women's Health and Life Experiences Questionnaire^[9] were the validated instruments used to assess postpartum depression, vaccine hesitancy, and intimate partner violence, respectively.

The survey was complemented with anthropometry measurements for children under five years old. The Tanita Baby Scale 1584 was used for infants under two years old, while SECA 813 Weighing Scale was used for toddlers aged two to five years for weight assessment. For height measurement, Stadiometer SECA 213 was used for toddlers aged two to five years, while SECA

Infantometer 417 was used for infants younger than two years. For toddlers between six months and five years old, developmental assessments based on the Denver Developmental Screening Tests Chart^[10] were done by trained nurses in the team. The complete questionnaire used for the survey is attached in this report (**Appendix 6D**).

In order to ensure accurate data collection, the mother's antenatal book and the child's health record book were used to verify the information obtained from the face-to-face interview. These two valuable resources served as essential documentation throughout the maternal and child healthcare journey. By cross-checking the details from both sources, a robust and comprehensive data collection process was ensured, ultimately enhancing the validity and reliability of the data for this survey.

Haemoglobin testing for anaemia was done for children 6 to 59 months via a finger prick (capillary blood) using HemoCue (a validated device in the NHMS 2019)^[13] at the primary health clinic. Written informed consent was obtained by a nurse before the procedure.

Table 1.4.1: Summary of eligibility age based on modules and methods of data collection for NHMS 2022: MCH

Module	Eligibility Age	Method
Module MC: Maternal Care		
• Antenatal Care	15 – 49 years, with the last childbirth less than 2 years	 Face-to-face interview
• Pregnancy Comorbidity	15 – 49 years, with the last childbirth less than 2 years	 Face-to-face interview
• Pre-Pregnancy Care	15 – 49 years, with the last childbirth less than 2 years	 Face-to-face interview
• Intrapartum Care	15 – 49 years, with the last childbirth less than 2 years	 Face-to-face interview
• Postnatal Care	15 – 49 years, with the last childbirth less than 2 years	 Face-to-face interview & Self-Administered Questionnaire (SAQ)
Module CH: Child Health		
• Infant and Young Child Feeding Practice	0 – 23 months	 Face-to-face interview
• Oral Health Among Children	0 – 59 months	 Face-to-face interview
• Child Morbidities	0 – 59 months	 Face-to-face interview
• Child Discipline	12 – 59 months	 Face-to-face interview
• Vaccine Hesitancy	0 – 24 months	 Self-Administered Questionnaire (SAQ)
Module N: Assessment by Nurse		
• Anthropometry Measurement (Nutritional Status)	0 – 59 months	 Assessment
• Child Development	6 – 59 months	 Assessment
• Vaccination Coverage	12 – 23 months	 Assessment
• Anaemia	6 – 59 months	 Point of care testing (POCT)

Module	Eligibility Age	Method
Module WR: Women of Reproductive Age (15 - 49 Years Old)		
• Contraception	15 – 49 years	 Face-to-face interview
• Miscarriage & Abortion	15 – 49 years	 Self-Administered Questionnaire (SAQ)
• Intimate Partner Violence (IPV)	15 – 49 years	 Self-Administered Questionnaire (SAQ)

1.5 DATA COLLECTION IMPLEMENTATION

1.5.1 Listing Phase

A comprehensive listing of Living Quarters (LQ) was conducted by trained nurses in preparation for data collection. The goals of this phase were to precisely locate LQ using maps and to identify eligible LQ occupied by households with children under five years. LQ that had been demolished, destroyed, or were no longer eligible were also identified and eventually excluded from the list of eligible LQ. About 850 nurses across Malaysia received either virtual or physical (hands-on) training in areas such as map reading, LQ address verification, and eligibility determination. The entire listing phase was fully monitored live via an online monitoring board (Google Sheet) by the NHMS 2022: MCH operation centre.

1.5.2 Data Collection Training

The data collection training for Peninsular Malaysia and Borneo was held concurrently from the 3rd to the 8th of August 2022. The training in Peninsular Malaysia involved 55 teams with 33 field supervisors, 99 staff nurses and 116 research assistants. Meanwhile, the training in Borneo involved 12 teams with 16 field supervisors, 31 staff nurses and 24 research assistants. Each data collection team comprised of a field supervisor, two research assistants and a nurse.

1.5.3 Field Data Collection

Data collection was conducted from August 9th to October 31st of 2022. Before the physical visit, the team leader scheduled an appointment with the household of the eligible LQ. The flowchart for the data collection process can be referred at **Appendix 5**.

1.6 PUBLICITY

Publicity campaigns played a vital role in increasing household participation rates in the designated Living Quarters (LQ). The NHMS 2022: MCH survey employed various strategies to enhance public awareness regarding this survey. A dedicated NHMS website and social media platforms provided comprehensive information on the survey's objectives, activities, locations, and frequently asked questions (FAQs). The state liaison officers (LO), central field supervisors (CFS), and field supervisors (FS) received "Media Kit" from the NHMS 2022: MCH publicity team, containing resources and guidelines for publicity efforts. The team utilised booklets, posters, bunting, banners, and car stickers to disseminate survey details, as per **Appendix 6E**.

1.7 DATA MANAGEMENT

1.7.1 Data Confidentiality

All information retrieved in all phases of this survey was treated with the utmost confidentiality. In addition, participants' identification details such as names and identification numbers were not shown to the data collectors unless necessary. A unique ID was used to identify the participant during data merging and analysis. A password-protected storage was used to save and secure datasets. The identities of respondents were kept confidential in all reports and publications.

1.7.2 Sample Weights

The weighted results made an important inference for the prevalence of diseases among Malaysian population. A weight factor was applied to each individual to adjust for the varying probabilities of selection (design weight), non-response rate, and post-stratification factors which were adjusted for the Malaysian population projection by DOSM in the year 2022. The weight (W) used for estimation was formulated as follows:

$$W = W_1 \times W_2 \times W_3 \times F \times PS$$

Where;

W1 = the inverse probability of selecting the EBs for each state

W2 = the inverse probability of responded LQ over the total frame during the listing activities

W3 = the inverse probability of successful LQ from the total listing frame

F = the non-response adjustment factor for LQ and individual

PS = post-stratification adjustment factor calculated by state, gender and ethnicity

Throughout the data collection phase, the Central Coordinating Team (CCT) had weekly meeting to monitor each team's progress. The director of IKU chaired these meeting to discuss the data obtained, movements of the teams, logistic issues, response rate, and publicity activities. The summary of NHMS 2022: MCH implementation and milestones are illustrated in **Appendix 5**.

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GENERAL FINDINGS



GENERAL FINDINGS

2.0 GENERAL FINDINGS

2.1 Sample Coverage & Response Rate for MCH Modules

The sample was obtained from 1,029 enumeration blocks (EB) provided by DOSM. The listing activities resulted in the visitation of 101,410 LQ to obtain the eligible LQ (LQ with children below 5 years old). A total of 13,832 eligible LQ were successfully visited, with 17,176 respondents successfully interviewed with an overall response rate of 74.9%.

2.2 Characteristics of Children Aged 0 - 5 Years Old

Overall, a total of 17,176 children aged under 5 years old were successfully interviewed. Most of the children reside in urban areas and 50.5% were male. The majority of the children were Malays and Malaysian citizens (**Table 2.2.1**).

Table 2.2.1: Characteristics of Children Under 5 Years Old (N=17,176)

	Frequency	Percentage (%)
Location		
Urban	12142	70.7
Rural	5034	29.3
Sex		
Male	8680	50.5
Female	8494	49.5
Age		
Less than 6 months	1330	7.7
6 - 11 months	1699	9.9
12 - 23 months	3523	20.5
24 - 35 months	3703	21.6
36 - 47 months	3628	21.1
48 - 59 months	3291	19.2
Ethnicity		
Malay	13462	78.4
Chinese	810	4.7
Indian	651	3.8
Other Bumiputera	1812	10.5
Others	431	2.5
Citizenship		
Malaysian citizen	16747	97.5
Permanent resident/ non-citizen	426	2.5

2.3 Characters of mothers (15-49 years old) with last childbirth two years ago

A total of 6,360 mothers (15-49 years old) with last childbirth two years ago were interviewed. About 69.8% of mothers lived in urban areas. By ethnicity, more than half were Malays and about 94.3% were Malaysian citizens (**Table 2.3.1**).

Table 2.3.1: Characters of mothers (15-49 years old) with last childbirth two years ago (N=6,360)

	Frequency	Percentage (%)
Location		
Urban	4439	69.8
Rural	1921	30.2
Age Group		
15 - 19	75	1.2
20 - 24	643	10.1
25 - 29	1844	29.0
30 - 34	1978	31.1
35 - 39	1302	20.5
40 - 44	398	6.3
45 - 49	46	0.7
Ethnicity		
Malay	4964	78.1
Chinese	236	3.7
Indian	207	3.3
Other Bumiputera	619	9.7
Others	282	4.4
Citizenship		
Malaysian citizen	6000	94.3
Permanent resident/ non- citizen	304	4.8
Marital Status		
Single/ separated/ divorcee/ widow	87	1.4
Married/ cohabiting	6216	97.7
Education Level		
No formal education	107	1.7
Primary school	330	5.2
Secondary school	3074	48.3
Tertiary education	2658	41.8
Occupation		
Government/ semi-government employee	921	14.5
Private employee	1147	18.0
Employer or self-employed	499	7.8
Unpaid worker/ housewife/ not working/ student	3610	56.8

2.4 Sample Coverage & Response Rate for Women of Reproductive age (15 – 49 years old) (WR) Module

A total of 2800 LQ was visited to obtain 1987 eligible LQ (LQ with women of reproductive age, 15–49 years). Subsequently, 1877 respondents were successfully interviewed with an overall response rate of 86.6%.

2.5 Characteristics of Women of Reproductive age (15 – 49 years old)

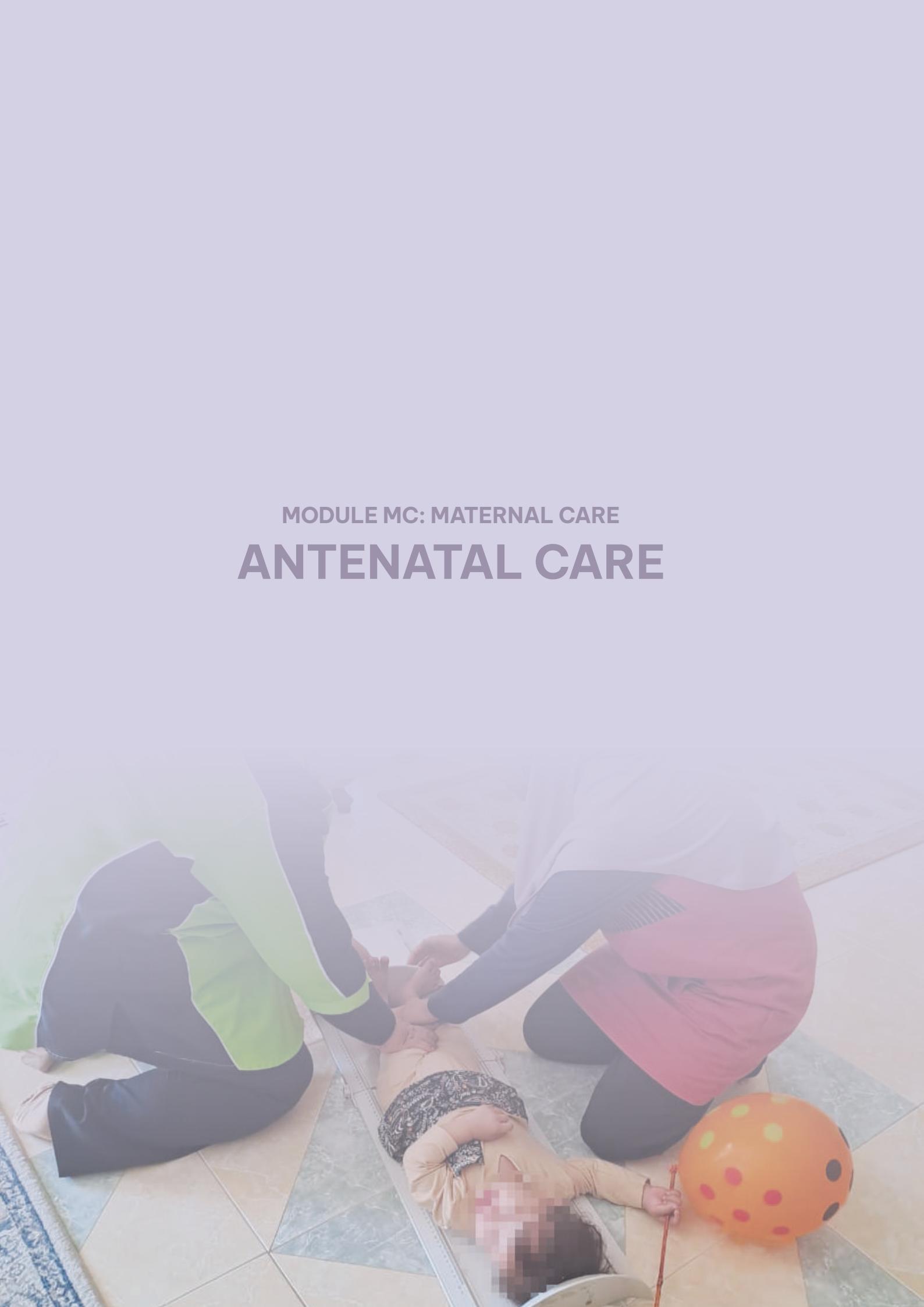
Out of 1877 respondents, 77.3 % of respondents were from the urban locality. The majority of respondents were Malaysian citizens. By ethnicity, more than half of them were Malay and about 70.4% of respondents were married. In terms of education level, about half of the respondents completed their secondary education (**Table 2.5.1**).

Table 2.5.1: Characteristics of Women Reproductive Aged 15 – 49 Years Old (N=1,877)

	Frequency	Percentage (%)
Location		
Urban	1355	77.3
Rural	522	22.7
Age Group		
15 – 19	48	15.4
20 – 24	160	15.6
25 – 29	314	14.9
30 – 34	396	15.3
35 – 39	421	15.3
40 – 44	319	12.8
45 – 49	203	10.7
Ethnicity		
Malay	1340	54.7
Chinese	99	20.7
Indian	123	6.4
Other Bumiputera	212	12.1
Others	86	6.2
Citizenship		
Malaysian citizen	1770	93.8
Permanent resident/ non- citizen	90	6.2
Marital Status		
Single	176	25.8
Married/ cohabiting	1596	70.4
Separated/ divorcee/ widow	78	3.8

	Frequency	Percentage (%)
Education Level		
No formal education	23	1.5
Primary school	110	9.5
Secondary school	986	52.8
Tertiary education	726	36.3
Occupation		
Government/ semi-government employee	324	11.2
Private employee	375	25.3
Employer or self-employed	246	10.8
Unpaid worker/ housewife/ not working/ student	898	52.7

MODULE MC: MATERNAL CARE
ANTENATAL CARE

A photograph showing two women interacting with a baby. One woman, wearing a pink dress, is holding the baby. The other woman, wearing a green dress, is holding an orange balloon with black spots. They appear to be in a home setting with a tiled floor.

ANTENATAL CARE

ANTENATAL CARE

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HIGHLIGHTS

- The prevalence of mothers who attended at least four antenatal visits was 98.1%.
- The prevalence of early initiation of antenatal care was 77.0%.
- The utilisation of public health facilities for antenatal care was more prevalent at 91.9%.
- The prevalence of current adolescent pregnancy was 2.0%.
- About 96.9% of mothers responded that their antenatal visits were not affected during COVID-19 measures.

Keywords: *Antenatal care, Prenatal care, Pregnancy care, Booking in pregnancy, Adolescent pregnancy*

3.1 INTRODUCTION

Antenatal care is one of the crucial components of safe motherhood aimed to improve pregnancy outcomes through health promotion, screening and early diagnosis, and morbidity prevention. The antenatal care coverage is also an important aspect emphasised in the SDG as it serves as an indicator to monitor progress towards achieving universal health coverage [1]. It has been established that timely and good-quality antenatal care can reduce maternal and perinatal mortality [2]. Early initiation of antenatal care is essential to enable healthcare providers to identify high-risk individuals and provide necessary and timely maternal health

interventions ensuring safety throughout the pregnancy and its outcome [3]. Additionally, the communication and support roles of antenatal care contribute to improving life, healthcare utilisation and quality of care [4].

3.2 OBJECTIVES

3.2.1 General Objective

To determine the prevalence of antenatal care service utilisation among pregnant women in Malaysia.

3.2.2 Specific Objectives

- i. To determine the prevalence of adequate antenatal care visits among mothers aged 15–49 years with a child below 2 years old in Malaysia.
- ii. The prevalence of early initiation of antenatal care (early booking) among mothers aged 15–49 years with a child below 2 years old in Malaysia.
- iii. The distribution of antenatal care coverage by types of antenatal care facilities.
- iv. The prevalence of adolescent pregnancy among mothers aged 15–49 years with a child below 2 years old in Malaysia.
- v. The prevalence of unaffected antenatal care service during COVID-19 measures among pregnant women in Malaysia.

3.3 DEFINITIONS

- Antenatal care refers to periodic healthcare and support during pregnancy.
- Early initiation of antenatal care (early booking) refers to the first antenatal examination initiated before or at 12 weeks of pregnancy.
- Current adolescent pregnancy refers to a pregnancy that occurs among mothers aged 15 to 19 years old within the last two years.
- History of adolescent pregnancy refers to mothers aged 20 years old and above, who had a history of first pregnancy before age 20 years old.

3.4 FINDINGS

Overall, the prevalence of mothers aged 15–49 years old, who had at least one, four or eight antenatal care visits was 99.0% (95% CI: 98.52, 99.36), 98.1% (95% CI: 97.40, 98.66), and 94.3% (95% CI: 93.08, 95.39) respectively. Meanwhile, only 0.9% (95% CI: 0.60, 1.40) of mothers had no antenatal care. During the COVID-19 pandemic, 96.9% (95% CI: 96.23, 97.52) of mothers responded that the COVID-19 measures did not affect their antenatal care visits. Meanwhile, among those who had affected antenatal services, 2.4% (95% CI: 1.85, 3.06) was due to the mother's related reason and 0.7% (95% CI: 0.45, 1.02) was due to rescheduling by healthcare providers. The prevalence of mothers who attended the first antenatal care during the first trimester of pregnancy was 77.0% (95% CI: 75.23, 78.63) (**Table 3.4.1**). Moreover, the prevalence of mothers who received antenatal care in public health facilities and private health facilities was 91.9% (95% CI: 90.47, 93.17) and 7.9% (95% CI: 6.70, 9.34) respectively (**Table 3.4.3**). The prevalence of current adolescent pregnancy was 2.0% (95% CI: 1.58, 2.58) (**Table 3.4.4**).

3.5 CONCLUSION

Encouraging improvement was observed in all indicators measured for antenatal care among mothers aged 15–49 years with a child below 2 years old. The study revealed a higher prevalence of adequate antenatal care visits from 2016 to 2022 (**Table 3.5.1**). Despite COVID-19 measures, the majority of the mothers reported uninterrupted antenatal care services.

Table 3.4.1: Overall prevalence of mothers who attended antenatal care by the timing of first antenatal visit during pregnancy of last childbirth, NHMS 2022: MCH

Mothers who attended antenatal care by timing of first antenatal visit during pregnancy of last child birth	Unweighted Count	Estimated population	Prevalence (%)	(95% CI)		Median period of gestation during first ANC visit (weeks)
				Lower	Upper	
First trimester (0–12 weeks)	4917	592400	77.0	75.23	78.63	
Second trimester (13–28 weeks)	1232	166691	21.7	20.02	23.39	10
Third trimester (more than 28 weeks)	89	10530	1.4	1.07	1.74	

3.6 RECOMMENDATIONS

- Emphasise continuous effort to improve the quality of antenatal health care particularly the competency of the health care providers and their adherence to standard guidelines.
- Strengthening early detection of risk, appropriate management, referral, and documentation.
- Continue to increase awareness among pregnant mothers on the importance of antenatal care to improve maternal and perinatal health.
- Effective communication between the healthcare provider and mothers should be stepped up to ensure personalised antenatal care, thus improving their health-seeking behaviour.

Table 3.5.1: Prevalence of mothers who attended at least 4 or more antenatal care visits, NHMS 2016 – 2022

	2016	2022
Women who received antenatal care 4 or more	97.4	98.1

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Table 3.4.2: Prevalence of mothers who attended first antenatal care in the first trimester during pregnancy of last childbirth, NHMS 2022: MCH (n= 6,238)

Sociodemographic	First trimester (0-12 weeks)						Median period of gestation during first ANC visit (weeks)
	Unweighted Count	Estimated population	Prevalence (%)	(95% CI)			
MALAYSIA	4917	592400	77.0	75.23	78.63	10	
State							
Johor	236	51026	63.3	54.65	71.14	11	
Kedah	426	50517	79.2	74.86	83.00	10	
Kelantan	434	45027	79.8	75.53	83.46	11	
Melaka	389	25211	84.1	79.79	87.65	10	
Negeri Sembilan	307	23090	81.2	75.97	85.46	10	
Pahang	384	31900	86.7	82.80	89.75	10	
Pulau Pinang	328	32639	75.8	70.16	80.63	11	
Perak	399	51019	86.1	82.17	89.23	10	
Perlis	397	6038	84.3	78.99	88.54	10	
Selangor	313	118438	79.8	74.98	83.90	11	
Terengganu	433	34325	89.3	85.86	91.91	10	
Sabah & WP Labuan	267	53673	72.2	65.15	78.38	11	
Sarawak	330	41202	72.0	66.99	76.56	10	
WP Kuala Lumpur & Putrajaya	274	28295	61.9	55.21	68.25	12	
Location							
Urban	3393	405673	75.5	73.40	77.50	10	
Rural	1524	186727	80.4	77.21	83.17	10	
Age							
15-19	38	4640	48.5	35.82	61.46	12	
20-24	463	54319	71.5	66.38	76.06	10	
25-29	1499	177007	80.3	77.38	82.91	10	
30-34	1540	187649	78.0	75.60	80.22	10	
35-39	1029	123438	78.3	74.96	81.26	10	
40-44	276	34610	67.6	61.54	73.19	11	
45-49	30	4248	74.8	59.57	85.69	12	
Ethnicity							
Malay	3984	451156	80.0	78.31	81.53	10	
Chinese	168	24300	74.9	68.19	80.55	11	
Indians	159	20958	75.0	67.08	81.58	10	
Other Bumiputera	459	73504	74.5	69.75	78.69	11	
Others	110	16564	42.9	31.74	54.82	12	
Citizenship							
Malaysian citizen	4751	567646	78.8	77.36	80.24	10	
Permanent resident/ non- citizen	126	18555	44.7	34.33	55.60	12	

Sociodemographic	First trimester (0-12 weeks)					
	Unweighted Count	Estimated population	Prevalence (%)	(95% CI)		Median period of gestation during first ANC visit (weeks)
Marital status						
Single/ separated/divorcee/ widow	38	4246	43.5	31.35	56.47	13
Married/ cohabiting	4840	581972	77.5	75.74	79.13	10
Mother's education						
No formal education	45	6636	49.3	37.93	60.80	12
Primary school	184	25913	55.9	45.30	65.92	12
Secondary school	2362	277134	76.4	74.21	78.48	10
Tertiary education	2189	266192	81.9	79.91	83.68	10
Occupation						
Government/ semi-government employee	786	88276	82.5	79.02	85.51	10
Private employee	912	121688	79.2	76.19	81.92	10
Employer/ self-employed	383	43026	79.0	74.67	82.83	10
Unpaid worker/ housewife/ not working/ student	2698	322641	74.5	71.93	76.87	10

Table 3.4.3: Prevalence of mothers aged 15-49 who received antenatal care in different types of health facilities during pregnancy of last childbirth, NHMS 2022: MCH (n= 6,258)

Sociodemographic	Public health facility					Private health facility				
	Unweighted Count	Estimated population	Prevalence (%)	95% CI		Unweighted Count	Estimated population	Prevalence (%)	95% CI	
				Lower	Upper				Lower	Upper
MALAYSIA	5891	707914	91.9	90.47	93.17	364	61524	7.9	6.70	9.34
State										
Johor	321	69459	86.6	77.68	92.25	47	10788	13.4	7.75	22.32
Kedah	513	60889	95.5	92.66	97.22	25	2899	4.5	2.78	7.34
Kelantan	542	56234	97.8	94.94	99.04	14	-	-	-	-
Melaka	448	29070	97.1	94.54	98.43	14	-	-	-	-
Negeri Sembilan	377	28089	96.6	94.17	98.03	14	991	3.4	1.97	5.83
Pahang	432	35845	95.5	93.12	97.07	21	1694	4.5	2.93	6.88
Pulau Pinang	409	40683	94.9	92.03	96.73	23	2202	5.1	3.27	7.97
Perak	448	57220	95.9	92.99	97.63	20	2447	4.1	2.37	7.01
Perlis	461	7100	98.1	96.49	98.95	11	-	-	-	-
Selangor	329	124779	84.9	80.22	88.66	59	22159	15.1	11.34	19.78
Terengganu	474	37531	97.8	95.57	98.91	11	-	-	-	-
Sabah & WP Labuan	332	66517	89.7	83.04	93.95	39	7628	10.3	6.05	16.96
Sarawak	448	56972	97.6	95.59	98.74	11	-	-	-	-
WP Kuala Lumpur & Putrajaya	357	38526	84.9	78.50	89.65	58	6852	15.1	10.35	21.50
Location										
Urban	4050	482485	90.1	88.22	91.70	321	53057	9.9	8.30	11.78
Rural	1841	225429	96.1	93.74	97.61	46	9113	3.9	2.39	6.26
Age										
15-19	71	9026	94.4	83.59	98.26	3	-	-	-	-
20-24	581	67796	89.4	84.69	92.83	43	8014	10.6	7.17	15.31
25-29	1741	208431	94.6	92.49	96.20	79	1795	5.4	3.80	7.51
30-34	1843	221183	91.9	89.87	93.53	115	19536	8.1	6.47	10.13
35-39	1207	144200	91.0	88.19	93.27	81	14182	9.0	6.73	11.81
40-44	355	44778	87.2	80.60	91.78	38	6575	12.8	8.22	19.40
45-49	42	5006	86.3	64.07	95.73	3	792	13.7	4.27	-

Sociodemographic	ANC at the most visited facility					
	Public health facility			Private health facility		
	Unweighted Count	Estimated population	Prevalence (%)	95% CI Lower	95% CI Upper	Estimated population
Ethnicity						
Malay	4701	530605	93.9	92.59	94.98	208
Chinese	186	24388	74.5	66.72	80.97	49
Indians	191	25903	93.2	87.44	96.44	13
Other Bumiputera	600	96488	98.1	96.55	98.97	12
Others	168	23790	61.4	49.93	71.72	81
Citizenship						
Malaysian citizen	5655	674524	93.6	92.44	94.59	279
Permanent Resident/ non-citizen	187	26290	63.0	52.21	72.60	84
Marital status						
Single/ separated/ divorcee/ widow	77	9228	93.7	84.20	97.62	4
Married/ cohabiting	5765	691145	91.9	90.42	93.17	359
Mother's education						
No formal education	77	10581	76.6	64.71	85.44	18
Primary school	266	37638	80.6	67.61	89.26	45
Secondary school	2920	345906	95.3	93.97	96.32	114
Tertiary education	2462	294362	90.6	88.55	92.37	173
Occupation						
Government/ semi-government employee	873	99566	93.3	90.16	95.43	43
Private employee	1027	134740	87.6	84.38	90.21	105
Employer/ self-employed	461	50242	92.7	88.63	95.35	28
Unpaid worker/ housewife/ not working/ student	3368	404247	93.1	91.18	94.63	179

Table 3.4.4: Overall prevalence of current adolescent pregnancy and history of adolescent pregnancy during first pregnancy among mothers, who had last childbearing within the last two years.

Categories	NHMS 2022			95% CI	
	Unweighted Count	Estimated population	Prevalence (%)	Lower	Upper
Current adolescent pregnancy (mothers aged 15–19 years old during last childbearing within the last two years from the time of data collection)	116	15804	2.0	1.58	2.58
History of adolescent pregnancy refers to mothers aged 20 years old and above, who had a history of first pregnancy before age 20 years old	701	89476	11.6	9.97	12.14

MODULE MC: MATERNAL CARE

PREGNANCY COMORBIDITY



PREGNANCY COMORBIDITY

PREGNANCY COMORBIDITY

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HIGHLIGHTS

- The prevalence of gestational diabetes mellitus (GDM) among respondents aged 15–49 years was 27.1%.
- The prevalence of hypertension in pregnancy among respondents aged 15–49 years was 6.5%.
- The prevalence of anaemia during pregnancy among respondents aged 15–49 years was 19.3%.
- The prevalence of placenta previa among respondents aged 15–49 years was 2.7%.

Keywords: *Anaemia, Gestational Diabetes Mellitus, Hypertension in Pregnancy, Placenta Previa*

4.1 INTRODUCTION

Gestational diabetes mellitus (GDM), hypertension in pregnancy, anaemia, and placenta previa are common pregnancy-related conditions that can have significant consequences for both mother and foetus. These conditions are related to Sustainable Development Goal (SDG) 3: Good Health and Well-being [1]. Addressing these common pregnancy problems is crucial in reaching the SDG targets and improving mother and

baby health. The previous National Health and Morbidity Survey 2016: Maternal and Child Health (NHMS 2016: MCH) reported a prevalence of 13.5%, 5.8%, and 29.3% for GDM, hypertension in pregnancy and anaemia in pregnancy, respectively [2]. It is essential and timely to reassess these common pregnancy comorbidities in the general population in Malaysia. The findings are crucial to monitor the prevalence trend, which reflects the maternal health status and achievement of SDG goals by 2030.

4.2 OBJECTIVES

4.2.1 General Objective

To determine the prevalence of common pregnancy comorbidities among mothers of reproductive age in the general population.

4.2.3 Specific Objectives

- i. To determine the prevalence of GDM among mothers aged 15–49 years with a child below 2 years old.
- ii. To determine the prevalence of hypertension in pregnancy among mothers aged 15–49 years with a child below 2 years old.
- iii. To determine the prevalence of anaemia during pregnancy among mothers aged 15–49 years with a child below 2 years old.
- iv. To determine the prevalence of placenta previa among mothers aged 15–49 years with a child below 2 years old.

4.3 DEFINITIONS

- GDM is diagnosed with a modified oral glucose tolerance test (MOGTT) with fasting plasma glucose (FPG) of ≥ 5.1 mmol/L or a 2-hour postprandial (2-HPP) of ≥ 7.8 mmol/L [3].
- Hypertension in pregnancy is defined as systolic blood pressure (SBP) ≥ 140 mmHg and/or diastolic blood pressure (DBP) ≥ 90 mmHg [4]. Gestational

hypertension is defined as hypertension detected for the first time after 20 weeks gestation which includes pregnancy-induced hypertension and pre-eclampsia^[4].

- Anaemia in pregnancy is defined as having a haemoglobin (Hb) concentration of < 11.0 g/dl at any gestational age.
- Placenta previa is the complete or partial covering of the internal os of the cervix with the placenta. A low-lying placenta is where the edge is within 2 to 3.5 cm from the internal os.

4.4 FINDINGS

Table 4.4.1 shows the prevalence of GDM among the study population. The prevalence of GDM among respondents aged 15–49 years was 27.1% (95% CI: 25.57, 28.58). **Table 4.4.2** shows the prevalence of hypertension in pregnancy among the study population. The prevalence of hypertension in pregnancy among respondents aged 15–49 years was 6.5% (95% CI: 5.78, 7.41). The prevalence of anaemia among respondents aged 15–49 years old was 19.3% (95% CI: 17.80, 20.88) (**Table 4.4.3**). The prevalence of placenta previa among respondents aged 15–49 was 2.7% (95% CI: 2.15, 3.28), as shown in **Table 4.4.4**.

4.5 CONCLUSION

Prevalence of GDM and hypertension in pregnancy among respondents aged 15–49 years are higher than NHMS 2016: MCH^[2] and it is consistent with the finding from National Obstetric Registry^[5]. This can be partly explained by more effective GDM screening programmes in Malaysia. The rising trend is concerning because it impedes efforts to improve maternal and child health and reduce the burden of non-communicable diseases, as outlined in the SDGs^[1]. In contrast, the prevalence of anaemia in pregnancy has improved compared to the previous survey, from 29.3% (NHMS 2016) to 19.3%. This shifted Malaysia's anaemia status from moderate to mild public health significance based on the WHO categorisation^[6].

4.6 RECOMMENDATIONS

- To enhance early detection of comorbidities and management of pregnant women as well as increase their awareness about healthy pregnancy
- To ensure postpartum follow-up for continuing diabetes and hypertension care at health clinics. For example, timely screening using oral glucose tolerance tests among postnatal mothers with GDM to prevent undiagnosed diabetes.
- All healthcare personnel should strengthen the management of pregnant women to improve the quality of care using evidence-based guidelines.

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Table 4.4.1: Prevalence of mothers aged 15 - 49 years who had gestational diabetes mellitus during pregnancy of last child birth, NHMS 2022: MCH (n=6,146)

Sociodemographic	GDM				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
MALAYSIA	1681	208771	27.1	25.57	28.58
State					
Johor	82	18054	22.6	17.95	27.99
Kedah	189	22227	35.0	31.13	39.03
Kelantan	111	11367	19.9	16.37	23.92
Melaka	112	7641	25.7	20.57	31.69
Negeri Sembilan	133	9598	32.9	28.13	38.12
Pahang	80	6702	17.8	13.88	22.56
Pulau Pinang	108	10755	25.3	21.65	29.28
Perak	145	18637	31.5	27.12	36.25
Perlis	154	2318	31.9	26.99	37.32
Selangor	128	48564	33.4	28.34	38.85
Terengganu	113	8924	23.3	19.05	28.17
Sabah & WP Labuan	84	17018	21.6	17.22	26.68
Sarawak	132	16496	28.6	24.44	33.25
WP Kuala Lumpur & Putrajaya	110	10469	23.0	19.58	26.92
Location					
Urban	1200	147394	27.6	25.69	29.53
Rural	481	61377	25.9	23.67	28.22
Age Group					
15 - 19	3	-	-	-	-
20 - 24	99	11371	14.4	11.46	18.04
25 - 29	397	54031	24.1	21.73	26.74
30 - 34	576	69491	28.6	26.21	31.17
35 - 39	428	50424	31.7	28.61	34.88
40 - 44	162	20710	39.9	33.76	46.40
45 - 49	16	2036	35.1	20.53	53.13
Ethnicity					
Malay	1379	162319	28.6	26.91	30.30
Chinese	47	7410	22.7	16.92	29.81
Indian	64	9674	34.5	26.90	43.02
Other Bumiputera	154	24336	24.6	21.03	28.62
Others	37	5032	11.4	7.00	17.96
Citizenship					
Malaysian citizen	1641	203463	28.1	26.61	29.63
Permanent resident/ non-citizen	39	5228	11.1	6.91	17.29
Marital Status					
Single/ separated/ divorcee/ widow	12	-	-	-	-
Married/ cohabiting	1667	206892	27.2	25.72	28.74
Education Level					
No formal education	20	2451	15.5	8.43	26.72
Primary school	58	8509	17.3	12.43	23.66
Secondary school	819	102362	28.0	26.08	30.05
Tertiary education	753	92048	28.2	25.97	30.47
Occupation					
Government /Semi- gov employee	262	29311	27.4	23.99	31.06
Private employee	272	38386	24.8	21.57	28.32
Employer/Self-employed	117	14078	25.5	20.80	30.77
Unpaid worker/ housewife/ not working/ student	1002	123938	28.1	26.19	30.14

Table 4.4.2: Prevalence of mothers aged 15 – 49 years who had hypertension during pregnancy of last child birth, NHMS 2022: MCH (n=6,146)

Sociodemographic	Hypertension				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
MALAYSIA	375	50577	6.5	5.78	7.41
State					
Johor	22	4854	6.1	4.16	8.78
Kedah	33	3922	6.2	4.03	9.35
Kelantan	41	4362	7.7	5.52	10.52
Melaka	41	2784	9.4	7.05	12.43
Negeri Sembilan	18	1378	4.7	3.14	7.06
Pahang	12	970	2.6	1.51	4.35
Pulau Pinang	13	1309	3.1	1.84	5.16
Perak	42	5301	8.9	6.63	11.94
Perlis	15	212	2.9	1.68	5.07
Selangor	30	11604	8.0	5.48	11.41
Terengganu	22	1753	4.6	2.94	7.08
Sabah & WP Labuan	25	5135	6.5	4.46	9.42
Sarawak	42	5234	9.1	6.44	12.68
WP Kuala Lumpur & Putrajaya	19	1760	3.8	2.35	6.19
Location					
Urban	256	33157	6.2	5.38	7.13
Rural	119	17420	7.3	5.77	9.30
Age Group					
15 - 19	2	-	-	-	-
20 - 24	17	2453	3.1	1.76	5.44
25 - 29	72	9718	4.4	3.34	5.65
30 - 34	119	15882	6.5	5.25	8.09
35 - 39	104	14483	9.1	7.20	11.40
40 - 44	53	6791	13.1	9.18	18.24
45 - 49	8	-	-	-	-
Ethnicity					
Malay	292	37005	6.5	5.62	7.54
Chinese	8	-	-	-	-
Indian	7	-	-	-	-
Other Bumiputera	56	9136	9.2	7.08	11.96
Others	12	-	-	-	-
Citizenship					
Malaysian citizen	360	48350	6.7	5.87	7.58
Permanent resident/ non-citizen	14	2147	4.5	2.62	7.79
Marital Status					
Single/ separated/ divorcee/ widow	5	-	-	-	-
Married/ cohabiting	369	49659	6.5	5.75	7.39
Education Level					
No formal education	7	-	-	-	-
Primary school	23	3095	6.3	4.06	9.66
Secondary school	200	29768	8.1	6.88	9.61
Tertiary education	134	15504	4.7	3.86	5.81
Occupation					
Government /Semi-gov employee	62	6523	6.1	4.58	8.02
Private employee	56	8811	5.7	4.11	7.80
Employer/Self-employed	25	3386	6.1	3.85	9.66
Unpaid worker/ housewife/ not working/ student	222	30823	7.0	6.04	8.09

**Table 4.4.3: Prevalence of mothers aged 15 – 49 years who had anaemia during pregnancy of last child birth,
NHMS 2022: MCH (n=6,146)**

Sociodemographic	Anaemia				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
MALAYSIA	1101	148870	19.3	Lower	Upper
State					
Johor	79	18477	23.1	15.99	32.04
Kedah	148	17583	27.7	23.27	32.66
Kelantan	54	5404	9.5	6.61	13.42
Melaka	59	4013	13.5	10.34	17.49
Negeri Sembilan	85	6128	21.0	16.88	25.87
Pahang	65	5421	14.4	11.19	18.44
Pulau Pinang	63	6177	14.6	11.09	19.02
Perak	102	13116	22.2	18.38	26.46
Perlis	86	1324	18.2	14.16	23.14
Selangor	87	33709	23.2	18.97	27.99
Terengganu	30	2365	6.1	4.38	8.56
Sabah & WP Labuan	91	18305	23.2	18.90	28.03
Sarawak	97	12166	21.2	17.67	25.27
WP Kuala Lumpur & Putrajaya	55	4682	10.2	7.29	14.22
Location					
Urban	768	100816	18.9	17.21	20.63
Rural	333	48054	20.3	17.29	23.61
Age Group					
15 - 19	21	3072	32.1	19.87	47.51
20 - 24	130	20192	25.7	21.40	30.46
25 - 29	305	40094	18.0	15.73	20.41
30 - 34	352	46543	19.1	17.08	21.38
35 - 39	218	27695	17.4	14.67	20.52
40 - 44	69	10349	19.9	15.30	25.45
45 - 49	6	-	-	-	-
Ethnicity					
Malay	834	103666	18.3	16.65	19.98
Chinese	30	4606	14.1	9.57	20.37
Indian	50	6624	23.6	18.06	30.29
Other Bumiputera	136	24173	24.4	20.17	29.22
Others	51	9802	22.2	15.28	31.14
Citizenship					
Malaysian citizen	1049	138594	19.1	17.62	20.75
Permanent resident/ non-citizen	52	10276	21.8	14.64	31.21
Marital Status					
Single/ separated/ divorcee/ widow	20	2685	26.5	16.49	39.63
Married/ cohabiting	1080	145704	19.2	17.66	20.75
Education Level					
No formal education	17	2986	18.9	11.75	28.88
Primary school	79	14297	29.1	22.21	37.15
Secondary school	553	73512	20.1	18.18	22.17
Tertiary education	428	55346	17.0	15.09	19.00
Occupation					
Government /Semi- gov employee	166	20713	19.4	15.94	23.35
Private employee	178	28076	18.1	15.33	21.26
Employer/Self-employed	65	8287	15.1	11.41	19.61
Unpaid worker/ housewife/ not working/ student	670	89271	20.3	18.43	22.21

Table 4.4.4: Prevalence of mothers aged 15 - 49 years who had placenta previa during pregnancy of last child birth, NHMS 2022: change to MCH (n=6,146)

Sociodemographic	Placenta Previa				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
MALAYSIA	129	20527	2.7	2.15	3.28
State					
Johor	10	-	-	-	-
Kedah	13	1543	2.4	1.41	4.16
Kelantan	17	1761	3.1	1.88	5.01
Melaka	9	-	-	-	-
Negeri Sembilan	9	-	-	-	-
Pahang	3	-	-	-	-
Pulau Pinang	9	-	-	-	-
Perak	9	-	-	-	-
Perlis	3	-	-	-	-
Selangor	20	7698	5.3	3.42	8.11
Terengganu	8	-	-	-	-
Sabah & WP Labuan	8	-	-	-	-
Sarawak	5	-	-	-	-
WP Kuala Lumpur & Putrajaya	6	-	-	-	-
Location					
Urban	88	14151	2.6	2.06	3.38
Rural	41	6376	2.7	1.78	4.03
Age Group					
15 - 19	1	-	-	-	-
20 - 24	8	-	-	-	-
25 - 29	28	4906	2.2	1.37	3.49
30 - 34	45	7345	3.0	2.15	4.21
35 - 39	32	3967	2.5	1.63	3.80
40 - 44	15	2468	4.7	2.56	8.64
45 - 49	0	-	-	-	-
Ethnicity					
Malay	107	16369	2.9	2.29	3.61
Chinese	6	-	-	-	-
Indian	2	-	-	-	-
Other Bumiputera	8	-	-	-	-
Others	6	-	-	-	-
Citizenship					
Malaysian citizen	123	19477	2.7	2.16	3.34
Permanent resident/ non-citizen	6	-	-	-	-
Marital Status					
Single/ separated/ divorcee/ widow	1	-	-	-	-
Married/ cohabiting	128	20333	2.7	2.15	3.31
Education Level					
No formal education	1	-	-	-	-
Primary school	4	-	-	-	-
Secondary school	63	10297	2.8	2.05	3.84
Tertiary education	58	8869	2.7	1.96	3.74
Occupation					
Government /Semi-gov employee	19	-	-	-	-
Private employee	35	6268	4.0	2.73	5.95
Employer/Self-employed	12	-	-	-	-
Unpaid worker/ housewife/ not working/ student	61	9474	2.1	1.58	2.91

MODULE MC: MATERNAL CARE

PRE-PREGNANCY CARE



PRE-PREGNANCY CARE

PRE-PREGNANCY CARE

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HIGHLIGHTS

- The prevalence of women with selected medical conditions who received medical advice on pregnancy before their next pregnancy was 91.0%.
- The prevalence of women with selected medical conditions who were suggested to delay their last pregnancy was 64.7%.
- The prevalence of women with selected medical conditions who were suggested to delay their last pregnancy and offered advice on contraception was 93.7%.

Keywords: *Pre-pregnancy care, Women, High-risk pregnancy, Family planning, Delay pregnancy*

5.1 INTRODUCTION

Pre-pregnancy care (PPC) is defined as “the provision of biomedical, behavioural and social health interventions to women and couples before conception occurs, aimed at improving their health status, and reducing behaviours and individual and environmental factors that could contribute to poor maternal and child health outcomes”^[1]. PPC is part of a continuum of care in a life-course perspective approach of a public health program to improve maternal and neonatal health^[2]. The concept of PPC was introduced in Malaysia in 2003 in the first edition of the Perinatal Care Manual. The program has evolved throughout the years and

a new targeted approach was introduced in 2019 with the integration of PPC components into chronic disease care of women in the reproductive age group. According to the Malaysian Confidential Enquiry into Maternal Death (CEMD) Report 2012–2014, one of the main causes of maternal death is “associated medical conditions” (20.7%) which includes pre-existing medical conditions before pregnancy^[3]. This highlighted the importance of disease optimization during the pre-pregnancy phase.

5.2 OBJECTIVES

5.2.1 General Objective

To determine the prevalence of women with selected medical conditions receiving PPC before pregnancy.

5.2.2 Specific Objectives

- i. To determine the prevalence of women with selected medical conditions who received medical advice on PPC before the next pregnancy.
- ii. To determine the prevalence of women with selected medical conditions who were suggested to delay their pregnancy.
- iii. To determine the prevalence of women with selected medical conditions and suggested to delay their last pregnancy who were offered advice on contraception.

5.3 DEFINITIONS

Selected medical conditions include hypertensive disease, diabetes mellitus, heart disease, thalassemia, thyroid disease, asthma, seizures and epilepsy.

5.4 FINDINGS

Overall, 9.3% (95% CI: 8.40, 10.23) of women with the last child aged under 2 years had selected medical conditions before the last pregnancy (**Table 5.4.1**). It was reported that 91.0% of women received medical advice before the pregnancy regarding the risk of her illness and pregnancy as well as preparation to stabilise her illness before the next pregnancy. Among the women with selected medical conditions, 64.7% were suggested to delay her pregnancy (**Table 5.4.2**), in which 93.7% of them were given advice to receive contraception (**Table 5.4.3**).

5.5 CONCLUSION

The provision of PPC could help to reduce maternal and neonatal morbidity and mortality rate in Malaysia. Findings from this study demonstrated the provision of PPC advice to mothers with selected medical conditions are quite satisfactory. However, further strengthening of disease optimization before pregnancy should be prioritised to ensure the women are well prepared for the next pregnancy. This survey will help the program managers, implementers, and advocate to put more concerted effort in emphasising life-course approach in healthcare service provision.

5.6 RECOMMENDATIONS

- Awareness and health promotion of the PPC among women with medical conditions and healthcare providers are crucial to reduce maternal and neonatal morbidity and mortality rate.
- As the prevalence of PPC advice given to the mother is quite favourable, the need for regular monitoring of the quality of services should be emphasised by the managerial level of healthcare providers to ensure appropriate PPC interventions are delivered.

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**Table 5.4.1 Prevalence of women who has selected medical conditions (having risk) before the last pregnancy,
NHMS 2022: MCH (n=6,451)**

Sociodemographic	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	600	72851	9.3	8.40	10.23
State					
Johor	26	5927	7.3	4.60	11.39
Kedah	73	8718	13.6	10.72	17.02
Kelantan	67	6884	11.7	9.01	15.18
Melaka	74	5030	16.5	12.48	21.63
Negeri Sembilan	46	3265	11.2	8.53	14.51
Pahang	26	2147	5.7	3.90	8.19
Pulau Pinang	35	3506	8.0	6.06	10.58
Perak	43	5420	9.1	6.55	12.41
Perlis	39	598	8.2	5.51	11.97
Selangor	47	17744	11.9	9.08	15.36
Terengganu	34	2671	6.9	4.82	9.84
Sabah	11	2127	2.6	1.48	4.66
Sarawak	37	4611	7.9	5.72	10.87
WP Kuala Lumpur & Putrajaya	42	4203	9.1	6.68	12.21
Location					
Urban	430	51806	9.5	8.46	10.66
Rural	170	21045	8.8	7.26	10.52
Age Group					
15 - 19	7	825	8.5	3.87	17.55
20 - 24	39	4667	5.9	4.02	8.60
25 - 29	127	15873	7.1	5.80	8.60
30 - 34	181	22429	9.2	7.66	11.02
35 - 39	169	20248	12.7	10.55	15.12
40 - 44	63	7292	14.0	10.50	18.47
45 - 49	6	588	9.9	4.20	21.62
Ethnicity					
Malay	509	60450	10.6	9.50	11.76
Chinese	15	2560	7.7	4.36	13.34
Indian	22	2899	10.2	6.13	16.57
Other Bumiputera	40	5286	5.3	3.81	7.35
Others	10	1123	2.5	1.34	4.60
Citizenship					
Malaysian citizen	585	71085	9.7	8.82	10.76
Permanent resident/ non-citizen	10	1152	2.4	1.30	4.39
Education Level					
No formal education	4	410	2.5	0.89	6.87
Primary Education	21	2724	5.4	3.65	8.02
Secondary Education	314	39302	10.7	9.37	12.13
Tertiary Education	252	29366	9.0	7.66	10.47
Marital Status					
Single/ Separated/Divorcee/widow	9	1064	9.9	4.99	18.70
Married/Cohabiting	586	70772	9.2	8.35	10.21
Occupation					
Government /Semi-gov employee	97	10130	9.4	7.45	11.88
Private Employee	96	13882	8.9	7.08	11.12
Employer/Self-employed	52	6118	11.0	7.94	15.04
Unpaid worker/ housewife/ not working/ student	346	41672	9.4	8.29	10.62

Table 5.4.2: Percentage of women with selected medical condition who received pre-pregnancy care, NHMS 2022: MCH (n=490)

Pre-pregnancy care advice	Unweighted Count	Percentage (%)
Received medical advice before next pregnancy	446	91.0%
Suggested to delay her pregnancy	317	64.7%

Table 5.4.3: Percentage of women with selected medical condition who received advice on contraception to delay her pregnancy, NHMS 2022: MCH (n=317)

Pre-pregnancy care advice	Unweighted Count	Percentage (%)
Advice on contraception among who received advise to delay her pregnancy	297	93.7%

MODULE MC: MATERNAL CARE
INTRAPARTUM CARE



INTRAPARTUM CARE

INTRAPARTUM CARE

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HIGHLIGHTS

- The proportion of safe deliveries was 98.4%.
- The prevalence of caesarean section (CS) was 26.2%, significantly higher in the 2016.

Keywords: *Intrapartum care, Safe delivery, Caesarean section, Malaysia*

6.1 INTRODUCTION

Intrapartum care is the term used to describe the care given by trained medical professionals to women during childbirth in order to provide the best possible health outcomes for both mother and child ^[1]. Over a third of maternal fatalities and a substantial proportion of pregnancy-related life-threatening conditions are attributed to complications that arise during labour, childbirth, or the immediate postpartum period. Similarly, approximately half of all stillbirths and a quarter of neonatal deaths result from complications during labour and childbirth. In Malaysia, maternal mortality has risen from 24.9 in 2020 to 68.2 per 100,000 live births in 2021 due to COVID-19-related mortality ^[2]. The Sustainable Development Goals indicator (SDG) 3.1, is to reduce the global maternal mortality ratio (MMR) to < 70 per 100,000 live births and for those countries with MMR of less than 420 at baseline in 2010; to reduce their MMR by at least 2/3 from the 2010 baseline value by 2030 ^[3]. Safe childbirth includes giving birth to a healthy

baby in a clinically and psychologically safe environment with continuity of practical and emotional support from the birth companion(s) and kind, technically competent clinical staff ^[4].

6.2 OBJECTIVES

6.2.1 General Objectives

To determine the prevalence of intrapartum care among mothers aged 15 - 49 with a child below 2 years old.

6.2.2 Specific Objectives

- i. To determine the prevalence of safe delivery and unsafe delivery.
- ii. To determine the prevalence of various mode of delivery and place of delivery.

6.3 DEFINITIONS

- Safe delivery is defined as births attended by skilled health personnel.
- Unsafe delivery is defined as births attended by individuals other than skilled health personnel.
- Mode of delivery is defined as the method of childbirth, whether it is vaginal delivery (spontaneous vaginal delivery (SVD), breech), instrumental delivery (vacuum, forceps) or caesarean section (CS).
- Place of delivery is defined as the place of childbirth whether it is at the health facilities or at home.
- Birth attendants are the people who conduct the delivery of a baby.

6.4 FINDINGS

6.4.1 Safe and Unsafe Delivery

The proportion of safe delivery was 98.4% (95% CI: 97.58, 98.91) slightly lower than NHMS MCH findings in 2016 [5]. The prevalence of unsafe delivery was 1.6%, higher than in 2016 [5]. Results showed a higher proportion of unsafe delivery in rural areas as compared to urban (**Table 6.4.1a & Table 6.4.1b**).

6.4.2 Mode of Delivery and Place of Delivery

Data on the last child's delivery mode was collected in this survey. The prevalence of vaginal delivery was highest among the three modes of delivery. Results showed the prevalence of caesarean section (CS) was 26.2% (95% CI: 24.79, 27.73). Increasing maternal age was associated with higher rates of CS (**Table 6.4.2a**).

The survey result showed a significantly higher proportion of delivery in public health facilities than in private health facilities. The rates of deliveries in public health facilities are higher compared to NHMS findings in 2016 [5], whereas the prevalence of deliveries in private health facilities was lower in this survey (**Table 6.4.2b**).

6.4.3 Types of Birth Attendants

The prevalence of deliveries conducted by skilled birth attendants was reported at 98.4% (95% CI: 97.58, 98.91) (**Table 6.4.3a**).

6.5 CONCLUSION

Overall, the proportion of deliveries attended by skilled health personnel among mothers aged 15 – 49 in Malaysia has exceeded the target set by the World Health Organization (WHO) of 90% safe deliveries [5] and the national target of 95 [6]. The study revealed a high prevalence of safe delivery (98.4%). Despite that, unsafe deliveries still occur in Malaysia. The increasing prevalence of CS is comparable with the result reported by the National Obstetric Registry which showed an increasing trend from 2018 – 2020 (28.43% – 29.56%) [7]. This increasing prevalence is most likely due to the fact that childbirth by caesarean section was advisable during the COVID-19 pandemic [8] (**Table 6.5.1**).

6.6 RECOMMENDATIONS

- Awareness of the importance of safe delivery attended by trained healthcare personnel must be emphasised to the public/mothers and spouses. This is to monitor the progress of labour, ascertain the well-being of the foetus and mother and identify the early warning signs of complications for further management.
- Healthcare personnel must assist the mother and her spouse to decide on the most appropriate birth preparedness plan.

Table 6.5.1: Prevalence of safe delivery, mode of delivery and place of delivery among mother aged 15 – 49 years during their last pregnancy, NHMS 2016 – 2022

	2016	2022
Safe and Unsafe delivery		
Safe deliveries	99.5	98.4
Mode of delivery		
Caesarean Section	20.7	26.2
Place of delivery		
Public Health Facility	80.5	86.5
Private Health Facility	18.6	11.7
Home	0.5	1.5
Others	0.4	0.3

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Table 6.4.1a: Prevalence of safe deliveries among mothers aged 15–49 years during their last pregnancy (n=6351), NHMS 2022: MCH

	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	6281	771816	98.4	97.58	98.91
Location					
Urban	4395	537926	98.7	98.20	99.13
Rural	1886	233890	97.5	94.82	98.84

Table 6.4.1b: Prevalence of unsafe deliveries among mothers aged 15–49 years during their last pregnancy (n=6351), NHMS 2022: MCH

	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	70	12759	1.6	1.09	2.42
Location					
Urban	39	6833	1.3	0.87	1.80
Rural	31	5926	2.5	1.16	5.18

Table 6.4.2a: Prevalence of mothers who delivered their last child by mode of delivery, NHMS 2022: MCH (n=6342)

Sociodemographic	Vaginal Delivery						Instrumental						Delivered via Vacuum & Forceps						Caesarean section														
	Unweighted Count		Estimated Population		95% CI (%) Lower Upper		Unweighted Count		Estimated Population		95% CI (%) Lower Upper		Unweighted Count		Estimated Population		95% CI (%) Lower Upper		Unweighted Count		Estimated Population		95% CI (%) Lower Upper										
	State	MALAYSIA	4524	560721	71.6	70.08	73.04	138	17148	2.2	1.80	2.66	1680	205446	26.2	24.79	27.73	State	MALAYSIA	4524	560721	71.9	70.57	75.66	12	2620	3.2	2.02	5.20	95	20867	25.9	21.36	30.98
Johor	263	57147	70.9	65.57	75.66	12	2620	3.2	2.02	5.20	95	20867	25.9	21.36	30.98	Kedah	364	43308	67.5	63.16	71.59	21	2472	3.9	2.42	6.09	156	18361	28.6	25.03	32.51		
Kelantan	425	43987	75.6	71.75	79.05	6	521	0.9	0.37	2.13	131	13688	23.5	20.14	27.28	Melaka	286	18778	62.3	57.84	66.62	2	115	0.4	0.10	1.50	177	11233	37.3	32.91	41.88		
Negeri Sembilan	268	20108	68.8	64.14	73.17	15	1058	3.6	2.22	5.86	110	8048	27.5	23.36	32.17	Pahang	352	29288	77.5	74.08	80.56	9	750	2.0	1.10	3.55	95	7759	20.5	17.66	23.73		
P.Pinang	290	28719	65.8	60.80	70.51	10	938	2.2	1.03	4.43	139	13974	32.0	27.22	37.25	Perak	320	40537	67.8	63.87	71.50	7	866	1.4	0.73	2.85	142	18382	30.7	27.19	34.55		
Perlis	325	4922	67.4	63.19	71.41	7	125	1.7	0.77	3.78	145	2252	30.9	26.98	35.02	Selangor	269	101570	67.9	62.50	72.92	7	2689	1.8	0.87	3.66	119	45254	30.3	25.11	35.98		
Terengganu	396	31345	81.2	77.84	84.13	8	621	1.6	0.77	3.32	84	6645	17.2	14.58	20.20	Sabah & WP Labuan	330	65889	82.0	77.09	86.06	3	624	0.8	0.26	2.31	69	13831	17.2	13.33	21.94		
Sarawak	338	42218	73.0	68.39	77.16	20	2508	4.3	2.70	6.89	105	13107	22.7	19.26	26.47	WP Kuala Lumpur & Putrajaya	298	32906	71.2	67.25	74.92	11	1242	2.7	1.42	5.05	113	12043	26.1	22.64	29.82		
Location	Urban	3104	383621	70.5	68.62	72.25	103	12666	2.3	1.86	2.90	1223	148112	27.2	25.42	29.07	Rural	1420	177099	74.1	71.51	76.58	35	4482	1.9	1.26	2.79	457	57334	24.0	21.61	26.56	
Age	15-19	64	7877	80.9	64.09	90.91	3	488	5.0	1.43	16.06	8	1377	14.1	6.81	27.06	20-24	503	61869	78.3	74.16	81.90	19	2437	3.1	1.84	5.11	121	14732	18.6	15.30	22.52	
	25-29	1350	166668	74.3	71.66	76.74	54	7125	3.2	2.34	4.30	439	50582	22.5	20.27	24.99	30-34	1403	169130	69.5	66.71	72.14	37	4084	1.7	1.16	2.41	536	70163	28.8	26.17	31.57	
	35-39	892	110681	69.2	66.00	72.25	21	2678	1.7	0.95	2.93	389	46560	29.1	26.16	32.26	40-44	243	34053	65.5	59.50	70.98	4	336	0.6	0.24	1.75	151	17630	33.9	28.42	39.83	
	45-49	24	3356	56.5	39.89	71.83						22	2580	43.5	28.17	60.11																	

Table 6.4.2b: Percentage of mothers who delivered their last child by place of delivery in Malaysia, NHMS 2022: MCH (n=6321)

	NHMS 2022				
	Unweighted Count	Estimated Population	Percentage (%)	95% CI	
				Lower	Upper
Public Health Facility	5601	674897	86.5	85.01	87.93
Private Health Facility	634	91055	11.7	10.43	13.05
Home	61	11386	1.5	0.92	2.29
Others	25	2549	0.3	0.18	0.58

Table 6.4.3a: Prevalence of mothers who received assistance during delivery of last childbirth in Malaysia, by types of the birth attendant, NHMS 2022: MCH (n=6351)

	NHMS 2022				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
Sociodemographic					
Health Staff (skilled attendant)	6281	771816	98.4	97.58	98.91
Traditional birth attendant	35	6259	0.8	0.5	1.27
No birth attendant	3	234	0	0.01	0.11
Others	32	6265	0.8	0.47	1.35

MODULE MC: MATERNAL CARE
POSTNATAL CARE



POSTNATAL CARE

POSTNATAL CARE

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HIGHLIGHTS

- 3 in 4 mothers notified their last child's birth to the nearest health facility within 24 hours.
- 79.1% of mothers received a postnatal home visit within 24 hours of birth notification.
- 63.5% of mothers received all three scheduled postnatal visits (at least one visit per week)
- 95% of mothers attended clinics for postnatal care at one month postpartum.
- One in 10 mothers was screened positive for probable postnatal depression.

Keywords: *Postnatal care, postnatal depression, confinement care, NHMS*

7.1 INTRODUCTION

Quality postnatal care includes early detection of conditions that may adversely affect women's health and well-being postpartum, including their capacity to care for themselves and their newborns^[1]. At each postnatal contact, women's general health and well-being, including psychological and emotional health, should be assessed, and women should be asked if they have any concerns^[2]. In addition, the baby's general well-being, feeding, and development should also be assessed at every postnatal contact so that any concerns can be identified early. The Malaysian

Perinatal Care Manual (4th Edition) suggested a minimum of five scheduled postnatal visits and one clinic visit for mothers with uneventful pregnancy and delivery^[3]. As for high-risk mothers and babies or any abnormalities detected, the number of contacts should be more frequent. To assess the extent of postnatal care services, women were asked whether they had notified their deliveries, received a postnatal home visit, scheduled postnatal visits, and attended postnatal clinic visits after one month postpartum. In addition, the Edinburgh Postnatal Depression Scale (EPDS) was used to screen for postnatal depression^[4].

7.2 OBJECTIVES

7.2.1 General Objective

To assess the provision and utilization of postnatal care and its practices among mother (15 - 49 years old) with the last child less than 24 weeks.

7.2.2 Specific objectives

- i. To determine the prevalence of mothers who notified their last child to the nearest health facility within 24 hours.
- ii. To determine the prevalence of postnatal home visits within 24 hours of birth notification.
- iii. To determine the prevalence of mothers who received scheduled postnatal visits during the first, second, and third to fourth weeks of postnatal (at least one visit per week).
- iv. To determine the prevalence of mothers who attended clinics for postnatal care at one-month postpartum.
- v. To determine the prevalence of mothers who missed postnatal care appointments during the COVID-19 measures.
- vi. To determine the prevalence of mothers who practiced confinement care.
- vii. To determine the prevalence of known, undiagnosed and overall probable postnatal depression in mothers with the last child aged 6-16 weeks.

7.3 DEFINITIONS

- Notified their last child to the nearest health facility defined as the mother, spouse or family members notified the health facility (after discharge from the ward or after delivery if delivered outside of the hospital), within 24 hours, after 24 hours of the childbirth, or no notification given.
- Postnatal home visits are defined as the provision of postnatal home visits by health personnel within 24 hours after notification received.
- Received scheduled postnatal visits are defined as mothers receiving postnatal visits by health personnel during the first, second, and third to fourth weeks of postnatal.
- Attended clinics for postnatal care at one-month postpartum is defined as the postnatal mother went to the health facility for a check-up one month after giving birth.
- Confinement care refers to traditional practices during the postpartum period with the intention for maternal wellbeing.
- Known postnatal depression is defined as the mother who has been told by her doctor to have depression after giving the last childbirth.
- Undiagnosed probable postnatal depression is defined as mothers with positive Edinburgh Postnatal Depression Scale screening (EPDS score of 12 or more or those who scored more than zero on Suicidal Ideation by item 10 on the EPDS)^[5] during this survey.
- Overall probable postnatal depression is defined as those who have known postnatal depression and undiagnosed probable postnatal depression.

7.4 FINDINGS

Birth notification should be done following delivery as soon as possible so the health care personnel can deliver immediate postnatal care. The majority of the respondents (97.2%) notified their deliveries to the nearest government healthcare facilities after discharged from the hospital, of which (77.8%, 95% CI: 74.37, 80.97) were done within 24 hours (**Table 7.4.1a**). About 79.1% (95% CI: 75.74, 82.09) of mothers received a postnatal visit within 24 hours of birth notification (**Table 7.4.2**).

The prevalence of mothers who received all three scheduled postnatal visits (at least one visit per week) was 63.5% (**Table 7.4.3a**). Most mothers (95.0%, 95.0% CI: 92.84, 96.47) visited the clinics for postnatal care one month postpartum (**Table 7.4.4**). Despite the COVID-19 pandemic measures, the majority of mothers did not miss their postnatal care appointments (97.3%, 95% CI: 95.58, 98.40) (**Table 7.4.5a**). Among those who missed postnatal care appointments during the COVID-19 pandemic measures (2.7%, 95% CI: 1.60,

4.42), 47.8% of them afraid of possibly getting an infection, 26.1% because of health-related issues, 13.0% was cancel or rescheduled appointment by healthcare staff, and 13.0% due to financial or transport problems (**Table 7.4.5b**).

For practicing confinement care, a total of 96.5% (95% CI: 94.44, 97.82) of respondents practiced confinement care (**Table 7.4.6a**). The top three confinement care practices among mothers were dietary restrictions (24.2%), postnatal massage (20.2%), followed by hot compression (18.5%) (**Table 7.4.6b**). The top three places of confinement were at their own house (55.7%), parent's house (34.4%), followed by in-law's house (8.2%) (**Table 7.4.6c**).

Out of 676 respondents, 13 (0.8%) was diagnosed by their doctors as having depression after the last childbirth. A total of 10.4% were screened positive with EPDS; score of 12 or more, or item number ten scored more than zero. Hence, the prevalence of overall probable postnatal depression was 11.2% (95% CI: 8.70, 14.40) (**Table 7.4.7a**).

7.5 CONCLUSION

Early birth notification had improved compared to the National Health and Morbidity Survey (NHMS) conducted in 2016^[6]. However, the postnatal home visit, scheduled postnatal visit, and clinic visit for postnatal care at one month postpartum were lower compared to the previous NHMS 2016. This situation is most likely contributed by the COVID-19 pandemic. Confinement care was a common practice among mothers in Malaysia. The prevalence of probable postnatal depression decreased from 12.7% in 2016 to 11.2% in 2022 (**Table 7.5.1**).

7.6 RECOMMENDATIONS

- The importance of early notification of delivery should be emphasized to all mothers, ensuring the continuity of postnatal care.
- Postnatal visits should be initiated immediately after receiving birth notification or after the mother or newborn is discharged from the hospital. In a situation like a pandemic, other modes of postnatal contact could be explored, e.g., virtual consultations and telephone calls.
- To establish integrated mental health services for women during the perinatal period including an exploration of a mental health screening program.

Table 7.5.1: Prevalence of positive postnatal depression screening among mother aged 15- 49 years during their last pregnancy, NHMS 2016 - 2022

	2016	2022
Postnatal depression	12.7	11.2

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Table 7.4.1a: Percentage of mothers aged 15-49 years old with the last child less than 24 weeks who had notified their last child's birth to the nearest health facility, NHMS 2022: MCH (n=1,274)

Notification time	Unweighted count	Estimated Population	Percentage (%)	95% CI	
				Lower	Upper
Within 24 hours	1028	124994	77.8	74.37	80.97
After 24 hours	222	31048	19.3	16.42	22.63
No notification	24	4526	2.8	1.73	4.56

Table 7.4.1b: Prevalence of mothers aged 15-49 years old with the last child less than 24 weeks who had notified their last child's birth to the nearest health facility within 24 hours, NHMS 2022: MCH (n=1,274)

Sociodemographic	Unweighted count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	1028	124994	77.8	74.37	80.97
State					
Johor	46	10996	57.8	44.83	69.72
Kedah	101	12007	98.0	92.16	99.53
Kelantan	61	6084	80.8	67.73	89.46
Melaka	99	6509	96.0	88.51	98.70
Negeri Sembilan	67	5104	94.6	86.66	97.90
Pahang	64	5277	68.2	55.61	78.62
Pulau Pinang	43	4123	77.9	62.59	88.12
Perak	85	10619	82.0	70.70	89.61
Perlis	106	1588	94.7	86.03	98.14
Selangor	71	26800	80.3	69.20	88.02
Terengganu	90	7112	80.5	69.73	88.05
Sabah & WP Labuan	67	13431	81.3	66.85	90.41
Sarawak	67	8361	67.7	56.20	77.37
WP Kuala Lumpur & Putrajaya	61	6982	64.4	51.47	75.60
Location					
Urban	716	85597	76.3	72.36	79.84
Rural	312	39397	81.4	73.89	87.15

Sociodemographic	Unweighted count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
Age Group					
15 - 19	14	1666	83.0	57.51	94.65
20 - 24	136	16916	78.6	69.85	85.30
25 - 29	277	33479	76.5	70.30	81.82
30 - 34	330	39921	79.2	73.60	83.83
35 - 39	198	22854	76.5	69.02	82.59
40 - 44	50	6029	75.6	59.06	86.97
45 - 49	5	1214	85.6	51.63	97.06
Ethnicity					
Malay	804	9110	80.0	75.91	83.47
Chinese	31	4126	60.9	42.50	76.71
Indian	31	3917	80.3	58.97	92.02
Other Bumiputera	110	18248	80.8	72.02	87.27
Others	39	5327	55.4	42.11	68.03
Citizenship					
Malaysian	975	117387	79.3	75.80	82.45
Permanent resident/ non-citizen	40	5341	54.4	41.33	66.92
Marital Status					
Single/ separated/ divorcee/ widow	8	846	87.0	45.10	98.20
Married/ cohabiting	1004	121105	77.6	74.10	80.70
Education Level					
No formal education	11	1664	70.2	44.30	87.40
Primary school	35	5383	59.3	45.28	71.91
Secondary school	501	60506	79.2	74.64	83.05
Tertiary education	443	52613	78.8	74.01	82.89
Occupation					
Government/ semi-gov employee	176	19194	83.9	76.30	89.40
Private employee	171	24173	79.8	72.18	85.72
Employer/ self-employed	67	7385	85.8	71.77	93.50
Unpaid worker/ housewife/ not working/ student	578	69586	74.7	70.19	78.71
Place of Child Delivery					
Government Facility	926	110614	80.0	76.32	83.19
Private Facility	92	13343	66.9	56.46	75.94
Others	5	-	-	-	-

Table 7.4.2: Prevalence of postnatal home visit within 24 hours of birth notification among mothers aged 15–49 years old with the last child less than 24 weeks, NHMS 2022: MCH (n=1,274)

Sociodemographic	Unweighted count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	1047	127225	79.1	75.74	82.09
State					
Johor	78	17482	91.8	81.65	96.61
Kedah	100	11877	97.0	90.91	99.03
Kelantan	56	5644	73.8	60.36	83.92
Melaka	99	6509	96.0	88.99	98.64
Negeri Sembilan	67	5127	95.0	88.24	97.97
Pahang	81	6753	88.2	79.34	93.54
Pulau Pinang	48	4636	87.6	69.14	95.70
Perak	90	11213	85.8	78.61	90.89
Perlis	110	1644	98.1	92.64	99.52
Selangor	74	27904	83.6	72.19	90.87
Terengganu	97	7665	86.7	76.42	92.94
Sabah & WP Labuan	41	8150	49.4	35.90	62.91
Sarawak	45	5639	45.2	33.31	57.65
WP Kuala Lumpur & Putrajaya	61	6982	64.4	53.88	73.77
Location					
Urban	741	89707	79.9	76.02	83.20
Rural	306	37519	77.3	70.21	83.18
Age Group					
15 - 19	12	1376	68.6	41.90	86.85
20 - 24	133	15607	72.4	62.22	80.62
25 - 29	281	35098	80.0	74.82	84.38
30 - 34	336	40330	80.0	74.27	84.70
35 - 39	207	24096	80.3	73.46	85.73
40 - 44	52	6286	78.9	62.76	89.20
45 - 49	5	-	-	-	-
Ethnicity					
Malay	841	97489	85.5	82.07	88.31
Chinese	41	4956	73.2	53.42	86.69
Indian	34	4535	93.0	79.71	97.80
Other Bumiputera	77	12429	54.9	45.11	64.34
Others	39	5163	53.1	38.43	67.22
Citizenship					
Malaysian	993	119480	80.7	77.24	83.66
Permanent resident/ non-citizen	39	5092	51.3	36.93	65.38
Marital Status					
Single/ separated/ divorcee/ widow	8	854	87.8	46.71	98.33
Married/ cohabiting	1023	123607	79.1	75.63	82.14
Education Level					
No formal education	12	1678	70.7	43.84	88.21
Primary school	31	4914	53.4	37.12	69.02
Secondary school	499	59333	77.6	72.47	81.98
Tertiary education	465	56166	84.0	79.53	87.57
Occupation					
Government/ semi-gov employee	175	19010	83.1	74.91	89.00
Private employee	181	24966	82.1	73.85	88.11
Employer/ self-employed	65	7002	80.2	66.24	89.36
Unpaid worker/ housewife/ not working/ student	588	71269	76.5	72.02	80.39

Table 7.4.3a: Prevalence of mothers aged 15 - 49 years with the last child less than 24 weeks who received all three scheduled postnatal visits during the first, second, and third to fourth weeks postnatal, NHMS 2022: MCH (n=1,267)

Notification time	Unweighted count	Estimated Population	Percentage (%)	95% CI	
				Lower	Upper
Received all three (3) scheduled home visits	847	101229	63.5	59.45	67.30
Received two (2) of three (3) scheduled home visits	216	26792	16.8	14.43	19.46
Received one (1) of three (3) scheduled home visits	91	13770	8.6	6.88	10.79
No postnatal home visit	113	17714	11.11	9.04	13.57

Table 7.4.3b: Prevalence of mothers aged 15 - 49 years with the last child less than 24 weeks who received all three scheduled postnatal visits during the first, second, and third to fourth weeks postnatal, NHMS 2022: MCH (n=1,267).

Sociodemographic	Received all three (3) scheduled home visits				
	Unweighted count	Estimated Population	Prevalence (%)	95% CI	
			Lower	Upper	
MALAYSIA	847	101229	63.5	59.45	67.30
State					
Johor	69	15541	81.6	70.52	89.22
Kedah	77	9201	75.8	65.37	83.88
Kelantan	51	5203	68.8	54.62	80.13
Melaka	81	5280	77.9	69.12	84.74
Negeri Sembilan	64	4901	90.8	79.83	96.12
Pahang	47	3960	51.2	40.78	61.48
Pulau Pinang	47	4498	87.3	76.15	93.63
Perak	66	8155	62.4	52.39	71.48
Perlis	98	1435	85.6	69.17	94.02
Selangor	54	20319	60.8	46.90	73.22
Terengganu	76	5998	67.9	56.41	77.49
Sabah & WP Labuan	33	6720	42.2	29.35	56.20
Sarawak	34	4277	34.6	22.51	49.12
WP Kuala Lumpur & Putrajaya	50	5740	54.9	44.07	65.34
Location					
Urban	598	69583	62.4	57.70	66.96
Rural	249	31647	65.8	58.18	72.74
Age Group					
15 - 19	7	939	46.8	23.42	71.67
20 - 24	110	12555	59.4	50.22	68.04
25 - 29	235	28864	66.5	60.11	72.32
30 - 34	268	31313	62.3	56.02	68.13
35 - 39	161	17777	59.9	51.87	67.41
40 - 44	46	6081	76.3	61.07	86.84
45 - 49	5	1214	85.6	51.63	97.06
Ethnicity					
Malay	692	78866	69.6	64.97	73.82
Chinese	28	3453	51.0	33.91	67.87
Indian	23	2947	60.4	40.93	77.07
Other Bumiputera	64	10013	45.1	34.83	55.71
Others	28	3834	40.3	27.99	54.03
Citizenship					
Malaysian	806	95157	64.7	60.53	68.70
Permanent resident/ non-citizen	29	3956	40.7	28.61	54.08
Marital Status					
Single/ separated/ divorcee/ widow	8	854	87.8	46.71	98.33
Married/ cohabiting	826	98148	63.3	59.27	67.21

Sociodemographic	Received all three (3) scheduled home visits				
	Unweighted count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
Education Level					
No formal education	6	1186	50.0	25.53	74.50
Primary school	24	3947	44.0	28.59	60.56
Secondary school	403	47879	63.2	57.90	68.26
Tertiary education	382	44208	66.4	60.44	71.96
Occupation					
Government/ semi-gov employee	136	14779	65.7	56.60	73.71
Private employee	147	20210	66.4	57.48	74.34
Employer/ self-employed	55	5865	67.2	52.99	78.84
Unpaid worker/ housewife/ not working/ student	478	56410	61.2	56.08	66.01

Table 7.4.4: Prevalence of mothers aged 15-49 years with the last child less than 24 weeks who attended clinics for postnatal care at one month postpartum, NHMS 2022: MCH

	Unweighted count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
NHMS 2022	1141	143586	95.0	92.84	96.47
NHMS 2016	927		98.2	97.12	98.94

Table 7.4.5a: Percentage of mothers aged 15-49 years with the last child less than 24 weeks who missed postnatal care appointments during the COVID-19 measures, NHMS 2022: MCH (n=1274).

Sociodemographic	Unweighted count	Estimated Population	Percentage (%)	95% CI	
				Lower	Upper
Missing postnatal care appointments	23	4280	2.7	1.60	4.42
Not missing appointment	1251	156108	97.3	95.58	98.4

Table 7.4.5b: Reasons of missing postnatal care appointments during the COVID-19 measures, NHMS 2022: MCH (n=23)

Reasons	Unweighted count	Percentage (%)
Afraid of possible get infection	11	47.8
Cancelled/ rescheduled appointment	3	13.0
Health Problems	6	26.1
Financial/ Transport issues	3	13.0

Table 7.4.6a: Prevalence of mothers aged 15–49 years with the last child less than 24 weeks who practiced confinement care, NHMS 2022: MCH (n=1274)

Sociodemographic	Unweighted count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	1239	155307	96.5	94.44	97.82
State					
Johor	357	45666	94.1	87.45	97.37
Kedah	100	11896	97.1	88.95	99.3
Kelantan	76	7565	99	93	99.85
Melaka	101	6624	97.7	90.04	99.52
Negeri Sembilan	64	4901	90.8	79.38	96.22
Pahang	93	-	-	-	-
Pulau Pinang	54	5199	98.2	88.61	99.75
Perak	103	12827	98.2	92.99	99.55
Perlis	111	1656	98.8	91.34	99.84
Selangor	87	33027	98.9	92.33	99.85
Terengganu	110	8677	98.2	92.99	99.54
Sabah & WP Labuan	66	13175	79.8	62.87	90.2
Sarawak	100	-	-	-	-
WP Kuala Lumpur & Putrajaya	90	10705	98.8	92.12	99.83
Location					
Urban	882	109642	97.5	95.98	98.49
Rural	357	45666	94.1	87.45	97.37
Age Group					
15 - 19	16	1940	96.6	79.01	99.55
20 - 24	161	20185	93.2	86.5	96.74
25 - 29	340	42617	97.2	94.31	98.61
30 - 34	390	48686	96.6	93.32	98.26
35 - 39	246	29800	99.3	96.07	99.89
40 - 44	59	7531	94.5	81.07	98.56
45 - 49	6	1199	84.5	38.31	97.95
Ethnicity					
Malay	957	112991	99.1	98.21	99.51
Chinese	47	6431	95	81.25	98.81
Indian	36	4811	98.6	90.6	99.81
Other Bumiputera	129	20520	90.3	75.98	96.51
Others	55	7849	80.7	65.34	90.26
Citizenship					
Malaysian	1167	144520	97.5	95.27	98.69
Permanent resident/ non-citizen	57	8084	81.4	66.41	90.60
Marital Status					
Single/ separated/ divorcee/ widow	9	-	-	-	-
Married/ cohabiting	1212	150854	96.45	94.33	97.80
Education Level					
No formal education	9	945	56.3	24.27	83.78
Primary school	51	8262	89.8	77.73	95.69
Secondary school	598	73908	96.5	92.76	98.38
Tertiary education	532	65781	98.3	96.52	99.2
Occupation					
Government/ semi-gov employee	200	22657	99.0	93.45	99.87
Private employee	205	29698	97.6	94.78	98.93
Employer/ self-employed	77	-	-	-	-
Unpaid worker/ housewife/ not working/ student	715	88678	95.1	91.59	97.14

Table 7.4.6b: Types of confinement care practices, NHMS 2022: MCH (n=1239)

Types of confinement care practices	Unweighted count	Percentage (%)
Postnatal massage	942	20.2
Hot Compression	861	18.5
Body wrapping	694	14.9
Herbal Bath	664	14.2
Ingestion herbal products	364	7.8
Dietary restrictions	1127	24.2
Others	11	0.2

Table 7.4.6c: Place of confinement, NHMS 2022: MCH (n=1239)

Place of confinement care	Unweighted count	Percentage (%)
Own house	748	55.7
Parent's house	461	34.4
In law's house	110	8.2
Relative's house	5	0.4
Hospital	2	0.2
Orang Asli Transit home	-	-
Confinement Centre	14	1.0
Others	2	0.2

Table 7.4.7a: Known, undiagnosed, and overall probable postnatal depression among mothers aged 15–49 who have a child aged 6–16 week, NHMS 2022: MCH (n=676)

Sociodemographic	Unweighted count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
Known	13	785	0.8	0.47	1.82
Undiagnosed	64	8630	10.4	7.89	13.58
Overall	77	9415	11.2	8.70	14.40

MODULE CH: CHILD HEALTH

INFANT AND YOUNG CHILD FEEDING PRACTICE



INFANT AND YOUNG CHILD FEEDING PRACTICE

INFANT AND YOUNG CHILD FEEDING PRACTICE

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HIGHLIGHTS

- 64.3% early initiation of breastfeeding among children born in the last 24 months.
- 94.9% were ever breastfed among children born in the last 24 months.
- 50.6% continued breastfeeding among children aged 12–23 months.
- 64.3% of children aged 6–23 months met the minimum dietary diversity (MDD).
- 60.2% of children aged 6–23 months met the minimum acceptable diet (MAD).

Keywords: *Breastfeeding, Complementary feeding, IYCF, Dietary diversity*

8.1 INTRODUCTION

Infant and young child feeding (IYCF) practices in Malaysia have improved over the years, with growing awareness of the importance of breastfeeding and complementary feeding. Adequate nutrition during infancy and early childhood is essential to ensure the growth, health and development of children to their full potential. The World Health Organization (WHO) has developed a set of indicators to assess IYCF practices and track progress towards improving child health outcomes [1]. In Malaysia, the National Health and Morbidity Survey (NHMS) periodically collects data on these indicators to monitor the status of IYCF

practices in the country. In addition, the government has established the National Plan of Action for Nutrition of Malaysia, which includes strategies to improve the nutritional status of infants and young children. These strategies include strengthening nutrition education and counselling for mothers and healthcare providers, improving access to nutritious foods, and increasing the availability of breastfeeding-friendly environments [2].

8.2 OBJECTIVES

8.2.1 General objective

To determine the infant and young child feeding practices among children under 2 years old.

8.2.2 Specific objectives

- i. To determine the prevalence of early initiation of breastfeeding among children born in the last 24 months by socio-demographic characteristics.
- ii. To determine the prevalence of ever breastfed among children born in the last 24 months by socio-demographic characteristics.
- iii. To determine the prevalence of continued breastfeeding among children aged 12–23 months by socio-demographic characteristics.
- iv. To determine the prevalence of minimum milk feeding frequency for non-breastfed children aged 6–23 months (MMFF) by socio-demographic characteristics.
- v. To determine the prevalence of children 0–23 months of age who were fed from a bottle with a nipple by socio-demographic characteristics.
- vi. To determine the prevalence of minimum meal frequency among children aged 6–23 months by socio-demographic characteristics.
- vii. To determine the prevalence of minimum dietary diversity among children aged 6–23 months by socio-demographic characteristics.
- viii. To determine the prevalence of the minimum acceptable diet by socio-demographic characteristics.

8.3 DEFINITIONS

Breastfeeding indicators	
Early initiation of breastfeeding	Percentage of children born in the last 24 months who were put to the breast within one hour of birth
Ever breastfed	Percentage of children born in the last 24 months who were ever breastfed
Continued breastfeeding (12–23 months)	Percentage of children 12–23 months of age who were fed breast milk during the previous day
Complementary feeding indicators	
Minimum milk feeding frequency for non-breastfed children	Percentage of non-breastfed children 6–23 months of age who consumed at least two milk feeds during the previous day
Minimum meal frequency	Percentage of children 6–23 months of age who consumed solid, semi-solid or soft foods (but also including milk feeds for non-breastfed children) the minimum number of times or more during the previous day
Minimum dietary diversity	Percentage of children 6–23 months of age who consumed foods and beverages from at least five out of eight defined food groups during the previous day
Minimum acceptable diet	Percentage of children 6–23 months of age who consumed a minimum acceptable diet during the previous day
Other indicators	
Bottle feeding	Percentage of children 0–23 months of age who were fed from a bottle with a nipple during the previous day

8.4 FINDINGS

8.4.1 Breastfeeding Indicators

8.4.1a Prevalence of early initiation of breastfeeding

Table 8.4.1a displays the prevalence of children who were put to the breast within one hour of birth among children born in the last 24 months by sociodemographic characteristics. The findings showed the prevalence of early initiation of breastfeeding within one hour of birth was 64.3% (95% CI: 61.11, 67.36). Meanwhile, after one hour to 24 hours after birth was 24.3% (95% CI: 21.52, 27.31), one day after birth was 4.0% (95% CI: 3.31, 4.78) and having never put the baby to the breast was 7.4% (95% CI: 6.09, 9.04).

8.4.1b Prevalence of ever breastfed among children born in the last 24 months.

The prevalence of ever breastfed among children born in the last 24 months by sociodemographic characteristics. The national prevalence of children born in the last 24

months who were ever breastfed was 94.9% (95% CI: 93.87, 95.80).

8.4.1c Prevalence of continued breastfeeding at 12–23 months among children by sociodemographic characteristics

Overall, the prevalence of continued breastfeeding among children aged 12–23 months was 50.6% (95% CI: 46.94, 54.25) (**Table 8.4.1c**).

8.4.2 Complementary Feeding Indicators

8.4.2a Prevalence of minimum milk feeding frequency for non-breastfed children

The prevalence of non-breastfed children 6–23 months of age who consumed at least two milk feeds during the previous day in Malaysia was 84.2% (95% CI: 81.77, 86.38).

8.4.2b Prevalence of minimum meal frequency, minimum dietary diversity and minimum acceptable diversity among children aged 0–23 months by sociodemographic characteristics.

8.4.2b (i) Minimum Meal Frequency

The indicator for minimum meal frequency refers to children 6–23 months of age who consumed solid, semi-solid or soft foods (but also including milk feeds for non-breastfed children) at least the minimum number of times during the previous day. The overall prevalence of children with minimum meal frequency was 78.6% (95% CI: 76.07, 80.98).

8.4.2b (ii) Minimum Dietary Diversity

As breastmilk is added as eighth food group and cut-off for minimum increased to five food groups⁴, data of NHMS 2016 was reanalysed and showed that the prevalence of minimum dietary diversity was 46.0% (95% CI: 43.81, 48.11). **Table 8.4.2b (ii)** showed the overall prevalence of minimum dietary diversity was 64.3% (95% CI: 61.16, 67.23). The study revealed a higher prevalence of minimum dietary diversity in 2022 compared to 2016.

8.4.2b (iii) Minimum Acceptable Diet

The indicator for a minimum acceptable diet refers to children 6–23 months of age who consumed at least the minimum dietary diversity and minimum meal frequency during the previous day and are either breastfed or consumed the minimum milk feeding frequency during the previous day. The overall prevalence of the minimum

acceptable diet was 60.2% (95% CI: 57.07, 63.19) (**Table 8.4.2b (iii)**).

8.5 OTHERS INDICATORS

8.5.1 Prevalence of bottle-feeding practices among children aged 0-23 months by sociodemographic characteristics

The prevalence of bottle-feeding practices among Malaysian children aged 0-23 months was 60.4% (95% CI: 57.48, 63.32) (**Table 8.5.1**).

8.6 CONCLUSION

Regardless of their demographic background, more Malaysian mothers breastfeed their children. Key actions are needed to bolster the supportive policy environment to support, promote, and protect breastfeeding. These findings also highlight the importance of increasing efforts to promote appropriate infant and young child feeding practices on dietary diversity, particularly among parents of children aged 6-11 months.

8.7 RECOMMENDATIONS

- To continue educating mothers on the importance of initiating breastfeeding after birth and continue to do so after leaving the hospital.
- To strengthen the support for the mother and spouse to breastfeed exclusively and continue for up to two years.
- To enhance supportive environments for breastfeeding by creating a community that is breastfeeding friendly.
- To actively advocate for parents, caretakers and healthcare providers on the importance and skill of timely, varied, adequate, properly fed and safe complementary feeding.
- To ensure employers and local authorities support breastfeeding mothers or employees by having flexible paid working hours or works from home.
- To improve affordability and accessibility to diverse and nutritious foods for every household.

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Table 8.4.1a: Prevalence of early initiation of breastfeeding among children born in the last 24 months, NHMS 2022: MCH (n= 6,408)

Sociodemographic	Within 1 hour after birth				1-24 hours after birth			
	Unweighted Count	Estimated Population	Prevalence (%)		95% CI		Estimated Population	Prevalence (%)
			Lower	Upper	Count	Lower		
MALAYSIA	4295	564712	64.3	61.11	67.36	1400	213445	24.3
State								21.52
Johor	165	45252	43.0	32.22	54.40	172	47401	45.0
Kedah	253	30499	44.5	37.52	51.67	190	21894	31.9
Kelantan	331	45231	67.0	57.16	75.46	112	16388	24.3
Melaka	275	14542	57.4	52.10	62.59	147	7884	31.1
Negeri Sembilan	340	24279	82.7	78.00	86.56	30	1909	6.5
Pahang	340	32570	76.5	71.81	80.58	87	8408	19.7
Pulau Pinang	261	22523	48.5	38.41	58.78	141	17919	38.6
Perak	313	37795	63.5	58.46	68.33	113	14486	24.4
Perlis	372	5875	76.2	71.07	80.72	38	682	8.9
Selangor	293	125574	71.4	59.57	80.90	73	36470	20.7
Terengganu	360	32581	73.5	65.20	80.42	100	9065	20.5
Sabah & WP Labuan	317	71715	72.0	59.78	81.60	49	11872	11.9
Sarawak	366	40965	73.5	67.98	78.44	74	7850	14.1
WP Kuala Lumpur & Putrajaya	309	35312	69.9	64.44	74.86	74	11216	22.2
Location								17.58
Urban	3010	395419	63.6	59.78	67.31	1023	157657	25.4
Rural	1285	169293	65.9	60.09	71.25	377	55788	21.7
Sex								17.78
Male	2137	285084	64.2	60.11	68.00	733	110728	24.9
Female	2158	279628	64.4	60.83	67.88	667	102717	23.7
Age Group								20.91
Less than 6 months	869	108421	61.1	56.53	65.54	293	47857	27.0
6 - 11 months	1105	137631	62.4	58.27	66.43	366	53109	24.1
12 - 23 months	2321	318660	66.3	62.23	70.16	741	112479	23.4
Ethnicity								19.73
Malay	3424	363986	64.8	61.77	67.65	1127	135174	24.1
Chinese	162	62809	56.8	48.37	64.80	91	38175	34.5
Indian	120	19250	56.9	46.36	66.79	62	9023	26.7
Other Bumiputera	490	72333	77.0	71.67	81.64	89	12911	13.7
Others	98	46254	59.8	39.10	77.46	30	-	-
Citizenship								-
Malaysian citizen	4201	522948	64.9	62.23	67.42	1366	195503	24.3
Permanent resident/ non-citizen	93	41683	57.8	36.46	76.63	34	-	-

Table 8.4.1c: Prevalence of continued breastfeeding among children age 12–23 months, NHMS 2022: MCH (n= 3,258)

Sociodemographic	Continued breastfeeding among children age 12–23 months				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
MALAYSIA	1680	229922	50.6	46.94	54.25
State					
Johor	78	20583	40.2	33.59	47.29
Kedah	122	14520	43.4	36.73	50.39
Kelantan	174	23665	68.1	61.12	74.42
Melaka	106	5012	42.9	34.81	51.46
Negeri Sembilan	98	6134	40.6	32.99	48.65
Pahang	154	14915	70.1	61.95	77.16
Pulau Pinang	113	10013	39.1	28.12	51.35
Perak	103	12351	45.6	37.02	54.38
Perlis	138	2236	55.8	48.15	63.16
Selangor	120	55612	55.1	40.98	68.38
Terengganu	147	13268	61.6	54.51	68.32
Sabah & WP Labuan	128	30255	57.8	57.75	49.19
Sarawak	74	7948	29.0	23.30	35.45
WP Kuala Lumpur & Putrajaya	125	13410	47.8	39.25	56.58
Location					
Urban	1,149	160910	50.4	45.60	55.12
Rural	531	69012	51.2	46.24	56.06
Sex					
Male	829	114350	49.0	43.61	54.41
Female	851	115573	52.3	47.80	56.74
Ethnicity					
Malay	1,425	158246	55.7	53.11	58.18
Chinese	38	15184	27.1	15.65	42.61
Indian	26	3782	22.4	12.78	36.31
Other Bumiputera	152	24338	50.3	43.93	56.59
Others	39	28372	58.6	32.53	80.60
Citizenship					
Malaysian citizen	1,642	204550	50.0	47.05	52.86
Permanent resident/ non-citizen	38	25372	56.6	29.72	80.04

Table 8.4.2b (ii): Prevalence of minimum dietary diversity, NHMS 2022: MCH (n=5,222)

Sociodemographic	Minimum Dietary Diversity				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	3438	462927	64.3	61.16	67.23
State					
Johor	216	61172	71.6	63.17	78.74
Kedah	354	44165	80.6	74.70	85.36
Kelantan	208	29099	54.2	47.61	60.58
Melaka	320	16681	82.1	77.73	85.81
Negeri Sembilan	258	18707	76.2	68.55	82.52
Pahang	241	23490	66.6	62.11	70.79
Pulau Pinang	179	17177	42.8	30.88	55.69
Perak	264	32864	69.0	61.53	75.60
Perlis	316	5176	83.3	76.75	88.32
Selangor	205	92580	61.8	50.18	72.25
Terengganu	174	15850	44.6	37.51	51.88
Sabah & WP Labuan	202	49191	60.8	51.81	69.07
Sarawak	282	31950	68.4	61.51	74.61
WP Kuala Lumpur & Putrajaya	219	24825	62.9	55.21	69.93
Location					
Urban	2393	324800	63.3	59.41	67.06
Rural	1045	138127	66.6	61.76	71.04
Sex					
Male	1750	237526	64.7	60.89	68.26
Female	1688	225402	63.8	59.71	67.76
Age Group					
6 - 11 months	981	123805	55.1	51.18	59.03
12 - 23 months	2457	339123	68.4	64.62	71.92
Ethnicity					
Malay	2756	295402	65.0	62.44	67.49
Chinese	149	57591	63.1	53.93	71.37
Indian	118	19166	63.5	54.86	71.36
Other Bumiputera	342	48487	64.6	56.81	71.60
Others	71	42071	61.2	41.43	77.82
Citizenship					
Malaysian citizen	3372	424286	64.6	62.00	67.04
Permanent resident/ non-citizen	66	38641	61.2	40.59	78.40

Table 8.4.2b (iii): Prevalence of minimum acceptable diet, NHMS 2022: MCH (n=5,222)

Sociodemographic	Unweighted Count	Estimated Population	MAD		
			Prevalence (%)	95% CI	Lower	Upper
MALAYSIA	3164	433509	60.2	57.07	63.19
State					
Johor	212	60473	70.8	62.45	77.91
Kedah	335	41231	75.2	67.93	81.32
Kelantan	197	27592	51.4	44.78	57.89
Melaka	284	14814	72.9	67.85	77.48
Negeri Sembilan	232	16734	68.2	59.85	75.51
Pahang	236	22994	65.2	60.59	69.51
Pulau Pinang	163	15868	39.6	28.08	52.34
Perak	225	27655	58.1	50.24	65.50
Perlis	269	4377	70.5	63.35	76.69
Selangor	200	91024	60.8	49.21	71.26
Terengganu	168	15287	43.0	36.09	50.19
Sabah & WP Labuan	176	42751	52.8	43.83	61.63
Sarawak	258	29089	62.3	55.84	68.35
WP Kuala Lumpur & Putrajaya	209	23621	59.8	52.85	66.42
Location					
Urban	2204	304351	59.3	55.47	63.08
Rural	960	129158	62.2	57.22	67.01
Sex					
Boy	1611	223430	60.8	57.00	64.52
Girl	1553	210078	59.5	55.46	63.40
Age Group					
6 - 11 months	969	122763	54.7	50.72	58.57
12 - 23 months	2195	310745	62.7	58.86	66.31
Ethnicity					
Malay	2551	278738	61.3	58.76	63.86
Chinese	131	52823	57.9	48.72	66.48
Indian	107	17962	59.5	50.87	67.60
Other Bumiputera	308	43531	58.0	50.02	65.50
Others	65	40244	58.5	39.13	75.57
Citizenship					
Malaysian citizen	3105	396753	60.4	57.79	62.89
Permanent resident/ non-citizen	59	36756	58.2	37.99	75.95

Table 8.5.1: Prevalence of bottle-feeding practices among children aged 0-23 months by sociodemographic characteristics NHMS 2022: MCH (n=6,428)

Sociodemographic	Bottle feeding				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	3919	531896	60.4	57.48	63.32
State					
Johor	270	77986	74.0	68.52	78.89
Kedah	389	48794	71.0	66.04	75.58
Kelantan	234	32346	47.9	42.71	53.23
Melaka	249	14146	55.8	51.34	60.12
Negeri Sembilan	293	21368	72.4	66.53	77.64
Pahang	222	21074	49.4	44.01	54.75
Pulau Pinang	274	29333	63.1	50.52	74.05
Perak	352	43748	73.3	68.50	77.59
Perlis	307	5018	65.3	58.84	71.20
Selangor	218	84507	48.1	37.32	59.13
Terengganu	258	23263	51.5	43.64	59.37
Sabah & WP Labuan	214	50214	50.3	44.49	56.18
Sarawak	377	43369	77.7	72.13	82.50
WP Kuala Lumpur & Putrajaya	262	36731	72.1	65.69	77.71
Location					
Urban	2778	377928	60.7	56.98	64.28
Rural	1141	153968	59.8	55.07	64.41
Sex					
Boy	2031	273832	61.6	57.81	65.16
Girl	1888	258064	59.3	55.59	62.90
Age Group					
Less than 6 months	607	81976	46.2	42.18	50.20
6 - 11 months	1038	137460	62.5	58.93	65.90
12 - 23 months	2274	312461	64.8	60.35	68.93
Ethnicity					
Malay	3027	334811	59.4	57.29	61.57
Chinese	229	91051	82.3	74.04	88.39
Indian	168	24392	72.1	62.68	79.84
Other Bumiputera	415	57031	60.5	54.80	65.95
Others	77	24307	31.3	19.91	45.56
Citizenship					
Malaysian citizen	3844	510593	63.2	61.12	65.25
Permanent resident/ non-citizen	74	21223	29.4	18.36	43.54

**MODULE CH: CHILD HEALTH
ORAL HEALTH**



ORAL HEALTH

ORAL HEALTH

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HIGHLIGHTS

- Almost all mothers knew the importance of looking after their children's teeth
- Only 1.8% (38,028) of mothers never clean their child's teeth or supervise their child brush his/her teeth
- 1 in 4 mothers never clean their child's gum
- 6 in 10 of the children never experienced or been treated at the dental clinic
- Majority of the children received dental examination or dental treatment in Malaysia government dental clinics

Keywords: *mothers, children, teeth, gum, Malaysia*

9.1 INTRODUCTION

Dental caries, also known as tooth decay, has been described as a global pandemic disease with a high proportion of untreated carious lesions^[1]. Early childhood caries (ECC) have an impact on children's overall health as well as their quality of life^[2]. Such issues have the potential to be serious, even fatal^[3]. In Malaysia, there was an increasing trend toddlers receiving dental check-ups in MOH public health facilities from 2014 (11.6%) to 2019 (17.5%) but had decreased in 2020 (11.2%) due to the COVID-19 pandemic. Thus, in 2022, various strategies were implemented by Oral Health

Programme including establishing collaboration with non-MOH agencies to increase the utilisation of oral healthcare of this vulnerable group^[4]. Tooth brushing is the most common method of removing bacterial plaque and, as a result, the most effective and cost-effective preventive measure against childhood tooth decay^[5]. Parents should ensure that, their toddlers have their teeth brushed, twice a day, until preschool age, as during this period, their manual dexterity has not fully developed. Toddlers should be taken for annual dental check-ups, once a year^[6].

9.2 OBJECTIVES

9.2.1 General Objective

To determine the perception and practice of mothers on oral health care of their young children.

9.3.1 Specific Objectives

- i. To determine the perceived importance of looking after the oral health of young children.
- ii. To determine oral hygiene care for young children.
- iii. To determine oral health care utilisation of young children.

9.4 FINDINGS

Overall, majority of mothers; 99.36% (95% CI: 98.85, 99.64), reported that it was important for them to look after their children's teeth. The prevalence of mothers with child below 5 years who never clean their child's gum was described in **Table 9.4.1**. On the positive side, this survey revealed that the prevalence of children who never brush their teeth or mothers never supervising their child's tooth brushing was low (1.8% (95% CI: 1.53, 2.18)). Additionally, the prevalence of using a toothbrush when cleaning child's teeth was 94.0% (95% CI: 93.32, 94.57), while the prevalence of sharing with other family members toothbrush was only 0.95% (95% CI: 0.72, 1.25).

The prevalence of child who never been examined or treated at dental clinic was 60.8% (95% CI: 58.77, 62.77), while the prevalence of dental visit less than one year ago was 62.4% (95%CI: 59.95, 64.74); as shown in **Table 9.4.2** and **Table 9.4.3**, respectively.

A summary of the percentage of the places where children get dental treatment, reasons for not bringing children for dental treatment, and mothers' opinions aged of their children for the first dental check-up was described in Table 9.4.4, Table 9.4.5, and Table 9.4.6 respectively.

9.5 CONCLUSION

Overall, the perception of the importance of children's oral healthcare among mother and the prevalence of tooth brushing has been increasing, compared with the previous NHMS 2016 findings [7]. Improving oral health among children in Malaysia requires a holistic approach, which includes education, access to dental care, community involvement and collaboration with non-MOH agencies. By adequately addressing these issues, the best possible oral health outcomes, and quality of life for children aged below 5 years old can be assured.

9.6 RECOMMENDATIONS

- Integrate oral health into broader global health that facilitates interactions with other oral health professions and with other public sectors. In addition, partnerships must be strengthened amongst oral health professionals, both public and private sectors.
- Well organised community-based programmes and dissemination of appropriate oral health messages through different means should be combined to improve oral health in young children.
- Parents and caregivers need to be provided with comprehensive health education on the importance of annual dental check-up, tooth brushing technique, gum, and tongue cleaning besides a well-balanced nutrition to maintain healthy teeth and gums.

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Table 9.4.1: Prevalence of mother with child below 5 years who never clean their child's gum by sociodemographic characteristics, NHMS 2022: MCH (n=2,039)

Sociodemographic	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	298	38991	24.3	20.06	29.01
State					
Johor	8	-	-	-	-
Kedah	40	4486	34.1	22.94	47.32
Kelantan	21	2890	21.3	12.55	33.71
Melaka	29	1575	41.0	28.42	54.94
Negeri Sembilan	16	1171	23.1	12.79	38.08
Pahang	27	2583	34.4	24.49	45.79
Pulau Pinang	17	-	-	-	-
Perak	26	2970	25.6	15.49	39.33
Perlis	22	423	35.3	21.96	51.46
Selangor	15	-	-	-	-
Terengganu	28	2648	33.5	20.22	50.11
Sabah & WP Labuan	17	-	-	-	-
Sarawak	18	-	-	-	-
WP Kuala Lumpur & Putrajaya	14	1520	14.1	8.54	22.53
Location					
Urban	198	27674	25.2	19.73	31.61
Rural	100	11318	22.2	17.06	28.37
Sex					
Male	168	20833	26.2	21.29	31.72
Female	130	18158	22.4	16.25	29.97
Age Group					
Less than 6 months	298	38991	24.3	20.06	29.01
Ethnicity					
Malay	240	24863	23.5	19.86	27.64
Chinese	9	-	-	-	-
Indian	12	-	-	-	-
Other Bumiputera	26	4075	20.9	12.91	31.96
Others	11	-	-	-	-
Citizenship					
Malaysian citizen	287	33244	22.4	19.02	26.11
Permanent resident/ non-citizen	11	5747	47.4	20.70	75.60

Table 9.4.2: Prevalence of child who never been examined or treated at dental clinic by sociodemographic characteristics, NHMS 2022: MCH (n= 14,931)

Sociodemographic	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	7549	1192661	60.8	58.77	62.72
State					
Johor	506	134270	57.8	51.05	64.20
Kedah	703	90096	64.0	58.58	69.02
Kelantan	561	78013	55.2	49.39	60.96
Melaka	527	27773	45.1	40.00	50.29
Negeri Sembilan	508	38635	56.3	50.43	61.91
Pahang	318	35114	33.0	26.84	39.75
Pulau Pinang	526	63603	68.7	62.64	74.11
Perak	556	67987	52.2	47.32	57.09
Perlis	286	4450	28.2	24.72	32.00
Selangor	716	328354	77.9	73.65	81.73
Terengganu	407	36777	40.4	34.80	46.24
Sabah & WP Labuan	472	119785	51.9	44.09	59.59
Sarawak	809	94072	75.3	71.30	78.89
WP Kuala Lumpur & Putrajaya	654	73731	70.3	66.11	74.16
Location					
Urban	5590	892185	64.0	61.67	66.20
Rural	1959	300476	52.9	49.09	56.66
Sex					
Male	3835	620634	61.2	58.75	63.53
Female	3714	572028	60.3	57.98	62.62
Age Group					
12 - 23 months	2351	356555	73.4	70.58	75.97
24 - 35 months	1953	322758	61.9	58.71	64.95
36 - 47 months	1829	277009	57.0	53.98	59.92
48 - 59 months	1416	236339	50.4	47.44	53.33
Ethnicity					
Malay	5611	677129	55.7	53.72	57.66
Chinese	440	187324	68.2	62.56	73.39
Indian	357	63935	69.5	63.62	74.88
Other Bumiputera	841	120357	53.8	48.82	58.79
Others	297	143398	91.8	87.20	94.81
Citizenship					
Malaysian citizen	7256	1057403	58.3	56.41	60.12
Permanent resident / non resident	292	135178	91.0	86.30	94.30

Table 9.4.3: Prevalence of child who received dental care (examined/treated) in less than one year by sociodemographic characteristics, NHMS 2022: MCH (n= 6,553)

Sociodemographic	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	3413	396872	62.4	59.95	64.74
State					
Johor	110	33595	42.1	32.40	52.45
Kedah	204	23878	57.1	50.07	63.95
Kelantan	250	34334	68.2	62.08	73.68
Melaka	341	18341	62.4	56.80	67.62
Negeri Sembilan	261	19537	77.8	71.39	83.05
Pahang	401	39489	67.5	62.35	72.19
Pulau Pinang	190	16945	71.8	62.96	79.30
Perak	237	29301	56.2	50.69	61.55
Perlis	372	6231	68.6	63.82	72.96
Selangor	153	56306	68.1	61.02	74.39
Terengganu	321	29350	66.7	57.71	74.61
Sabah & WP Labuan	234	53697	60.8	53.81	67.29
Sarawak	170	18725	74.1	67.02	80.12
WP Kuala Lumpur & Putrajaya	169	17144	65.7	57.41	73.17
Location					
Urban	2,243	260810	62.3	59.29	65.12
Rural	1,170	136062	62.6	58.32	66.70
Sex					
Male	1,716	204633	63.0	60.20	65.76
Female	1,697	192240	61.7	58.50	64.83
Age Group					
24 - 35 months	1274	143597	72.8	68.96	76.32
36 - 47 months	1134	132440	63.8	60.21	67.20
48 - 59 months	1005	120836	52.2	48.83	55.60
Ethnicity					
Malay	2830	278888	62.6	60.02	65.13
Chinese	126	44756	62.9	51.32	73.14
Indian	100	15008	61.3	50.37	71.17
Other Bumiputera	336	51234	59.7	53.18	65.92
Others	20	6866	75.5	53.43	89.27
Citizenship					
Malaysian citizen	3391	389881	62.2	59.77	64.57
Permanent resident/ non-citizen	22	6992	74.0	52.90	87.90

Table 9.4.4: Place receiving dental care (examination/ treatment), NHMS 2022: MCH

Place	Unweighted Count	Estimated Population	Percentage (%)	95% CI	
				Lower	Upper
Government dental clinic	4737	528856	83.1	80.90	85.10
Private dental clinic	533	95913	15.1	13.10	17.20
Others	67	11521	1.8	1.30	2.60

Table 9.4.5: Reason for not bringing child for dental treatment, NHMS 2022: MCH (n= 8,315)

Reason not going dental clinic	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
My child is too young to get treatment	1754	268608	22.6	20.00	25.30
The dental clinic is too far	118	19714	1.7	1.10	2.50
My child is afraid of dental treatment	371	46894	3.9	3.30	4.60
I think dental treatment for milk teeth is not important	46	3960	1.0	0.60	1.90
Covid pandemic problem	298	43242	3.6	2.90	4.50
I think my child has no dental problem	4333	698474	58.7	55.60	61.60
Others	617	101514	8.5	7.00	10.30

Table 9.4.6: Mothers' opinion on age of first dental check-up, NHMS 2022: MCH (n= 17,168)

Opinion age of first dental check-up	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
Don't know	389	72874	3.1	2.40	3.90
Less than 1 year old	3660	416786	17.5	15.80	19.30
1-3 years old	8788	1156449	48.5	46.20	50.70
More than 3 years old	1826	271626	11.4	10.30	12.60
When starts schooling	1578	280124	11.7	10.10	13.70
When having toothache	927	187177	7.8	6.60	9.30

MODULE CH: CHILD HEALTH

CHILD MORBIDITIES



CHILD MORBIDITIES

CHILD MORBIDITIES

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HIGHLIGHTS

- The prevalence of diarrhoea among children aged 0–59 months in the last two weeks in 2022 was 3.1%.
- Out of the total number of children with diarrhoea, 38.4% received ORS.
- The prevalence of children aged 0–59 months who exhibited symptoms of acute respiratory infections (ARI) in the last two weeks was 1.4%.
- Among the children aged 0–59 months with symptoms of ARI in the last two weeks, 74.6% received antibiotics treatment.

Keywords: *Diarrhoea, Acute Respiratory Infection, Children under five, Malaysia*

10.1 INTRODUCTION

According to the World Health Organization (WHO), diarrhoea and Acute Respiratory Infection (ARI) are two of the leading causes of morbidity and mortality among children under five worldwide [1–2]. Diarrhoeal disease is responsible for killing around 525 000 children annually. ARI causes almost 20% of all deaths of children under

five worldwide. The top health issues that affect children under five in Malaysia are these two diseases, with pneumonia ranked as the third leading cause of death in this group, causing 2.1% of deaths in 2021 [3–4]. The 4th Edition Paediatric Protocol for Malaysian Hospitals is used to manage diarrhoea and ARI in Malaysia [5]. This study focuses on identifying percentages of child morbidities and treatment received to inform public health policies, improve health services, and evaluate the effectiveness of interventions aimed at reducing the burden of these conditions.

10.2 OBJECTIVES

10.2.1 General Objective

To determine the prevalence of diarrhoea, acute respiratory infection and treatment received among children 0–59 months old.

10.2.2 Specific Objectives

- i. To determine the prevalence of diarrhoea and treatment received among children 0–59 months old.
- ii. To determine the prevalence of acute respiratory infection and antibiotic treatment among children 0–59 months old.

10.3 DEFINITIONS

- Diarrhoea is defined as three times or more loose/watery stools per day, or by the presence of blood in the stool as perceived by the mother/caretaker in the last two weeks.
- ARI is defined as children who have cough and fast breathing or difficulty in breathing in the last two weeks.

10.4 FINDINGS

The prevalence of children who had diarrhoea in the last two weeks was 3.1%, indicating a reduction compared

to NHMS 2016 4.4% (95% CI: 3.68, 5.33) (**Table 10.4.1 & Table 10.5.1**). Among children who had diarrhoea, 48.9% (95% CI: 43.11, 54.79) received treatment, 17.7% were given ORS only (95% CI: 14.25, 21.76), 10.6% were given antibiotics only (95% CI: 7.08, 15.44), while 20.7% received both treatment (95% CI: 16.43, 25.81) (**Table 10.4.2**).

The prevalence of children who had symptoms of ARI (coughing and difficulty breathing) was 1.4% (95% CI: 0.93, 2.17), slightly increased from 1.3% in 2016 with an estimated population of 32,220 children aged 0-59 months in Malaysia. Among children with ARI, 99.5% received treatment from the health facility, which has a marked increase compared to NHMS 2016 (88.9%). In 2022, those with ARI received treatment from health facilities, including the public at 44.9% (95% CI: 26.06, 65.32) and private facilities at 56.9% (95% CI: 36.89, 74.91). Among those, 74.6% received antibiotics (**Table 10.4.3**).

The prevalence of children with morbidities, such as diarrhoea or ARI, decreased from 5.5% (95% CI: 4.80, 6.33) in 2016 to 4.4% (95% CI: 3.75, 5.11) in 2022 (**Table 10.4.4 & Table 10.5.1**).

10.5 CONCLUSION

In Malaysia, the prevalence of diarrhoea in children under the age of five has decreased slightly since 2016 from 4.4% to 3.1% in 2022. However, it is concerning that more than half of children did not receive treatment (ORS or antibiotics) and less than 40% of children with diarrhoea were treated with ORS., the incidence of ARI in children has increased slightly since 2016, and about 75% were given antibiotics. Almost all children with ARI were treated in public or private health facilities, an increase from 89% in 2016.

10.6 RECOMMENDATIONS

- It is crucial for parents to have adequate knowledge regarding hygiene practices and appropriate food handling, especially in preparing food for infants and young children.
- Inculcate correct hand washing habits among children to promote good personal hygiene habits and encourage children to wash their hands especially before eating or after using the washroom to prevent diarrhoea.
- Encourage parents to bring children with diarrhoea to healthcare facilities for treatment.
- Health care providers should carefully assess the child with ARI before prescribing antibiotics, taking into account the child's medical history, symptoms and other factors. Antibiotics should be prescribed according to the 3rd National Antimicrobial Guidelines

when there is a clear indication of bacterial infection and when the benefits of treatment outweigh the risks of side effects, such as antimicrobial resistance.

Table 10.5.1: Prevalence of child morbidities among children under 5 years, NHMS 2016 - 2022

	2016	2022
Diarrhoea	4.4	3.1
Acute respiratory infection (ARI)	1.3	1.4
Either diarrhoea or ARI	5.5	4.4

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Table 10.4.1: Prevalence of children aged 0-59 months with diarrhoea in the last two weeks, Malaysia, NHMS 2022: MCH (n=17,085)

Sociodemographic	Diarrhoea				95% CI Lower	Upper
	Unweighted Count	Estimated Population	Prevalence (%)	Lower		
MALAYSIA	583	74558	3.1	2.79	3.54	
Location						
Urban	416	50920	3.0	2.60	3.50	
Rural	167	23638	3.4	2.83	4.20	
Sex						
Male	322	39430	3.2	2.80	3.76	
Female	261	35128	3.0	2.50	3.69	
Age group						
0 - 11 months	98	15258	3.8	2.81	5.13	
12 - 23 months	181	22963	4.7	3.78	5.73	
24 - 35 months	126	15065	2.9	2.27	3.65	
36 - 47 months	97	10824	2.2	1.72	2.90	
48 - 59 months	81	10446	2.2	1.66	2.98	
Ethnicity						
Malay	452	47397	3.2	2.85	3.56	
Chinese	26	8588	2.7	1.67	4.30	
Indian	27	4432	4.1	2.38	7.04	
Other Bumiputera	67	9639	3.6	2.61	4.97	
Others	10	-	-	-	-	-
Citizenship						
Malaysian citizen	573	70188	3.2	2.85	3.59	
Permanent resident/ non-citizen	10	-	-	-	-	-
Source of drinking water						
Treated	556	70497	3.1	2.78	3.55	
Untreated	27	-	-	-	-	-
Type of toilet used						
Sanitary toilet	557	71480	3.1	2.77	3.55	
Unsanitary toilet	26	3077	3.3	2.07	5.17	
Main method disposing garbage						
Sanitary	521	65774	3.2	2.80	3.60	
Unsanitary	62	8783	2.9	2.07	4.15	

Table 10.4.2: Percentage of children aged 0-59 months with diarrhoea in the last two weeks who received ORS and antibiotics treatment, NHMS 2022: MCH (n=583)

Treatment of diarrhoea	Unweighted Count	Estimated Population	Percentage (%)	95% CI	
				Lower	Upper
Received treatment	303	36369	48.9	43.11	54.79
ORS	117	13151	17.7	14.25	21.76
Antibiotics	54	7841	10.6	7.08	15.44
ORS and Antibiotics	132	15377	20.7	16.43	25.81
No receiving treatment	277	37952	51.1	45.21	56.89

Table 10.4.3: Percentage of children aged 0-59 months with symptoms of acute respiratory infections (ARI) in the last two weeks who received antibiotics treatment and source of treatment, Malaysia, NHMS 2022: MCH (n=203)

Treatment and source of treatment	Unweighted Count	Estimated Population	Percentage (%)	95% CI	
				Lower	Upper
Received Antibiotic					
Yes	133	23344	74.6	59.54	85.48
No	70	7930	25.4	14.52	40.46
Source of Treatment (more than one answer)					
Public Health Facility	130	14040	44.9	26.06	65.32
Private Health Facility	79	17800	56.9	36.89	74.91
Other source	2	-	-	-	-
No advice or treatment sought	17	-	-	-	-

Table 10.4.4: Prevalence of children aged 0-59 months with either diarrhoea or acute respiratory infection (ARI), Malaysia, NHMS 2022: MCH (n= 17,016)

Sociodemographic	Either diarrhoea or ARI				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
MALAYSIA	769	103501	4.4	3.75	5.11
Location					
Urban	556	73213	4.4	3.54	5.36
Rural	213	30287	4.4	3.73	5.26
Sex					
Male	428	57740	4.8	3.70	6.13
Female	341	45760	4.0	3.37	4.68
Age group					
0 - 11 months	122	18022	4.5	3.48	5.86
12 - 23 months	227	28941	5.9	4.91	7.08
24 - 35 months	171	20837	4.0	3.27	4.88
36 - 47 months	135	21769	4.5	2.37	8.41
48 - 59 months	114	13930	3.0	2.30	3.84
Ethnicity					
Malay	606	64253	4.3	3.92	4.80
Chinese	31	10319	3.2	2.10	4.98
Indian	35	5299	4.9	3.06	7.88
Other Bumiputera	84	11887	4.5	3.44	5.78
Others	12	-	-	-	-
Citizenship					
Malaysian citizen	757	91890	4.2	3.80	4.65
Permanent resident/ non-citizen	12	-	-	-	-

MODULE CH: CHILD HEALTH

CHILD DISCIPLINE



CHILD DISCIPLINE

CHILD DISCIPLINE

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HIGHLIGHTS

- The prevalence of use of violent discipline is 66.6% among children 1 to 5 years of age, a reduction from 70.8% seen in 2016.
- The prevalence of use of physical punishment is 40.6% among children 1 to 5 years of age, a reduction from 55.0% seen in 2016.
- The prevalence of use of psychological aggression is 58.1% among children 1 to 5 years of age, almost similar to the 57.8% reported in 2016.
- A total of 45.0% of parents still believe physical punishment is needed to bring up, raise or educate the child properly.

Keywords: *Violent Discipline, Psychological Aggression, Physical Punishment, Child Discipline.*

11.1 INTRODUCTION

Child discipline is essential in the development of a child. It teaches the child self-control, acceptable behaviour, the ability to handle conflict and manage their emotions. Child discipline is meant to change the behaviour of the child, teach them how to fit into the real world, and act as a foundation for the child's own self-discipline to mature as a good adult [1]. Positive parenting methods reinforce good behaviour and instil responsibility. However, the use of punitive and physical punishment on children, to intimidate and punish the child, results in detrimental effects. Studies have shown that children who have been physically punished subsequently demonstrate more aggressive behaviour when they grow older, have reduced cognitive test scores, and have an increased lifetime risk of anxiety disorders, depression, and alcohol abuse [2-5]. Most parents in Malaysia have been found to use a combination of non-violent punishment, psychological aggression, and physical punishment in disciplining their children [6].

11.2 OBJECTIVES

11.2.1 General Objective

To determine the prevalence of violent disciplinary methods among children 1 to 5 years of age in Malaysia.

11.2.2 Specific Objectives

- i. To determine the prevalence of any violent discipline among children 1 to 5 years of age in Malaysia.
- ii. To determine the prevalence of psychological aggression among children 1 to 5 years of age in Malaysia.
- iii. To determine the prevalence of physical punishment among children 1 to 5 years of age in Malaysia.
- iv. To determine parent/caregiver beliefs in the need for physical punishment towards children 1 to 5 years of age in Malaysia.

11.3 DEFINITIONS

- Physical punishment is defined as anyone in the family shaking the child, spanking the bottom with hands, hitting the bottom or body with a cane, hitting, slapping, or pinching arms and legs, slapping the face, hitting the head, or twisting the ear in the past month to teach the child the right behaviour or to address a behaviour problem.
- Psychological aggression is defined as anyone in the family scolding with a harsh tone or calling the child dumb or lazy in the past month to teach the child the right behaviour or to address a behaviour problem.
- Any violent discipline is defined as anyone in the family using physical punishment or psychological aggression in the past month to teach the child the right behaviour or to address a behaviour problem.
- Non-violent punishment is defined as anyone in the family withholding liked activities, explaining wrong behaviour, or giving them something else to do in the past month to teach the child the right behaviour or to address a behaviour problem.

11.4 FINDINGS

Our study found that 66.6% of children aged 12–59 months in Malaysia received some form of violent disciplinary method. The prevalence of psychological aggression was at 58.1% (95% CI: 55.71, 60.36), meanwhile physical punishment was at 40.6% (95% CI: 38.24, 43.04) (**Table 11.4.1**). A total of 45.0% (95% CI: 42.32, 47.78) of parents believed that physical punishment is necessary to raise a child (**Table 11.4.2**).

11.5 CONCLUSION

A healthy future generation is the basis on which a sustainable future is constructed. Early in life negative experiences and environmental factors have been found to have negative effects on a child's learning, behaviour, physical health, and mental health. Even though the use of violent disciplinary methods, at 66.6%, has shown to have a decreased compared to 2016, the prevalence is still high with almost half of Malaysian parents still believing in the need for physical punishment.

11.6 RECOMMENDATIONS

- Parents and caregivers need to be educated to positively engage and discipline a child in a manner that does not affect their well-being or retard their physical and psychological growth.
- Healthcare workers, particularly primary healthcare, should also educate parents about the potential negative effects of violent punishments on children's health and development.

- Parents and caregivers should also be educated on how to handle stress and be provided adequate community support in bringing up a child without the use of violent disciplinary methods.

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Table 11.4.1: Violent disciplinary methods experienced in the past 1 month by children aged 12-59 months, NHMS 2022: MCH (n= 14,147)

Sociodemographic	Any Violent Discipline			Psychological Aggression			Physical Punishment			
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI Lower	95% CI Upper	Unweighted Count	Estimated Population	Prevalence (%)	95% CI Lower	95% CI Upper
MALAYSIA	8236	1253690	66.6	64.29	68.83	7336	1100501	58.1	55.71	60.36
Location								4685	765473	40.6
Urban	5910	906911	67.2	64.45	69.80	5254	793118	58.3	55.53	61.10
Rural	2326	346779	65.1	60.74	69.26	2082	307383	57.3	53.10	61.46
Sex								1341	218833	41.1
Male	4231	652752	67.6	64.76	70.26	3782	574841	59.1	56.16	61.93
Female	4005	600937	65.6	63.09	67.98	3554	525660	57.0	54.42	59.50
Age Group								2190	349626	38.3
12 - 23 months	1610	257458	54.7	51.02	58.33	1395	216640	45.5	41.80	49.30
24 - 35 months	2176	341052	68.0	64.23	71.52	1930	300907	59.6	55.76	63.24
36 - 47 months	2275	323777	70.9	68.18	73.41	2048	284800	62.0	59.04	64.79
48 - 59 months	2175	331402	73.1	69.92	76.10	1963	298153	65.6	62.37	68.62
Ethnicity								1316	207489	45.9
Malay	6296	759163	65.7	63.42	67.91	5624	670272	57.5	55.10	59.81
Chinese	434	177796	66.8	59.75	73.10	385	158539	59.4	52.49	66.04
Indian	383	68774	75.7	69.67	80.79	337	59081	64.4	57.65	70.70
Other Bumiputera	883	142072	65.9	59.39	71.78	770	119995	55.3	48.79	61.54
Others	237	105403	68.8	55.63	79.51	217	92133	60.2	47.47	71.64
Citizenship								162	61127	38.1
Malaysian citizen	8004	1157700	66.5	64.36	68.65	7123	1017685	58.0	55.84	60.23
Permanent resident / non-citizen	232	95989	67.4	53.11	79.05	213	82817	58.2	58.18	70.65

Table 11.4.2: Prevalence of parents who believe in physical discipline, Malaysia, NHMS 2022: MCH (n=8,197)

Sociodemographic	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	5456	859240	45.0	42.32	47.78
Location					
Urban	3952	617140	45.1	41.85	48.33
Rural	1504	242099	44.9	39.94	50.04
Ethnicity					
Malay	4028	491083	42.0	39.29	44.68
Chinese	261	124005	46.3	39.03	53.72
Indian	243	40340	44.3	37.09	51.83
Other Bumiputera	723	115310	53.0	45.26	60.62
Others	198	88020	54.8	41.83	67.23
Citizenship					
Malaysian citizen	5259	776498	44.2	41.59	46.77
Permanent resident / non-citizen	197	82742	55.3	41.35	68.39

MODULE CH: CHILD HEALTH

VACCINE HESITANCY



VACCINE HESITANCY

VACCINE HESITANCY

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HIGHLIGHTS

- 4.9% of parents who had children under 2 years old were found to be vaccine hesitant.

Keywords: *Vaccines hesitancy, PACV, Multi-ethnic, Parents, Malaysia.*

12.1 INTRODUCTION

Vaccine hesitancy is defined as a delay in acceptance or refusal of vaccines despite the availability of vaccination services [1,2]. This is a threat to the collective effort of the global public health communities in combating vaccine-preventable diseases, with the potential to undermine the label of vaccination being the most successful public health intervention of human history [3]. Vaccine hesitancy has been studied extensively in Western countries but this information is sparse in Asian countries, including Malaysia. As such, vaccine hesitancy should be studied and addressed in Malaysia, in line with the Global Vaccine Action Plan (GVAP) [4].

12.2 OBJECTIVES

12.2.1 General Objective

To determine the prevalence of Vaccine Hesitancy among parents with children aged 2 years and below in Malaysia.

12.2.2 Specific Objectives

- i. To determine the prevalence of vaccine hesitancy among parents of children aged 2 years and below in Malaysia.
- ii. To determine the prevalence of vaccine hesitancy by sociodemographic profile among parents of children aged 2 years and below in Malaysia.

12.3 DEFINITIONS

- Vaccine hesitancy is defined as the refusal or delay in acceptance of vaccines despite readily available services owing to a range of factors [1].
- It also includes vaccine-related beliefs and behaviours ranging from complete refusal of all vaccines to complete vaccine acceptance [5].

12.4 FINDINGS

A total of 6,238 parents who had children under 2 years old participated in this module. The prevalence of vaccine hesitancy in Malaysia was 4.9% (95% CI: 4.1, 5.9) with an estimated population of 41,960 parents who had children under 2 years of age in Malaysia (**Table 12.4.1**).

12.5 CONCLUSION

The prevalence of vaccine hesitancy in Malaysia was 4.9%. This finding was lower than a study conducted at a health facility in Kuala Lumpur with 11.6% [3] and in Sandakan with 6.8% [6]. This is the first nationwide study conducted among the population and may serve as baseline information. It is important to address the parents' concerns through effective interventions to reduce vaccine hesitancy among parents in Malaysia [2].

12.6 RECOMMENDATIONS

- Implement Reaching-Every-District Strategy to search or locate every child within the operational area to increase vaccination uptake.
- Increase the awareness towards Vaccine-Preventable Diseases and their threat to the public, parents (especially first-time parents) and specifically in areas with a high prevalence of vaccine hesitancy refusal.
- Strengthen capacity building especially in areas of communication strategy to deal with hesitant or refused parents.
- Strengthen partnerships with other agencies private sector and NGO to co-operate in providing vaccination services for vulnerable population/ undocumented children/ stateless/ refugees.

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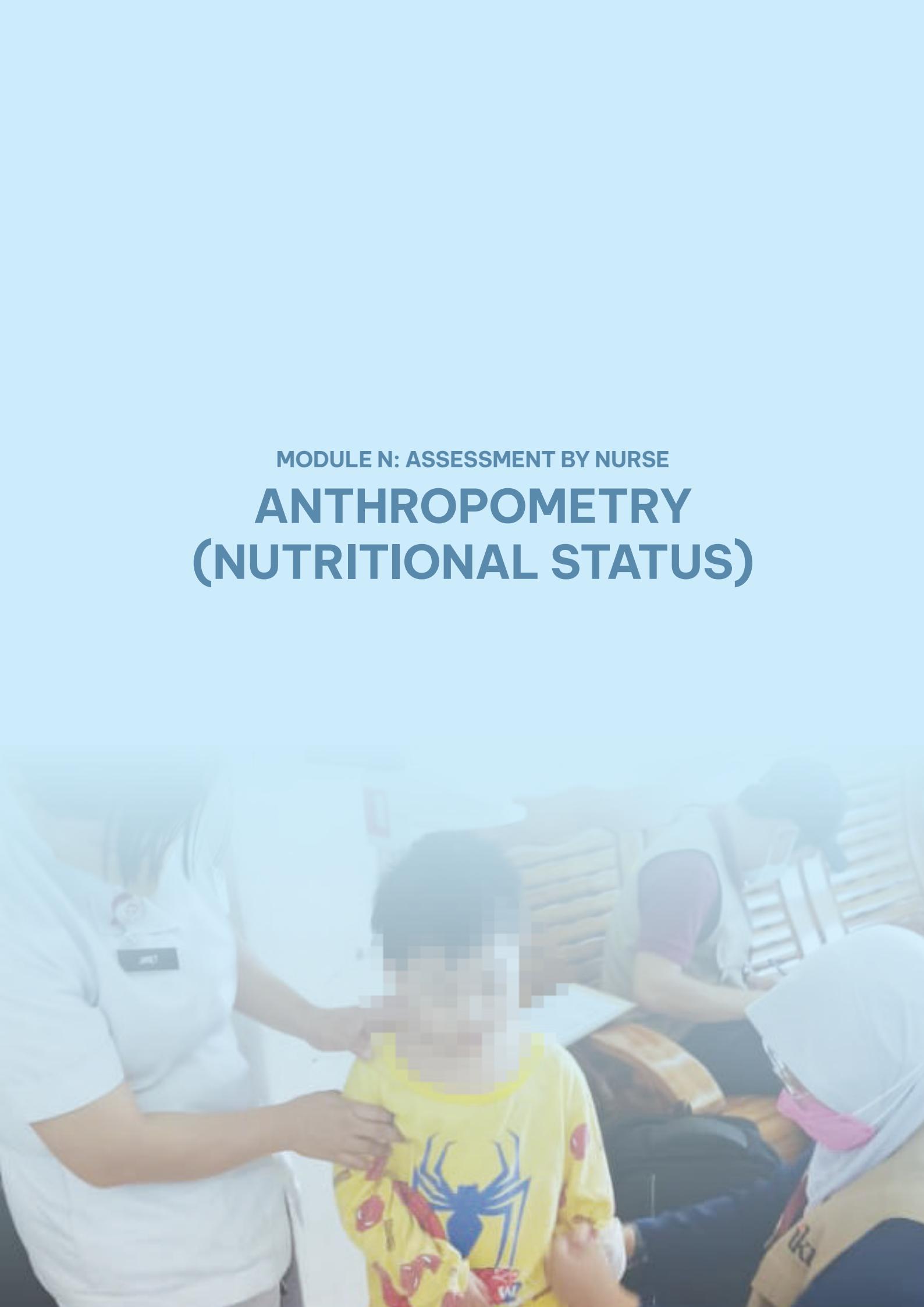
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Table 12.4.1: Prevalence of vaccine hesitancy among parents of children under 2 years of age in Malaysia, NHMS 2022: MCH (n = 6,238)

Sociodemographic	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	295	41960	4.9	4.11	5.90
State					
Johor	21	6125	6.0	3.73	9.38
Kedah	28	3690	5.7	3.19	9.95
Kelantan	26	3558	5.7	3.95	8.06
Melaka	22	1083	4.4	2.30	8.28
Negeri Sembilan	17	1077	3.8	2.19	6.41
Pahang	18	1551	3.7	2.14	6.33
Pulau Pinang	18	1951	4.5	1.74	10.99
Perak	25	3022	5.2	3.51	7.58
Perlis	6	80	1.1	0.49	2.21
Selangor	13	5809	3.4	1.75	6.33
Terengganu	45	4069	9.2	5.57	14.87
Sabah & WP Labuan	18	5698	6.0	2.93	11.99
Sarawak	19	1863	3.5	2.17	5.53
WP Kuala Lumpur & Putrajaya	19	2384	4.7	2.88	7.65
Location					
Urban	206	27021	4.5	3.61	5.54
Rural	89	14939	6.0	4.34	8.30
Sex					
Male	157	19374	4.5	3.63	5.56
Female	138	22586	5.4	4.13	6.95
Age Group					
Less than 6 months	73	10177	6.0	4.34	8.17
6 - 11 months	80	11204	5.3	3.85	7.31
12 - 23 months	142	20579	4.4	3.40	5.61
Ethnicity					
Malay	241	27261	5.0	4.20	5.87
Chinese	9	5691	5.3	2.54	10.67
Indian	8	807	2.4	1.14	5.16
Other Bumiputera	19	2480	2.7	1.73	4.25
Citizenship					
Malaysian citizen	275	35934	4.6	3.84	5.43
Permanent resident/ non-citizen	20	6026	9.3	4.28	18.98

MODULE N: ASSESSMENT BY NURSE

ANTHROPOMETRY (NUTRITIONAL STATUS)



ANTHROPOMETRY (NUTRITIONAL STATUS)

ANTHROPOMETRY (NUTRITIONAL STATUS)

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HIGHLIGHTS

- 10.9% of infants had a low birth weight.
- 21.2% of children under five suffer from stunting.
- 15.3% of children under five were underweight.
- 11.0% of children under suffer from wasting.
- 5.6% of children under five were overweight.

Keywords: *Wasting, Stunting, Overweight, Obesity, Low birth weight, Weight perception*

13.1 INTRODUCTION

The nutritional quality of a child will determine the health status in later years. Almost 50% of the deaths in children under 5 worldwide are caused by undernutrition which exposes children to a greater risk of malnutrition, common infections, increases the recurrence and severity of infections, as well as delays the healing process [1]. The presence of obesity and underweight in the same populations has led to a double burden of malnutrition which could influence overall health and well-being in later life [2]. Low birth weight (LBW) infants are also associated with various mortality and morbidity outcomes, growth and cognitive deficits, and non-communicable diseases (NCDs) throughout their lifespan [3-5]. In addition, parent's perceptions of their children's weight status play an important role in the management of children's malnutrition [1]. Therefore, national data on the nutritional status of Malaysian children and parents' perception of their children's weight are crucial to evaluate the current situation.

13.2 OBJECTIVES

13.2.1 General Objective

To determine the low birth weight and nutritional status among children below five years old.

13.2.2 Specific Objectives

- i. To determine the low birth weight status.
- ii. To determine the nutritional status (prevalence of underweight, stunting, wasting and overweight) of children below five years old.
- iii. To determine the body weight perception of mothers towards their children below five years old compared to actual body weight status.
- iv. To determine the action taken by mothers about their children's body weight compared to actual body weight status.

13.3 DEFINITIONS

- Low birth weight (LBW) is defined as birth weight less than 2500g among pre-term and term babies.
- Malnutrition refers to deficiencies, excesses, or imbalances of energy and/or nutrient intake. The term malnutrition addresses three broad groups of conditions: undernutrition, micronutrient-related malnutrition, and overweight, obesity, and diet-related non-communicable diseases [1,2].
- Underweight is defined as children's weight-for-age less than -2 standard deviations (SD) (<-2SD) of the WHO Child growth standards median [1,2].
- Stunting was defined as height-for-age less than -2 SD (<-2SD) of the WHO Child growth standards median [1,2].
- Wasting was defined as weight-for-height and BMI-for-age less than -2 SD (<-2SD) of the WHO Child growth standards median [1,2].
- Overweight was defined as children's weight-for-height and BMI-for-age more than 2 SD (>+2SD) of the WHO Child growth standards median [1,2].

13.4 FINDINGS

13.4.1 Low birth weight status

Overall, the prevalence of low birth weight (LBW) in Malaysia was 10.9% (95% CI: 10.19, 11.59) (**Table 13.4.1**).

13.4.2 Nutritional status by weight-for-age

This survey showed that 15.3% (95% CI: 14.42, 16.28) of children were underweight (weight-for-age: <-2SD) (**Table 13.4.2**).

13.4.3 Nutritional status by height-for-age

The prevalence of stunting (height-for-age: <-2SD) was 21.2% (95% CI: 19.95, 22.56). Stunting was more prevalent in Pahang state [28.2% (95% CI: 23.65, 33.26)] (**Table 13.4.3**).

13.4.4 Nutritional status by weight-for-height

The overall wasting prevalence in this study was 11.0% (95% CI: 10.11, 11.97). The prevalence of overweight in this study was 5.6 % (95% CI: 4.85, 6.38) (**Table 13.4.4**).

13.4.5 Nutritional status by BMI for age

The survey found that the national prevalence of wasting (BMI-for-age< -2SD) was 10.1% (95% CI: 9.40, 10.93) while the prevalence of overweight (BMI for age >2SD) was 6.0% (95% CI: 5.22, 6.79) (**Table 13.4.5**).

13.4.6 Parental perception of child's body weight status and action taken

Findings showed that 74.4% (95% CI: 70.55, 77.86) of the parents perceived their wasting child as having normal weight. Overall, 80.3% (95% CI: 70.17, 87.54) of parents with overweight children misperceived their child's body weight status as normal (**Table 13.4.6a**).

About 34.1% (95% CI: 23.23, 46.97) of parents who perceived their child as overweight reported trying to reduce their child's body weight while 61.7% (95% CI: 48.15, 73.70) of parents did nothing about their child's weight. Overall, 56.0% (95% CI: 51.49, 60.34) of parents with wasting children and 66.1% (95% CI: 59.59, 72.01) of parents with overweight children do nothing about their child's weight (**Table 13.4.6b**).

13.5 CONCLUSION

The prevalence of stunting among children aged 0-59 months remained high at 21.2%, and the prevalence of underweight and wasting has been steadily increasing since year 2015 with the current prevalence of 15.3%

and 10.1% respectively (**Table 13.5.1**). Undernutrition among children has become a major public health issue due to the high public health significance of stunting and wasting. Although the prevalence of undernutrition, which includes underweight, stunting, and wasting among Malaysian children under five remains higher, the prevalence of overweight has become a medium public health significant issue, thus contributing to a double burden of malnutrition in the nation. Children from rural locality still had a significantly higher prevalence of stunting and underweight compared to children from urban locality. The findings warranted urgent, intensive, and extensive strategies to address these problems.

13.6 RECOMMENDATIONS

- To empower and motivate parents and caregivers to monitor children's growth at home/ childcare and bring them to a clinic for routine health screening, not only when they are sick.
- To educate parents and caregivers on the importance of giving a variety of foods particularly eggs, flesh foods, fruits, and vegetables to children starting at 6 months of age and beyond.
- To strengthen the food and nutrition security of the children especially in addressing the problem of wasting, underweight, and stunting via more holistic and sustainable approaches.

Table 13.5.1: Prevalence of nutritional status among children under 5 years, NHMS 2015 - 2022

Nutritional Status	Year		
	2015	2019	2022
Stunting	17.7	21.8	21.2
Underweight	12.4	14.1	15.3
Wasting	8.1	9.4	11.0

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Table 13.4.1: Prevalence of low birth weight, Malaysia, NHMS 2022: MCH (n=15,875)

Sociodemographic	Low Birth Weight (<2.5kg)				95% CI
	Unweighted Count	Estimated Population	Prevalence (%)	Lower	
MALAYSIA	1759	236537	10.9	10.19	11.59
State					
Johor	105	29340	11.5	9.37	13.92
Kedah	145	16717	10.6	9.09	12.33
Kelantan	104	15366	9.4	7.49	11.86
Melaka	146	7099	9.8	8.55	11.22
Negeri Sembilan	114	8183	11.3	9.15	13.91
Pahang	120	14138	12.5	9.40	16.47
Pulau Pinang	103	11143	10.5	7.94	13.81
Perak	138	17736	11.8	9.92	14.01
Perlis	120	1978	10.6	8.49	13.21
Selangor	124	45982	10.0	8.20	12.11
Terengganu	107	9527	9.1	7.50	11.05
Sabah & WP Labuan	107	23508	9.8	7.57	12.62
Sarawak	217	24459	16.4	14.35	18.71
WP Kuala Lumpur & Putrajaya	109	11361	10.0	8.27	12.11
Location					
Urban	1214	163197	10.5	9.73	11.42
Rural	545	73340	11.7	10.49	12.97
Sex					
Male	791	102590	9.2	8.33	10.15
Female	968	133947	12.6	11.64	13.71
Gestational age					
Full term (≥ 37 weeks)	1004	131627	6.6	6.04	7.18
Pre-term (< 37 weeks)	755	104910	58.9	55.25	62.50
Age Group					
Less than 6 months	149	20582	11.9	9.30	15.05
6 - 11 months	195	25292	11.8	9.70	14.37
12 - 23 months	376	50295	10.8	9.31	12.59
24 - 35 months	360	49934	10.4	8.97	12.04
36 - 47 months	361	45262	10.4	9.04	11.83
48 - 59 months	318	45173	11.1	9.57	12.81
Ethnicity					
Malay	1322	145054	10.5	9.82	11.24
Chinese	77	33396	11.5	8.91	14.78
Indian	79	12043	12.3	9.62	15.65
Other Bumiputera	247	38838	15.0	12.83	17.45
Others	34	7206	4.9	2.83	8.26
Citizenship					
Malaysian citizen	1724	229272	11.2	10.56	11.94
Permanent resident/ non-citizen	35	7266	5.4	3.12	9.21

Table 13.4.2: Weight-For-Age (WAZ) status among children below 5 years by sociodemographic characteristics in Malaysia, NHMS 2022: MCH (n=16,992)

Sociodemographic		Underweight (WAZ < -2SD)						Overweight (WAZ > +2SD)									
		Unweighted Count		Estimated Population		Prevalence (%)		95% CI		Unweighted Count		Estimated Population		Prevalence (%)		95% CI	
State																	
Johor	124	35980	12.9	10.53	15.68	19	4926	1.8	1.14	2.72							
Kedah	272	32349	18.5	15.97	21.44	30	3537	2.0	1.41	2.90							
Kelantan	239	33416	19.6	17.13	22.26	21	2714	1.6	0.98	2.57							
Melaka	218	10431	14.3	12.27	16.66	28	1848	2.5	1.73	3.70							
Negeri Sembilan	130	8502	10.4	8.34	12.92	38	2793	3.4	2.40	4.86							
Pahang	217	22900	17.9	15.05	21.25	19	1872	1.5	0.92	2.33							
Pulau Pinang	177	12820	11.7	8.84	15.43	20	-	-	-	-							
Perak	162	18878	11.9	10.12	13.89	24	3019	1.9	1.29	2.79							
Perlis	220	3796	19.6	16.65	22.87	29	472	2.4	1.78	3.31							
Selangor	208	79237	15.9	13.10	19.23	19	-	-	-	-							
Terengganu	181	16565	14.5	12.65	16.68	22	1962	1.7	1.10	2.70							
Sabah & WP Labuan	184	47590	17.2	14.22	20.62	23	4988	1.8	1.13	2.86							
Sarawak	209	23436	15.6	13.46	17.95	41	5479	3.6	2.60	5.08							
WP Kuala Lumpur & Putrajaya	143	15738	12.4	10.04	15.17	22	2871	2.3	1.35	3.75							
Location																	
Urban	1794	235913	14.1	12.96	15.24	266	42227	2.5	1.78	3.54							
Rural	890	125725	18.4	16.94	20.02	89	11892	1.7	1.33	2.29							
Sex																	
Male	1445	191080	15.9	14.60	17.20	201	32176	2.7	1.71	4.15							
Female	1239	170559	14.8	13.55	16.08	154	21943	1.9	1.51	2.38							
Age Group																	
Less than 6 months	248	31000	17.6	14.38	21.44	11	-	-	-	-							
6 - 11 months	216	29031	13.2	10.33	16.65	16	-	-	-	-							
12 - 23 months	495	63106	12.8	11.25	14.63	45	5324	1.1	0.73	1.60							
24 - 35 months	616	84838	16.3	14.61	18.19	78	10554	2.0	1.50	2.74							
36 - 47 months	598	75650	15.6	14.02	17.32	95	-	-	-	-							
48 - 59 months	511	78014	16.7	14.56	19.04	110	14772	3.2	2.41	4.12							
Ethnicity																	
Malay	2180	242325	16.4	15.46	17.33	241	24256	1.6	1.40	1.92							
Chinese	76	36503	11.6	8.46	15.62	25	7636	2.4	1.51	3.86							

Sociodemographic	Underweight (WAZ < -2SD)					Overweight (WAZ > +2SD)				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI Lower	Upper	Unweighted Count	Estimated Population	Prevalence (%)	95% CI Lower	Upper
Indian	74	125633	11.8	8.04	17.01	26	4719	4.4	2.66	7.32
Other Bumiputera	285	43536	16.3	14.23	18.69	50	6695	2.5	1.90	3.32
Others	68	26632	14.0	8.94	21.20	13	-	-	-	-
Citizenship										
Malaysian citizen	2614	334952	15.4	14.50	16.24	343	44269	2.0	1.76	2.34
Permanent resident/non-citizen	70	26687	15.0	9.61	22.67	11	-	-	-	-

Table 13.4.3: Height-For-Age (HAZ) status among children below 5 years by sociodemographic characteristics in Malaysia, NHMS 2022: MCH (n= 16,881)

Sociodemographic	Stunting (HAZ < -2SD)			Tall (HAZ > +2SD)			
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI		Prevalence (%)	95% CI
				Lower	Upper		
MALAYSIA	3547	498327	21.2	19.95	22.56	404	59738
State							
Johor	160	48725	17.5	14.45	21.00	22	6104
Kedah	351	41168	23.7	20.65	27.05	19	-
Kelantan	276	38774	23.0	20.08	26.23	16	2255
Melaka	316	15912	21.9	19.05	25.06	45	2381
Negeri Sembilan	197	12912	15.9	12.56	19.91	48	4378
Pahang	313	35009	28.2	23.65	33.26	35	3307
Pulau Pinang	205	17345	16.0	12.56	20.28	17	-
Perak	192	23111	14.6	12.51	16.94	22	2894
Perlis	220	3722	19.4	16.07	23.18	44	693
Selangor	286	110480	22.2	17.81	27.29	37	-
Terengganu	251	22847	20.2	17.24	23.53	39	3469
Sabah & WP Labuan	274	69627	25.3	22.03	28.83	12	-
Sarawak	269	29013	19.4	17.01	21.97	29	3446
WP Kuala Lumpur & Putrajaya	237	29682	23.4	19.57	27.71	19	3055
Location							
Urban	2413	336592	20.2	18.55	21.90	301	46917
Rural	1134	161735	23.8	22.05	25.68	103	12821
Sex							
Male	1891	262148	21.8	20.25	23.47	193	34881
Female	1656	236180	20.6	18.90	22.43	211	24857
Age Group							
Less than 6 months	322	39923	22.8	19.34	26.67	32	-
6 - 11 months	323	42933	19.8	16.87	23.02	58	8173
12 - 23 months	821	113117	23.2	20.79	25.79	94	1101
24 - 35 months	778	111774	21.6	19.28	24.07	103	13257
36 - 47 months	715	94838	19.6	17.62	21.77	68	-
48 - 59 months	588	95741	20.5	17.75	23.66	49	7332
Ethnicity							
Malay	2848	319963	21.8	20.62	22.94	317	33628
Chinese	125	59115	18.7	14.76	23.40	34	9227

Sociodemographic	Stunting (HAZ < -2SD)				Tall (HAZ > +2SD)			
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	Unweighted Count	Estimated Population	Prevalence (%)	95% CI
Indian	73	15269	14.4	9.76 - 20.70	22	4305	4.1	2.34 - 6.94
Other Bumiputera	384	63074	23.9	21.03 - 26.93	23	2804	1.1	0.67 - 1.67
Others	116	40826	21.6	15.20 - 29.66	8	-	-	-
Citizenship								
Malaysian citizen	3433	460492	21.2	20.03 - 22.47	396	49964	2.3	1.96 - 2.70
Permanent resident/ non-citizen	114	37836	21.3	15.02 - 29.31	8	-	-	-

Table 13.4.4: Weight-For-Height (WHZ) status among children below 5 years by sociodemographic characteristics in Malaysia, NHMS 2022: MCH (n= 16,790)

		Wasting (WHZ < -2SD)				Overweight (WHZ > +2S)				
				95% CI				95% CI		
Sociodemographic	Unweighted Count	Estimated Population	Prevalence (%)	Lower	Upper	Unweighted Count	Estimated Population	Prevalence (%)	Lower	Upper
MALAYSIA	1892	2566299	11.0	10.11	11.97	872	129810	5.6	4.85	6.38
State										
Johor	112	31616	11.4	9.02	14.33	53	16223	5.9	4.21	8.09
Kedah	145	16785	9.8	7.76	12.19	57	7977	4.6	3.11	6.84
Kelantan	134	17826	10.6	8.56	13.03	67	8544	5.1	3.46	7.39
Melaka	206	10639	14.8	12.73	17.14	98	5774	8.0	6.24	10.28
Negeri Sembilan	102	7833	9.7	7.38	12.63	80	5673	7.0	4.09	11.81
Pahang	141	14256	11.4	9.19	13.96	71	9319	7.4	4.91	11.06
Pulau Pinang	122	11120	10.3	7.64	13.63	50	6224	5.7	3.73	8.74
Perak	125	15022	9.5	7.74	11.70	36	4787	3.0	2.09	4.39
Perlis	164	2800	14.6	12.15	17.41	57	902	4.7	3.70	5.96
Selangor	154	63058	12.9	9.82	16.73	65	30064	6.1	3.83	9.71
Terengganu	170	15353	13.6	11.71	15.85	55	5033	4.5	3.46	5.76
Sabah & WP Labuan	92	24601	8.9	6.65	11.93	51	11728	4.3	3.21	5.65
Sarawak	135	15565	10.5	8.81	12.40	77	9240	6.2	4.74	8.11
WP Kuala Lumpur & Putrajaya	90	10153	8.1	6.47	10.11	55	8320	6.6	4.36	10.00
Location										
Urban	1313	177102	10.7	9.62	11.87	640	98590	6.0	5.01	7.05
Rural	579	79527	11.8	10.20	13.54	232	31220	4.6	3.86	5.52
Sex										
Male	1008	140802	11.8	10.41	13.40	493	78143	6.6	5.34	8.04
Female	884	115826	10.2	9.23	11.15	379	51667	4.5	3.92	5.23
Age Group										
Less than 6 months	126	19096	11.0	8.01	14.87	53	6111	3.5	2.50	4.92
6 - 11 months	139	16816	7.7	6.29	9.44	58	5559	2.6	1.81	3.58
12 - 23 months	321	40406	8.3	7.00	9.76	126	18297	3.7	2.97	4.72
24 - 35 months	440	64898	12.6	10.06	15.78	190	27874	5.4	4.40	6.69
36 - 47 months	452	56503	11.8	10.34	13.38	213	38758	8.1	5.55	11.62
48 - 59 months	414	58909	12.8	11.08	14.82	232	33211	7.2	6.04	8.65
Ethnicity										
Malay	1544	170101	11.6	10.83	12.49	642	69848	4.8	4.27	5.34
Chinese	84	32007	10.3	7.53	13.98	58	21295	6.9	5.00	9.36

Sociodemographic	Wasting (WHZ < -2SD)					Overweight (WHZ > +2S)				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI		Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper				Lower	Upper
Indian	75	15229	14.4	10.27	19.95	42	8900	8.4	5.73	12.27
Other Bumiputera	149	20475	7.8	6.35	9.48	102	16968	6.4	4.90	8.42
Others	40	-	-	-	-	27	-	-	-	-
Citizenship										
Malaysian citizen	1848	238624	11.1	10.33	11.87	843	116823	5.4	4.87	6.03
Permanent resident/non-citizen	44	-	-	-	-	28	-	-	-	-

Table 13.4.5: Body Mass Index-For-Height (BAZ) status among children below 5 years by sociodemographic characteristics in Malaysia, NHMS 2022: MCH (n= 16,768)

Sociodemographic	Wasting (BAZ < -2SD)						Overweight (BAZ > +2SD)					
	Unweighted Count		Estimated Population		Prevalence (%)		95% CI		Unweighted Count		Estimated Population	
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
MALAYSIA	1772	236178	10.1	9.40	10.93	9.58	958	138816	6.0	5.22	6.79	
State												
Johor	107	29892	10.8	8.50	13.59	6.3	18890	6.8	4.98	9.27		
Kedah	132	15444	9.0	7.10	11.26	62	7975	4.6	3.11	6.84		
Kelantan	128	17004	10.1	8.01	12.62	71	9155	5.4	3.87	7.57		
Melaka	199	10475	14.6	12.58	16.88	114	6595	9.2	7.25	11.59		
Negeri Sembilan	105	8234	10.2	7.65	13.45	84	6068	7.5	4.35	12.67		
Pahang	133	13271	10.7	8.45	13.39	76	9675	7.8	5.04	11.83		
Pulau Pinang	105	9599	8.9	6.39	12.19	58	6566	6.1	4.05	9.00		
Perak	122	15003	9.5	7.59	11.87	47	6151	3.9	2.72	5.57		
Perlis	157	2608	13.6	11.43	16.11	62	985	5.1	4.02	6.54		
Selangor	141	54567	11.2	8.99	13.80	66	30223	6.2	3.86	9.78		
Terengganu	157	14156	12.6	10.60	14.94	57	5199	4.6	3.56	6.01		
Sabah & WP Labuan	75	21143	7.7	5.65	10.35	54	11876	4.3	3.21	5.78		
Sarawak	126	14656	9.8	8.17	11.80	83	10096	6.8	5.38	8.50		
WP Kuala Lumpur & Putrajaya	85	10122	8.1	6.05	10.71	61	9363	7.5	4.95	11.15		
Location												
Urban	1240	163939	9.9	9.06	10.82	709	106252	6.4	5.46	7.54		
Rural	532	72240	10.7	9.27	12.33	249	32563	4.8	4.01	5.79		
Sex												
Male	919	121535	10.2	9.21	11.32	537	81781	6.9	5.64	8.35		
Female	853	114643	10.0	9.08	11.11	421	57034	5.0	4.35	5.74		
Age Group												
Less than 6 months	167	22998	13.1	10.03	16.90	27	3532	2.0	1.26	3.20		
6 - 11 months	151	18499	8.5	6.93	10.39	53	5031	2.3	1.67	3.20		
12 - 23 months	269	33853	6.9	5.83	8.26	166	22697	4.7	3.81	5.69		
24 - 35 months	407	55345	10.8	9.19	12.76	229	30727	6.0	4.96	7.30		
36 - 47 months	394	51092	10.7	9.20	12.31	249	43030	9.0	6.37	12.50		
48 - 59 months	384	54392	11.8	10.18	13.70	234	33799	7.3	6.16	8.74		

Sociodemographic	Wasting (BAZ < -2SD)						Overweight (BAZ > +2SD)					
	Unweighted Count		Estimated Population		Prevalence (%)		95% CI		Unweighted Count		Estimated Population	
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
Ethnicity												
Malay	1454	159315	10.9	10.15	11.74	705	75281	5.2	4.62	5.76		
Chinese	85	33591	10.8	7.79	14.83	61	22196	7.1	5.26	9.65		
Indian	71	13085	12.4	8.78	17.28	51	10067	9.6	6.74	13.38		
Other Bumiputera	123	16773	6.3	5.12	7.84	111	18204	6.9	5.27	8.95		
Others	39	13414	7.1	3.97	12.25	29	-	-	-	-		
Citizenship												
Malaysian citizen	1729	223576	10.4	9.65	11.17	927	125560	5.8	5.25	6.47		
Permanent resident/non-citizen	43	-	-	-	-	30	-	-	-	-		

Table 13.4.6a: Prevalence of parental perception of child's weight status by actual nutritional status, NHMS 2022: MCH (n= 16,764)

Actual Nutritional Status	Perceived Underweight						Perceived Normal Weight						Perceived Overweight						
	Sociodemographic		Unweighted Population		Estimated Population		95% CI (%)		Unweighted Population		Estimated Population		95% CI (%)		Unweighted Population		Estimated Population		95% CI (%)
	Count	Count	Lower	Upper	Count	Count	Lower	Upper	Count	Count	Lower	Upper	Count	Count	Lower	Upper	Count	Count	Lower	Upper
Wasting (BAZ < -2SD)	448	59556	25.2	21.73	29.06	1318	175654	74.4	70.55	77.86	6	-	-	-	-	-	-	-	-
Normal (-2SD < BAZ ≤ +2SD)	999	146908	7.5	6.46	8.72	12926	1787816	91.5	90.20	92.57	109	20081	1.0	0.70	1.51				
Overweight (BAZ > +2SD)	18	-	-	-	-	787	111405	80.3	70.17	87.54	153	24781	17.9	10.65	28.38				

Table 13.4.6b: Prevalence of action taken on child's weight status by weight perception and actual nutritional status, NHMS 2022: MCH (n= 17,058 & n=16,763)

Actual Nutritional Status	Put effort to reduce child body weight						Put effort to increase child body weight						Do nothing					
	Sociodemographic		Prevalence (%)		95% CI (%)		Put effort to reduce child body weight		Prevalence (%)		95% CI (%)		Put effort to increase child body weight		Prevalence (%)		95% CI (%)	
	Count	Population	Count	Population	Count	Population	Count	Population	Count	Population	Count	Population	Count	Population	Count	Population	Count	Population
Weight Perception																		
Perceived Underweight	42	5559	2.6	1.77	3.93	1303	186658	88.9	86.15	91.21	132	17684	8.4	6.41	10.99			
Perceived Normal Weight	76	8100	0.4	0.25	0.60	3130	508106	24.1	21.38	27.13	12057	1588730	75.5	72.48	78.25			
Perceived Overweight	145	18416	34.1	23.23	46.97	15	-	-	-	-	158	33331	61.7	48.15	73.70			
Actual Nutritional Status																		
Wasting (BAZ < -2SD)	27	3437	1.5	0.87	2.44	686	100239	42.6	38.22	47.05	1056	131758	56.0	51.49	60.34			
Normal (-2SD < BAZ ≤ +2SD)	105	11924	0.6	0.43	0.86	3487	550771	28.2	25.36	31.16	10444	1392235	71.2	68.22	74.04			
Overweight (BAZ > +2SD)	97	10430	7.5	5.67	9.89	210	36665	26.4	20.90	32.78	651	91721	66.1	59.59	72.01			

MODULE N: ASSESSMENT BY NURSE

CHILD DEVELOPMENT



CHILD DEVELOPMENT

CHILD DEVELOPMENT

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HIGHLIGHTS

- 7.4% of Malaysian children have possible developmental delay.
- The prevalence of possible social delay was the highest among four major domains.

Keywords: *Developmental delay, Physical delay, Language delay, Social-personal delay*

14.1 INTRODUCTION

The first few years of a child's life is immensely precious where development occurs across multiple domains, encompassing the physical, cognitive, social-emotional, linguistic, and behavioural domain. Cultural, environmental, and genetic factors are among the factors influencing the progress of child development [1]. The developmental delay happens when the child fails to achieve the developmental milestones as compared to their peers. In 2016, the prevalence of

developmental delay in Malaysia was 2.8% [2]. Children with developmental delay may experience learning difficulties, social problems, an increase risk of having physical and mental health problems, as well as a low quality of life as they grow older [3,4,5,6]. Thus, early detection is essential as it allows early intervention, which can significantly improve outcomes [7,8].

14.2 OBJECTIVES

14.2.1 General Objective

To determine the prevalence of developmental delay in any developmental domains among children aged 6–59 months.

14.2.2 Specific Objectives

- i. To determine the prevalence of gross motor delay.
- ii. To determine the prevalence of fine motor delay.
- iii. To determine the prevalence of speech/hearing delay.
- iv. To determine the prevalence of social delay.

14.3 DEFINITIONS

- A delay in one or more of the following domains – gross motor, fine motor, speech/hearing, or social domain – is considered a possible developmental delay. The classification of delays is determined through the use of questionnaires and assessments conducted by nurses.
- The assessment of gross motor delay involves evaluating the child's head control, rolling over, sitting, standing, walking, running, and standing. Failure to pass any age-specific assessment leads to the classification of possible gross motor delay.
- The assessment of fine motor delay involves evaluating the child's ability to grasp objects, transfer objects, make a pincer grip, bang cubes, scribble, stack cubes, copy lines, copy a circle, or hold a pencil with an active tripod grasp. Failure to pass any age-

- specific assessment leads to the classification of possible fine motor delay.
- The assessment of speech/hearing delay involves evaluating the child's ability to react to sounds, copy sounds, say words, make sentences or have their speech understood by others. Failure to pass any age-specific assessment leads to the classification of possible speech/hearing delay.
 - The assessment of social delay involves evaluating the child's ability to self-feed, wave hands, imitate activities, follow instructions, remove clothes, put on clothes, engage in pretend play, go to the toilet independently or interact with other children. Failure to pass any age-specific assessment leads to the classification of possible social delay.
 - Any findings of possible developmental delay should receive thorough professional assessment.

14.4 FINDINGS

Overall, the prevalence of developmental delay among children aged 6–59 months old in Malaysia was 7.4% (95% CI: 6.71, 8.22) (**Table 14.4.1**). The prevalence of gross motor, fine motor, speech/hearing and social delays are tabulated in **Table 14.4.2**.

14.5 CONCLUSION

The prevalence of children with developmental delay has doubled compared to the previous nationwide study [2]. Among the four domains, social delay was the highest, followed by speech/hearing delay, fine motor delay and gross motor delay.

14.6 RECOMMENDATIONS

- Create awareness among parents and childcare providers for early detection of developmental delay among children.
- Collaboration with private sectors, NGOs and other agencies to optimise resources and expertise.
- Further research is needed to identify particular risk factors that lead to the increasing trend of developmental delays among Malaysian children.

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Table 14.4.1: Developmental delay among children aged 6–59 months, NHMS 2022: MCH (n=15,234)

Sociodemographic	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	1188	157725	7.4	6.71	8.22
Location					
Urban	858	111312	7.3	6.58	8.20
Rural	330	46414	7.6	6.12	9.51
Sex					
Male	726	94941	8.7	7.73	9.74
Female	462	62784	6.1	5.26	7.06
Age Group					
6 – 11 months	67	8975	4.2	2.96	5.86
12 – 23 months	200	24758	5.2	4.28	6.41
24 – 59 months	921	123992	8.6	7.72	9.66
Ethnicity					
Malay	894	93329	7.1	6.45	7.80
Chinese	69	23765	8.1	5.81	11.13
Indian	44	6587	6.8	4.65	9.79
Other Bumiputera	139	20462	8.5	6.68	10.89
Others	41	-	-	-	-
Citizenship					
Malaysian citizen	1149	145387	7.4	6.75	8.15
Permanent resident/ non- citizen	39	-	-	-	-

Table 14.4.2: Developmental delay among children aged 6–59 months by domains, Malaysia, NHMS 2022: MCH (n=15,234)

Domains	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
Gross motor	153	20627	1.0	0.78	1.21
Fine motor	295	40565	1.9	1.56	2.34
Speech/hearing	474	56452	2.7	2.34	3.03
Social	636	86159	4.1	3.51	4.69

MODULE N: ASSESSMENT BY NURSE

VACCINATION COVERAGE



VACCINATION COVERAGE

VACCINATION COVERAGE

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HIGHLIGHTS

- The overall prevalence of complete primary vaccination in Malaysia was 87.1%.
- 11.9% of respondents did not complete their vaccination as scheduled.
- The prevalence of complete verified primary vaccination was highest in Sarawak (97.0%) and lowest in Pulau Pinang (59.6%).
- Complete vaccination coverage of the Hepatitis B third dose was 86.8%.
- 92.9% of respondents did not miss or delay their vaccination appointments during the COVID-19 control measures (Movement Control Order, MCO).

Keywords: *Vaccination coverage, Prevention, Children, Communicable disease, Sustainable Development Goals (SDG)*

15.1 INTRODUCTION

Childhood vaccination is the most effective and efficient activity in public health to prevent serious infectious diseases. In 1974, the World Health Organization (WHO) established the Expanded Program on Immunization (EPI) to assure global vaccination coverage, which has resulted in a considerable reduction in the prevalence

of vaccine-preventable illnesses and prevented more than 2 million child deaths annually [1,2]. In addition, vaccination plays a critical role in achieving the Sustainable Development Goals (SDGs). It contributes to 14 of the 17 Sustainable Development Goals (SDGs), including SDG 3, which aims to ensure healthy lives and promote well-being for all at all ages [3]. Vaccination coverage is the percentage of a target population receiving the full vaccination schedule. The schedule includes all the vaccinations recommended by the National Immunization Program (NIP), applied at the correct ages and intervals. The Malaysian National Immunisation Programme (NIP) [4] was introduced in the early 1950s, designed based on the WHO Expanded Programme on Immunisation (EPI), and today it protects against thirteen illnesses.

15.2 OBJECTIVES

15.2.1 General Objective

To evaluate the complete vaccination coverage and its determinants among children aged 12–23 months in Malaysia.

15.2.1 Specific Objectives

- i. To evaluate the vaccination coverage for BCG among children aged 12–23 months.
- ii. To evaluate the vaccination coverage for Hepatitis B among children aged 12–23 months.
- iii. To evaluate the vaccination coverage for DTP/Hib/IPV among children aged 12–23 months.
- iv. To evaluate the vaccination coverage for MMR among children aged 12–23 months.
- v. To evaluate the vaccination coverage for Pneumococcal among children aged 12–23 months.
- vi. To evaluate the prevalence of complete primary vaccination coverage among children aged 12–23 months in Malaysia.
- vii. To evaluate the prevalence of missed or delayed vaccination appointments during the COVID-19 control measures.

viii. To assess reasons for missed or delayed vaccination appointments during the COVID-19 control measures.

15.3 DEFINITIONS

- Complete verified defined as respondents who have completed their primary vaccination coverage (BCG, 3 doses of Hepatitis B, 3 doses of DTaP/IPV/Hib, 2 doses of pneumococcal and 2 doses of MMR) verified by child's clinic books.
- Complete self-report is defined as respondents who have completed their primary vaccination coverage through self-report by their parent/guardian.
- Incomplete vaccination is defined as respondents who did not complete their vaccination.
- Unvaccinated is defined as respondents who did not receive any vaccination.

15.4 FINDINGS

A total of 3,463 out of 3,523 eligible respondents participated in this module with a response rate of 98.3%. The overall prevalence of complete verified coverage for BCG, Pneumococcal, DPT-IPV/Hib, MMR and Hepatitis B was 94.9% (95% CI: 93.10, 96.20), 92.8% (95% CI: 90.87, 94.45), 90.7% (95% CI: 88.54, 92.58), 88.1% (95% CI: 85.89, 90.10) and 86.8% (95% CI: 84.28, 88.89) respectively (**Table 15.4.2**). The BCG vaccine was self-reported by 4.1% (95% CI: 2.90, 5.80) of the population, whereas 1.0% (95% CI: 0.58, 2.04) did not get the vaccine. Complete self-reported for the hepatitis B vaccine was reported by 3.9% (95% CI: 2.78, 5.61), 8.3% for incomplete hepatitis B coverage (95% CI: 6.78, 10.25) and 1.1% (95% CI: 0.68, 2.05) did not take the hepatitis B vaccine at all. For pneumococcal and MMR vaccines, the prevalence of complete self-report is 5.1% for both vaccines (95% CI: 3.74, 6.93) (95% CI: 3.78, 6.95), the prevalence of incomplete vaccination is 1.1% (95% CI: 0.69, 1.88) and 2.7 (95% CI: 2.01, 3.89) and the prevalence of unvaccinated is 1.0% (95% CI: 0.55, 2.22) and 4.1% (95% CI: 3.05, 5.77) respectively.

Overall, in Malaysia, 87.1% of children completed their primary vaccination by the age of 12 months, of which 83.5% (95% CI: 80.93, 85.76) were verified, with an additional 3.6% (95% CI: 2.44, 5.32) self-reported as having completed their child's primary vaccination (**Table 15.4.1**). A total of 11.9% (95% CI: 10.05, 14.01) of children received some vaccinations but did not complete all scheduled primary vaccinations and 1.0% (95% CI: 0.49, 1.95) did not receive any vaccination. Sarawak has the highest complete primary vaccination coverage rate in Malaysia, at 97.0% (95% CI: 91.80, 98.93), while Pulau Pinang has the lowest, at 59.6% (95% CI: 44.69, 72.89). The prevalence of all states and their sociodemographic characteristics are described in **Table 15.4.1**.

The impact of COVID-19 on MCH services was also evaluated in this study. It was reported that 92.2% of respondents did not miss or delay their vaccination appointments during the COVID-19 social distancing measures (Movement Control Order, MCO) while 7.8% missed or delayed their vaccination appointments (**Table 15.4.3**). The top 3 reasons given for missed or delayed appointments are that the parent has financial difficulties (22.8%), their child was sick during the appointment date (22.7%) and the doctor or nurse cancelled or rescheduled the appointment (20.1%) (**Table 15.4.4**).

15.5 CONCLUSION

In general, the prevalence of children aged 12-23 months who completed their primary vaccination has dropped to less than 90% compared to the NHMS 2016 (87.1% vs 95.3%) (**Table 15.5.1**). The findings in 2022 also revealed that self-reported prevalence has decreased from 8.9% to 3.6%. The COVID-19 pandemic and Movement Control Order (MCO) have affected childhood vaccination uptake, hence the increased reporting of incomplete vaccination from 4.9% in 2016 to 11.9% in 2022.

15.6 RECOMMENDATIONS

- Following the pandemic, intensification of routine vaccination has been carried out to trace defaulters or children who missed vaccination.
- To improve vaccination documentation by leveraging the use of ICT through NIP MyVAS at all levels, including the private sector.
- To enhance advocacy and promotional education on the importance of vaccination for children.
- To consider expanding fee waivers to other vaccines in the NIP for non-citizen children.
- To strengthen capacity building among healthcare workers in all aspects of the vaccination programme.

Table 15.5.1: Prevalence of complete primary vaccination coverage among children aged 12 - 23 months in Malaysia, NHMS 2016 - 2022

	2016	2022
Complete primary vaccination coverage	95.3	87.1

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Table 15.4.1: Primary vaccination coverage among children aged 12-23 months, NHMS 2022: MCH (n=3,463)

Sociodemographic	Verified complete				Self-reported complete			
	Unweighted Count		Prevalence (%)		95% CI		Prevalence (%)	
	Estimated Population	Lower	Upper	Unweighted Count	Estimated Population	Lower	Upper	
MALAYSIA	2957	405871	83.5	80.93	85.76	90	17610	3.6
State								2.44
Johor	170	47593	82.7	75.44	88.11	15	5337	9.3
Kedah	269	31239	89.1	80.42	94.24	7	-	-
Kelantan	188	25453	69.3	57.17	79.18	5	-	-
Melaka	242	12606	94.6	86.12	98.00	0	-	-
N. Sembilan	192	13305	83.0	71.39	90.54	2	-	-
Pahang	218	21452	93.2	89.80	95.53	12	1052	4.6
P. Pinang	190	17355	59.6	44.69	72.89	0	-	-
Perak	217	26916	87.4	82.80	90.88	5	-	-
Perlis	231	3784	90.6	85.39	94.11	11	-	-
Selangor	196	95976	91.6	83.56	95.91	4	-	-
Terengganu	218	19688	86.5	80.81	90.70	16	1377	6.1
Sabah & Labuan	189	41483	77.9	69.10	84.70	2	631	1.2
Sarawak	270	30757	97.0	91.80	98.93	0	-	-
WP KL & Putrajaya	167	18264	65.8	55.13	75.01	11	-	-
Sex								
Male	1512	210469	84.3	81.00	87.09	41	5886	2.4
Female	1445	195402	82.7	79.15	85.67	49	11725	5.0
Location								
Urban	2060	283629	82.7	79.56	85.48	69	14929	4.4
Rural	897	122242	85.3	80.71	89.01	21	2682	1.9
Ethnicity								
Malay	2347	256603	86.0	83.66	88.12	75	9154	3.1
Chinese	132	51731	80.5	71.60	87.13	9	-	-
Indians	97	15325	76.1	63.18	85.53	4	-	-
Other Bumiputra	342	48835	94.6	91.23	96.69	1	106	0.2
Others	38	33247	64.7	46.63	79.43	1	-	-
Citizenship								
Malaysian citizen	2921	376901	86.0	83.83	87.92	88	14677	3.4
Permanent resident/ non-citizen	35	28890	60.4	40.67	77.31	2	-	-

Sociodemographic		Incomplete			Unvaccinated			95% CI		
		Unweighted Count	Estimated Population	Prevalence (%)	95% CI Lower	95% CI Upper	Unweighted Count	Estimated Population	Prevalence (%)	95% CI Lower	95% CI Upper
MALAYSIA	399	57809	11.9	10.05	14.01	17	4841	1.0	0.49	1.95
State										
Johor	24	4639	8.1	4.69	13.50	-	-	1	-	-
Kedah	17	-	-	-	-	-	-	-	-	-
Kelantan	73	10285	28.0	18.53	39.91	2	-	-	-	-
Melaka	9	-	-	-	-	-	-	-	-	-
N. Sembilan	32	-	-	-	-	-	-	-	-	-
Pahang	5	-	-	-	-	-	-	1	-	-
P. Pinang	78	10888	37.4	24.93	51.75	1	-	-	-	-
Perak	26	3158	10.3	7.03	14.73	1	-	-	-	-
Perlis	14	-	-	-	-	-	-	-	-	-
Selangor	12	-	-	-	-	-	-	-	-	-
Terengganu	19	1694	7.4	4.57	11.90	-	-	-	-	-
Sabah & Labuan	27	7932	14.9	9.85	21.88	10	-	-	-	-
Sarawak	4	-	-	-	-	0	-	-	-	-
WP KL & Putrajaya	59	7441	26.8	18.18	37.61	1	-	-	-	-
Sex										
Male	206	31130	12.5	10.00	15.44	9	-	-	-	-
Female	193	26679	11.3	9.18	13.79	8	-	-	-	-
Location										
Urban	292	41163	12.0	9.82	14.60	10	-	-	-	-
Rural	107	16646	11.6	8.54	15.62	7	-	-	-	-
Ethnicity										
Malay	306	32014	10.7	8.84	12.98	4	-	-	-	-
Chinese	23	7565	11.8	7.11	18.87	0	-	-	-	-
Indians	22	4257	21.1	12.36	33.74	0	-	-	-	-
Other Bumiputera	14	2297	4.4	2.54	7.69	2	-	-	-	-
Others	32	-	-	-	-	11	-	-	-	-
Citizenship										
Malaysian citizen	365	46013	10.5	8.83	12.45	5	-	-	-	-
Permanent resident/ non-citizen	34	-	-	-	-	12	-	-	-	-

Table 15.4.2: Prevalence of complete vaccination coverage among children aged 12–23 months, NHMS 2022: MCH (n=3,463)

	Complete Verified				
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
BCG	3338	461363	94.9	93.10	96.20
HEP B (completed 3 doses)	3055	421771	86.8	84.28	88.89
DTaP-IPV--Hib (completed 3 doses)	3219	440824	90.7	88.54	92.58
Pneumococcal (completed 2 doses)	3277	451290	92.8	90.87	94.45
MMR (completed 2 doses)	3154	428041	88.1	85.89	90.10

Table 15.4.3: Prevalence of missed or delayed vaccination appointments during the COVID-19 control measures (Movement Control Order, MCO), NHMS 2022: MCH (n=3,454)

	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
No	3259	447484	92.2	90.17	93.99
Yes	195	37382	7.8	6.01	9.83

Table 15.4.4: Reason for missed or delayed vaccination appointments during the COVID-19 control measures (Movement Control Order, MCO), NHMS 2022: MCH (n=195)

	Unweighted Count	Percentage (%)
Financial difficulties	21	10.8
Child was sick during TCA date	43	22.1
The doctor/nurse cancelled or rescheduled the appointment	39	20.0
Afraid they may acquire COVID-19 in the hospital/health care centre	43	22.1
Working parent	8	4.1
Others	12	6.2
Document issues	5	2.6
Refuse vaccination	5	2.6
Default TCA	9	4.6
Family issues	4	2.1
No time	3	1.5
Fear of vaccine side effects	3	1.5

A photograph showing a medical professional, likely a nurse, wearing white scrubs and white gloves. The nurse is focused on a task, possibly drawing blood or applying a bandage, on a patient's arm which is visible on the left side of the frame. The background is a plain, light-colored wall.

MODULE N: ASSESSMENT BY NURSE

ANAEMIA

ANAEMIA

ANAEMIA

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HIGHLIGHTS

- 46.5% of children aged 6–59 months were anaemic.
- 0.3% of children aged 6–59 months with severe anaemia.

Keywords: *anaemia, children aged 6–59 months, Malaysia*

16.1 INTRODUCTION

Children are more likely to have micronutrient deficiencies due to greater physiological requirements [1]. Anaemia is an indicator of poor nutrition and health. It is associated with adverse reproductive outcomes including decreased iron stores for the infant, which leads to impaired health and productivity later in life [2,3]. WHO defines anaemia in children aged 6–59 months as a haemoglobin concentration <110 g/L at sea level [4,5]. In 2000, the prevalence of anaemia among children below 6 years in Malaysia was 18.9% [6]. The WHO Global Health Observatory estimated the prevalence of anaemia among children aged 6–59 months in Malaysia increased since 2005, from 19.5% (2005) to 24.6% (2019), and transitioning from mild to moderate of public health significance [7]. Therefore, a national study to obtain data on prevalence of anaemia among children aged 6–59 months is needed in Malaysia.

16.2 OBJECTIVES

16.2.1 General Objective

To determine the prevalence of anaemia in children aged 6–59 months in Malaysia

16.3 DEFINITION

Anaemia in children aged 6–59 months: haemoglobin concentration below <110 g/L at sea level.

16.4 FINDINGS

The overall prevalence of anaemia in children aged 6–59 months was 46.5% (95% CI: 35.56, 57.78). By severity of the anaemia, 24.3% (95% CI: 35.56, 57.78) had mild anaemia, 21.9% (95% CI: 12.25, 36.00) had moderate anaemia and 0.3% (95% CI: 0.06, 1.30) had severe anaemia (**Table 16.4.1**).

Table 16.4.1: Prevalence of anaemia among children aged 6 – 59 months old in Malaysia, NHMS 2022: MCH (n=1,047)

	Unweighted Count	Estimated Population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	439	1109072	46.5	35.56	57.78
Severity of anaemia					
Mild Anaemia (100 – 109 g/L)	268	580351	24.3	20.19	29.02
Moderate anaemia (70–99 g/L)	168	522012	21.9	12.25	36.00
Severe anaemia (<70 g/L)	3	-	-	-	-

16.5 CONCLUSION

The prevalence of anaemia among children aged 6–59 months in this survey was considered as severe public health problem ($\geq 40\%$). The findings of this survey were much higher than estimation by WHO Global Health Observatory 2019. Among children with anaemia, a major proportion of them had mild and moderate anaemia.

16.6 RECOMMENDATION

To incorporate anaemia prevention strategies into complementary feeding and pre-schoolers education for mothers and caregivers.

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**MODULE WR: WOMEN OF REPRODUCTIVE AGE
(15 – 49 YEARS)**

CONTRACEPTION



CONTRACEPTION

CONTRACEPTION

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HIGHLIGHTS

- Current use of any contraceptive method (CPR) was 42.8 %
- 34.5% of respondents used modern contraceptive method
- The prevalence of unmet needs for family planning was 26.7%
- The prevalence of demand for family planning satisfied with modern contraception method was 51.6%
- 33.0% of respondents had unplanned pregnancy

Keywords: *Contraception, Family planning, Unmet need, Unplanned pregnancy, Malaysia*

17.1 INTRODUCTION

The contraceptive prevalence rate (CPR) and unmet need for family planning are key indicators for measuring

improvements in accessing reproductive health services, as called for in the 2030 Agenda for Sustainable Development under target 3.7 [1]. Critically unmet needs can result in unplanned pregnancies, unsafe abortions, and a range of adverse health consequences both for women and infants. However, contraceptive use among the Malaysian population is still lower than expected. This was based on the model-based estimates and projections of family planning indicators in 2019, as the CPR in Malaysia was much lower as compared to neighbouring countries such as the Philippines, Singapore, Indonesia, Thailand, and Vietnam [2].

17.2 OBJECTIVES

17.2.1 General Objective

To determine the prevalence of current contraceptive use among women aged 15–49 years who are currently married or in union in Malaysia.

17.2.2 Specific Objectives

- i. To determine the prevalence of current contraceptive use (contraceptive prevalence rate; CPR) among women aged 15–49 years who are currently married or in union.
- ii. To determine the types of contraceptive method used by women aged 15–49 years who are currently married or in union.
- iii. To determine the prevalence of unmet need for family planning (unmet need for spacing and for limiting) among women aged 15–49 years who are currently married or in union.
- iv. To determine the prevalence of demand for family planning satisfied with modern contraception among women aged 15–49 years who are currently married or in union.
- v. To determine the prevalence of unplanned pregnancy among women aged 15–49 years who are currently married or in union.

17.3 DEFINITIONS

- Contraceptive prevalence rate (CPR) refers to the percentage of women of reproductive age (15–49) who are currently using, or whose partner is currently using, at least one method of contraception (modern or traditional).
- Modern methods of contraception refer to female and male sterilisation, intrauterine device (IUD), injectables, implants, pill, male and female condom, diaphragm, foam/jelly, and lactational amenorrhoea method (LAM).
- Traditional methods of contraception refer to periodic abstinence, withdrawal, traditional (e.g., herbs, wood roots, *makjun*), and other methods.
- Unmet need for family planning refers to women who are fecund but are not using any method of contraception, and report not wanting any more children (limiting) or wanting to delay the next child (spacing).
- Demand for family planning satisfied with modern contraception refers to the proportion of women who are currently using at least one modern contraceptive method divided by total demand for family planning (the sum of contraceptive prevalence (any method) and the unmet need for family planning).

17.4 FINDINGS

The overall prevalence of any contraceptive method use was 42.8% (95% CI: 38.64, 47.04). About 34.5% (95% CI: 30.86, 38.23) of respondents were currently using modern contraceptive methods (**Table 17.4.1**). The top three most commonly used contraceptive methods were pills (33.1%), injectables (16.4%), and withdrawal (9.6%).

Table 17.4.2. The prevalence of unmet need for family planning was 26.7% (95% CI: 22.61, 31.32), with 20.7% (95% CI: 17.13, 24.80) unmet need for limiting and 6.0% (95% CI: 3.86, 9.30) unmet need for spacing (**Table 17.4.3**). The prevalence of demand for family planning satisfied with modern contraception was 51.6% (95% CI: 46.25, 56.85) (**Table 17.4.4**). The unplanned pregnancy rate was 33.0% (95% CI: 25.22, 41.86). The prevalence by sociodemographic characteristic is described in **Table 17.4.1**, **Table 17.4.3** and **Table 17.4.4**.

17.5 CONCLUSION

The study found that the prevalence of CPR, unmet need for family planning, and demand for family planning satisfied with modern contraceptives were 42.8%, 26.7% and 51.6%, respectively. While for unplanned pregnancy, the prevalence was 33.0%. Compared with other Asian countries, the prevalence of unmet need for family planning in Malaysia is the highest among selected Asian countries^[3].

17.6 RECOMMENDATIONS

- The high prevalence of unmet need for family planning found in this survey requires specific interventions and policies to increase contraceptive uptake by addressing its barriers. The unmet needs are not only due to lack of access to the family planning services but also the women or spouse objections towards contraception due to various reasons and influence.
- To expand the availability and affordability of modern contraception, with a particular emphasis on long-acting methods such as implants.
- To raise public knowledge on the importance of contraception, especially modern methods through advocacy and effective communication.
- To improve the knowledge and abilities of health professionals, such as doctors, nurses, and pharmacists, in family planning counselling and process to provide patients with accurate and sufficient information and reduce myths about contraception.
- To expand and explore potential entry points to initiate counselling and contraceptives use in health care facilities; e.g.: postpartum IUCD insertion, pre-pregnancy care for high-risk women.
- To expand the pre-pregnancy care services for high-risk women in private health facilities.

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Table 17.4.1: Prevalence of current contraceptive usage among women aged 15–49 years who are currently married or in union, NHMS 2022: MCH (n= 1,489)

Sociodemographic	Any contraceptive method				Modern contraceptive method			
	Unweighted count	Estimated population	Prevalence (%)		95% CI		Prevalence (%)	95% CI
			Lower	Upper	Estimated count	Estimated population		
MALAYSIA States	699	2416719	42.8	38.64	47.04	614	2081622	34.5 30.86 38.23
Johor	39	333035	37.9	25.08	52.65	29	281469	31.3 19.69 45.75
Kedah	29	84572	29.6	17.48	45.51	26	77348	23.1 13.98 35.76
Kelantan	36	97798	42.2	28.65	56.98	33	90164	36.1 24.48 49.57
Melaka	48	102961	51.8	36.21	67.03	44	95086	44.3 30.29 59.20
Negeri Sembilan	30	93179	43.5	28.87	59.32	25	80668	34.2 21.00 50.36
Pahang	74	125093	52.2	39.67	64.45	69	118637	45.8 33.56 58.61
Penang	46	132213	46.8	32.74	61.39	41	125958	36.9 26.36 48.81
Perak	53	108997	35.6	26.15	46.35	49	102795	32.9 23.93 43.21
Perlis	100	34628	55.1	44.31	65.52	89	31942	47.3 37.20 57.54
Selangor	30	395721	37.3	27.46	48.38	19	245926	22.1 15.38 30.69
Terengganu	34	110753	43.5	29.37	58.71	27	97737	35.9 22.10 52.49
Sabah & WP Labuan	81	412053	54.7	44.64	64.39	73	368838	44.3 35.36 53.59
Sarawak	62	202768	46.9	29.76	64.84	57	198411	45.2 28.63 62.83
WP KL & Putrajaya	37	182948	40.9	25.47	58.29	33	166643	35.6 21.66 52.61
Location								
Urban	476	1632036	38.5	33.61	43.73	407	1363563	30.2 25.96 34.71
Rural	223	784682	55.5	49.06	61.72	207	718060	47.2 41.31 53.24
Age group								
15-19	4	86111	84.0	36.56	97.96	4	86111	84.0 36.56 97.96
20-24	35	196104	35.1	23.58	48.70	34	192807	31.3 21.07 43.79
25-29	112	395148	43.9	33.17	55.16	99	337149	32.3 24.29 41.55
30-34	162	541445	48.4	39.27	57.72	146	454525	37.2 29.21 45.98
35-39	177	498631	44.3	35.40	53.62	155	428845	35.6 27.79 44.36
40-44	135	420471	40.9	31.93	50.54	119	374586	36.3 27.50 46.06
45-49	72	276886	34.5	25.97	44.11	56	205993	25.4 17.63 35.21

Sociodemographic	Any contraceptive method				Modern contraceptive method			
	Unweighted count	Estimated population	Prevalence (%)	95% CI	Unweighted count	Estimated population	Prevalence (%)	95% CI
Ethnicity								
Malay	518	1365609	45.77	41.00 - 50.61	448	1108245	34.4	30.50 - 38.56
Chinese	29	404745	36.17	23.89 - 50.58	27	376548	32.8	21.24 - 47.02
Indian	20	-	-	-	18	57996	15.3	7.72 - 28.12
Other Bumiputera	98	409477	55.37	45.91 - 64.45	91	383648	47.1	38.82 - 55.50
Others	32	173470	39.10	26.72 - 53.05	29	153577	32.9	22.18 - 45.71
Citizenship								
Malaysian citizen	663	2250381	43.40	39.06 - 47.84	582	1935493	34.8	31.05 - 38.77
Permanent resident/ non-citizen	34	164415	36.68	24.86 - 50.36	31	144523	31.0	20.90 - 43.23
Marital Status								
Married/ Cohabitating	607	2060555	35.26	31.64 - 39.05	-	-	-	-
Separated/ Divorcee/ Widow	2	-	-	-	-	-	-	-
Education								
No formal education	7	-	-	-	6	-	-	-
Primary	43	190807	41.72	28.27 - 56.53	42	177713	37.1	24.89 - 51.24
Secondary	382	1293514	43.29	37.42 - 49.34	337	1129532	35.6	30.31 - 41.25
Tertiary or higher	258	872527	42.32	36.10 - 48.79	221	724800	32.4	27.16 - 38.14
Occupation								
Government/ semi-gov employee	147	485432	58.48	50.41 - 66.13	132	381870	43.8	35.47 - 52.42
Private employee	92	389297	30.09	22.85 - 38.47	81	337935	24.4	18.19 - 31.80
Employer/ self-employed	83	225136	34.30	24.55 - 45.59	66	181723	25.9	17.62 - 36.33
Unpaid worker/ housewife/ not working/ student	369	1291277	45.87	39.64 - 52.24	328	1154833	38.2	32.67 - 44.04

**Table 17.4.2: Type of contraceptive use by women aged 15–49 years currently married or in union,
NHMS 2022: MCH (n=841)**

Types of contraceptive method	Unweighted count	Percentage (%)
Pill	278	33.1
Injectables	138	16.4
Withdrawal	81	9.6
Male condom	76	9.0
Periodic abstinence/Rhythm	75	8.9
Female sterilization	66	7.8
Intrauterine device (IUD)	52	6.2
Implants	46	5.5
Female condom	17	2.0
Lactational amenorrhoea method (LAM)	11	1.3
Male Sterilization	1	0.1

Table 17.4.3: Prevalence of unmet need for family planning among women aged 15–49 years who are currently married or in union, NHMS 2022: MCH (n= 1,236)

Sociodemographic	Total (Unmet need for family planning)						For spacing				
	Unweighted count	Estimated population	Prevalence (%)	95% CI		Unweighted count	Estimated population	Prevalence (%)	95% CI		
MALAYSIA	288	1245185	26.7	Lower	Upper	31.32	73	280903	6.0	3.86	9.30
States											
Johor	30	185327	31.4	18.95	47.34	5	-	-	-		
Kedah	26	158872	52.8	32.54	72.15	4	-	-	-		
Kelantan	20	70066	36.1	20.71	55.03	2	-	-	-		
Melaka	18	-	-	-	-	7	-	-	-		
Negeri Sembilan	11	-	-	-	-	3	-	-	-		
Pahang	28	48166	22.3	13.50	34.54	10	-	-	-		
Penang	12	-	-	-	-	2	-	-	-		
Perak	22	44684	20.4	11.86	32.70	7	-	-	-		
Perlis	31	13286	25.8	15.97	38.86	8	-	-	-		
Selangor	23	360364	42.6	28.87	57.64	6	-	-	-		
Terengganu	18	35861	18.3	11.71	27.45	5	-	-	-		
Sabah & WP Labuan	16	-	-	-	-	7	-	-	-		
Sarawak	14	-	-	-	-	2	-	-	-		
WP KL & Putrajaya	19	80926	24.0	13.52	38.84	5	-	-	-		
Location											
Urban	207	993895	28.8	23.69	34.58	51	235315	6.8	4.06		
Rural	81	251290	20.8	15.35	27.49	22	-	-	-		
Age group											
15-19	0	-	-	-	-	6	-	-	-		
20-24	11	-	-	-	-	26	-	-	-		
25-29	48	253531	26.1	17.21	37.41	-	-	-	-		
30-34	79	259838	24.8	17.91	33.16	26	-	-	-		
35-39	71	277750	30.0	21.34	40.27	13	-	-	-		
40-44	49	202312	30.6	20.98	42.25	2	-	-	-		

		Total (Unmet need for family planning)				Unmet need for family planning					
		Unweighted count		Estimated population		Prevalence (%)		95% CI		For spacing	
						Lower	Upper	Unweighted count	Estimated population	Prevalence (%)	95% CI
Sociodemographic											
Ethnicity											
Malay	207	642090	25.2	20.67	30.31	60	173130	6.8	4.41	10.32	
Chinese	23	317541	36.2	22.44	52.75	2	-	-	-	-	
Indian	26	151633	58.7	40.04	75.13	3	-	-	-	-	
Other Bumiputra	20	-	-	-	-	6	-	-	-	-	
Others	11	-	-	-	-	2	-	-	-	-	
Citizenship											
Malaysian citizen	275	1182293	27.5	23.11	32.27	71	275449	6.4	4.07	9.92	
Permanent resident/ non-citizen	12	-	-	-	-	2	-	-	-	-	
Marital Status											
Married/ Cohabiting	277	1175990	25.9	21.83	30.42	71	278223	6.1	3.91	9.48	
Separated/ Divorcee/ Widow	6	56760	70.8	52.51	84.16	0	-	-	-	-	
Education											
No formal education	54	146543	21.6	15.21	29.65	1	-	-	-	-	
Primary	61	407166	38.2	28.54	48.85	3	-	-	-	-	
Secondary	36	179852	33.7	20.64	49.79	29	-	-	-	-	
Tertiary or higher	131	496376	21.3	16.10	27.64	38	135560	7.5	4.53	12.04	
Occupation											
Government/ semi gov employee	54	146543	21.6	15.21	29.65	11	-	-	-	-	
Private employee	61	407166	38.2	28.54	48.85	15	-	-	-	-	
Employer/ self-employed	36	179852	33.7	20.64	49.79	6	-	-	-	-	
Unpaid worker/ housewife/ not working/ student	131	496376	21.3	16.10	27.64	39	154804	6.6	3.49	12.28	

Sociodemographic	Unmet need for family planning				
	For limiting				
	Unweighted count	Estimated population	Prevalence (%)	95% CI	
MALAYSIA	215	964282	20.7	17.13	24.80
States					
Johor	25	167177	28.4	16.47	44.28
Kedah	22	147544	49.0	28.79	69.57
Kelantan	18	64495	33.2	19.83	50.08
Melaka	11	-	-	-	-
Negeri Sembilan	8	-	-	-	-
Pahang	18	-	-	-	-
Penang	10	-	-	-	-
Perak	15	-	-	-	-
Perlis	23	10298	20.0	11.23	33.05
Selangor	17	235320	27.8	18.00	40.42
Terengganu	13	26230	13.4	7.89	21.80
Sabah & WP Labuan	9	-	-	-	-
Sarawak	12	-	-	-	-
WP KL & Putrajaya	14	-	-	-	-
Location					
Urban	156	758580	22.0	17.56	27.21
Rural	59	205703	17.0	12.44	22.80
Age group					
15-19					
20-24	5	-	-	-	-
25-29	22	-	-	-	-
30-34	53	209450	20.0	13.77	28.02
35-39	58	192643	20.8	14.81	28.34
40-44	47	186228	28.2	18.93	39.68
45-49	29	173073	38.4	26.31	52.09
Ethnicity					
Malay	147	468960	18.4	14.70	22.76
Chinese	21	267961	30.6	18.27	46.48
Indian	23	124128	48.0	30.22	66.37
Other Bumiputera	14	-	-	-	-
Others	9	-	-	-	-
Citizenship					
Malaysian citizen	204	906844	21.1	17.31	25.37
Permanent resident/ non-citizen	10	-	-	-	-
Marital Status					
Married/ Cohabitating	206	897766	19.8	16.33	23.73
Separated/ Divorcee/ Widow	6	56760	70.8	52.51	84.16
Education					
No formal education	3	-	-	-	-
Primary	8	-	-	-	-
Secondary	115	483114	20.3	15.76	25.86
Tertiary or higher	85	407647	22.4	16.60	29.60
Occupation					
Government/ semi gov employee	43	125927	18.5	12.45	26.68
Private employee	46	315888	29.6	20.55	40.64
Employer/ self-employed	30	168327	31.5	18.60	48.11
Unpaid worker/ housewife/ not working/ student	92	341572	14.7	10.95	19.36

Table 17.4.4: Prevalence of demand for family planning satisfied with modern contraception among women aged 15-49 years who are currently married or in union, NHMS 2022: MCH (n= 1,609)

Sociodemographic	Unweighted count	Estimated population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	617	2088643	51.6	46.25	56.85
States					
Johor	29	281469	50.4	32.93	67.69
Kedah	26	-	-	-	-
Kelantan	33	90164	53.7	35.72	70.78
Melaka	44	95086	51.7	33.83	69.11
Negeri Sembilan	25	80668	55.2	37.24	71.87
Pahang	70	119391	62.2	44.74	76.92
Penang	41	125958	74.8	60.30	85.32
Perak	49	102795	65.7	50.71	78.07
Perlis	90	32237	62.2	49.55	73.45
Selangor	19	245926	28.8	18.93	41.19
Terengganu	27	97737	64.7	47.46	78.84
Sabah & WP Labuan	73	368838	75.2	64.36	83.64
Sarawak	57	198411	72.8	54.43	85.66
WP KL & Putrajaya	34	172615	50.3	29.87	70.56
Location					
Urban	410	1370583	45.8	39.34	52.31
Rural	207	718060	68.1	60.84	74.52
Age group					
15-19	4	-	-	-	-
20-24	34	192807	38.4	23.84	55.36
25-29	100	337444	51.7	39.17	64.09
30-34	146	454525	55.4	44.62	65.62
35-39	156	429599	53.7	42.82	64.24
40-44	119	374586	58.2	46.13	69.30
45-49	57	211965	44.7	30.58	59.71
Ethnicity					
Malay	451	1115266	49.3	43.28	55.39
Chinese	27	376548	47.0	29.64	65.15
Indian	18	-	-	-	-
Other Bumiputera	91	383648	75.3	64.62	83.56
Others	29	153577	67.9	51.29	81.00
Citizenship					
Malaysian citizen	585	1942513	50.9	45.42	56.44
Permanent resident/ non-citizen	31	144523	62.9	45.81	77.20
Marital Status					
Married/ Cohabitating	607	2060555	57.2	52.05	62.24
Separated/ Divorcee/ Widow	5	-	-	-	-
Education					
No formal education	6	-	-	-	-
Primary	42	177713	78.7	62.55	89.10
Secondary	339	1130581	55.1	47.66	62.27
Tertiary/ higher	222	730772	44.2	36.20	52.43
Others					
Occupation					
Government/ semi gov employee	132	381870	57.8	47.68	67.30
Private employee	83	344661	36.7	26.87	47.70
Employer/ self-employed	66	181723	43.7	29.19	59.35
Unpaid worker/ housewife/ not working/ student	329	1155128	58.0	49.46	66.12

**MODULE WR: WOMEN OF REPRODUCTIVE AGE
(15 – 49 YEARS)**

MISCARRIAGE AND ABORTION



MISCARRIAGE AND ABORTION

MISCARRIAGE AND ABORTION

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HIGHLIGHTS

- 15.9% of respondents had experienced miscarriage.
- 1.0% of respondents had ever undergone abortion.

Keywords: *Miscarriage, Abortion, Malaysia*

18.1 INTRODUCTION

Miscarriage and abortion refer to pregnancy loss before viability, which varies between 20–28 weeks depending on the region^[1,2]. Miscarriage typically refers to naturally ended pregnancy while abortion refers to artificially ended pregnancy^[1]. In Malaysia, the definition of miscarriage is any fetal demise and/or expulsion before the fetus reaches viability (ability to survive if delivered)^[3]. In a pooled analysis, the population prevalence of women who had experienced one miscarriage was 10.8%^[4]. Other studies had reported 1 in 4 pregnancies in Singapore and 1 in 8 pregnancies in the United Kingdom (UK) had miscarriage^[5,6]. Chromosomal anomalies account for approximately 60% of miscarriages, making it a frequent cause^[7]. Induced abortions account for 29.0% of all pregnancies worldwide^[2]. However, the

prevalence of miscarriage and abortion in Malaysia are rather vague. Therefore, this study is done to assess the prevalence of miscarriage and abortion among women of reproductive age (15–49) in Malaysia.

18.2 OBJECTIVES

18.2.1 General Objective

To determine the prevalence of miscarriage and abortion among Malaysian women of reproductive aged 15–49 years.

18.2.2 Specific Objectives

- i. To determine the prevalence of ever had miscarriage among women of reproductive age (15–49 years).
- ii. To determine the prevalence of ever had abortion among women of reproductive age (15–49 years).

18.3 DEFINITIONS

- Ever had miscarriage refers to a natural or accidental miscarriage without the use of any medication or intervention below 22 weeks of pregnancy.
- Ever had abortion refers to intentionally either by taking medication or surgical procedure or doing something using any method, below 22 weeks of pregnancy.

18.4 FINDINGS

Overall, the prevalence of ever had miscarriage and abortion among women of reproductive aged 15–49 years was 15.9% (95% CI: 13.60, 18.55) and 1.0% (95% CI: 0.35, 1.86) respectively. The prevalence of ever had miscarriage and ever had abortion by socio-demographic factors were described in **Table 18.4.1** and **Table 18.4.2**.

18.5 CONCLUSION

Both the prevalence of miscarriage and abortion in this study are considered a baseline prevalence for Malaysia. This study reported that Malaysia had a miscarriage prevalence of 15.9%, which was higher than the UK (12.5%) but lower than Singapore (25.0%)^[5,6]. While for abortion, the prevalence was 1.0%. Health professionals should treat those with a history of miscarriage as high-risk patients and prioritise effective treatments to reduce the risks associated with both miscarriage and abortion.

18.6 RECOMMENDATIONS

- Pregnant mothers should follow a healthy lifestyle (avoid unhealthy risk factors such as smoking, second-hand smoke, alcohol consumption and drug use) and improve pregnancy health by having regular exercise, adequate sleep and eating healthy.
- Recurrent miscarriage should be investigated for the cause and to be managed accordingly. For women with cervical incompetence, they should be referred to Obstetrics and Gynaecology (O&G) specialist as soon as possible for further management.
- Early and strict Antenatal Care (ANC) follow up for mothers with a history of recurrent miscarriage.
- Obtain pre-pregnancy care especially for high-risk women with medical conditions.
- Health education on safe sex should be enhanced to those who do not intend to get pregnant to avoid unintended pregnancies which may lead to illegal abortions.

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Table 18.4.1: Prevalence of ever had miscarriage among women of reproductive aged 15–49 years, MALAYSIA, NHMS 2022: MCH (n= 1,874)

Sociodemographic	Ever had miscarriage			
	Unweighted Count	Estimated Population	Prevalence (%)	95% CI
			Lower	Upper
MALAYSIA	406	1371118	15.9	13.60 18.55
State				
Johor	28	187339	13.3	8.55 20.04
Kedah	26	108079	19.6	12.37 29.54
Kelantan	17	45151	12.5	7.22 20.92
Melaka	22	39788	14.3	8.95 22.05
Negeri Sembilan	22	57000	15.7	8.96 26.13
Pahang	39	53767	16.0	10.18 24.35
Pulau Pinang	26	81261	11.6	6.22 20.47
Perak	42	67353	15.9	10.17 24.00
Perlis	49	15803	22.0	15.98 29.58
Selangor	17	252658	15.7	8.89 26.25
Terengganu	24	52756	18.3	11.07 28.85
Sabah & WP Labuan	37	191939	20.0	14.16 27.49
Sarawak	28	105402	16.7	9.08 28.63
WP Kuala Lumpur & Putrajaya	29	112822	18.0	10.40 29.30
Location				
Urban	290	1061581	15.9	13.17 19.18
Rural	116	309537	15.8	12.41 19.99
Age Group				
15 - 19	1	-	-	-
20 - 24	9	-	-	-
25 - 29	42	160494	12.6	8.04 19.19
30 - 34	77	223669	17.0	11.98 23.60
35 - 39	123	391424	29.8	22.92 37.85
40 - 44	93	286658	26.0	19.30 34.12
45 - 49	60	214627	23.3	16.38 31.98
Ethnicity				
Malay	303	725753	15.5	12.69 18.68
Chinese	16	252276	14.2	8.21 23.45
Indian	24	99098	18.1	10.38 29.67
Other Bumiputera	44	199689	19.3	13.35 26.96
Others	18	91616	17.9	10.52 28.76
Citizenship				
Malaysian citizen	387	1279070	15.9	13.47 18.65
Permanent resident/ non-citizen	18	89363	17.2	10.33 27.27
Marital Status				
Single	2	-	-	-
Married	377	1277743	21.3	18.48 24.35
Widow(er)/ Divorcee	24	78838	24.4	13.51 40.09
Education Level				
No formal education	6	-	-	-
Primary school	22	-	-	-
Secondary school	221	656111	14.6	11.57 18.17
Occupation				
Government/ semi-gov employee	94	278217	29.2	23.55 35.58
Private employee	59	248268	11.6	7.76 16.90
Employer/ self-employed	61	193039	21.1	14.40 29.83
Unpaid worker/ housewife/ not working/ student	188	639672	14.4	11.33 18.09

Table 18.4.2: Prevalence of ever had abortion among women of reproductive aged 15–49 years, MALAYSIA, NHMS 2022: MCH (n= 1,870)

Sociodemographic	Ever had abortion				95% CI	
	Unweighted Count	Estimated Population	Prevalence (%)		Lower	Upper
MALAYSIA	22	85360	1.0		0.53	1.86

**MODULE WR: WOMEN OF REPRODUCTIVE AGE
(15 – 49 YEARS)**

INTIMATE PARTNER VIOLENCE



INTIMATE PARTNER VIOLENCE

INTIMATE PARTNER VIOLENCE

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HIGHLIGHTS

- 4.4% of women of reproductive age (15 – 49 years) reported experiencing Intimate Partner Violence (IPV) in the past one year.
- 1 in 4 women experienced the act of controlling behaviour by their husband/partner.

Keywords: *Intimate partner violence, Violence, Domestic violence, Women*

19.1 INTRODUCTION

Intimate partner violence (IPV) against women is a global public health issue associated with various negative social and health consequences. IPV refers to behaviour by an intimate partner or ex-partner that causes physical, sexual, or psychological harm, including physical aggression, sexual coercion, psychological abuse and controlling behaviours^[1]. Globally, about one in three (27%) ever-married/partnered women aged 15–49 years had suffered either physical and/or sexual intimate partner violence at least once in their lifetimes^[2]. There are regional variations, with the prevalence of lifetime IPV being reported to be highest in South-East Asia (33%) than in the Americas (25%) or the Europe

and Western Pacific regions (20%)^[2]. In Malaysia, the prevalence of IPV varies from 4.9% to 35.9% depending on the types of survey questionnaire used, the definition of IPV used, the study setting and study population, and the approach used in collecting the information^[3].

19.2 OBJECTIVES

19.2.1 General Objective

To determine the prevalence of Intimate Partner Violence (IPV) among reproductive women aged 15–49 years old in Malaysia.

19.2.2 Specific Objectives

- i. To determine the lifetime prevalence of IPV among reproductive women aged 15–49 years old in Malaysia
- ii. To determine the past year prevalence of IPV among reproductive women aged 15–49 years old in Malaysia

19.3 DEFINITIONS

- Reproductive women aged 15–49 years old, who were ever married or ever lived with partners.
- **Lifetime IPV:** Women's lifetime exposure to any types of IPV; either physical, psychological, or sexual violence by a current or former husband/ intimate partner
- **Past Year IPV:** Women's exposure to any types of IPV; either physical, psychological, or sexual violence by a current or former husband/ intimate partner in the past 12 months
- **Physical violence:** Woman reported having ever experienced any act of violence from her current or former husband/ partner, such as being slapped, had something thrown at her that could hurt, being pushed, grabbed, or had her hair pulled, being hit with a fist or something else that could hurt, being kicked, dragged, or beaten up, being choked, or

- burnt, or being threatened with or had a weapon (e.g., gun or knife) used against her.
- **Psychological violence:** Woman's current or former husband/partner had ever insulted her or made her feel bad about herself, degraded, or humiliated her in front of others, threatened or made her scared (e.g., by the way he looks at her, shouts or breaks things), threatened to hurt her or somebody whom she cares about.
 - **Sexual violence:** Woman reported having ever experienced any act of sexual violence from her current or former husband/partner, such as being physically forced to have sexual intercourse, had unwanted sexual intercourse because of fear of what her partner might do, or being forced to do something sexual that she found degrading or humiliating.
 - **Controlling behaviour:** Woman reported having ever experienced any act of controlling behaviour from her last or current partner, such as tried to stop her from meeting her friends, limits her relationship with her biological family, partner insist to know where they are at all times, partner ignores her and treating her like they do not exist, partner getting angry if they speak with another man, partner suspected her of being unfaithful, they need to ask for permission before seeking health care for herself.

19.4 FINDINGS

Table 19.4.1 shows the prevalence of IPV based on the types of IPV. The prevalence of lifetime IPV among reproductive women aged 15–49 years was 7.1% (95%CI: 5.19, 9.69) and the prevalence of past year IPV was 4.4% (95% CI: 2.73, 7.07).

19.5 CONCLUSION

IPV is a significant issue that affects negatively and permanently on people, families, and communities. The Sustainable Development Goals (SDG) by the United Nations, target 5.2 is to eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking, sexual and other types of exploitation. In line with Indicator 5.2.1 of the SDGs, this survey provides a national prevalence estimates of past-year IPV of 4.4% which includes physical, sexual, and psychological violence among women of reproductive age (15–49 years). Caution should be exerted when comparing this prevalence with other countries as different instruments may have been used. The lower prevalence obtained in this study compared to previous study in Malaysia conducted in 2013 (8%) was probably due to different techniques of administering the questionnaire [4]. MOH intends to prevent IPV before it ever begins. The prevalence of IPV should eventually decline as a result of prevention efforts that promote wholesome, respectful, non-violent relationships.

Healthy relationships can be promoted by addressing risk and protective factors at the person, relational, community, and society levels.

19.6 RECOMMENDATIONS

- Develop peer-based programmes in school to describe healthy relationships that include conflict resolution training and relationship skills training and education.
- Develop savvy campaigns to educate the public on IPV and the need for them to be involved in prevention of IPV.
- Involve peers and influential individuals (for example ministers, leaders, social media influencers) to enhance programmes that are centred on families, giving multiple reinforced messages on promoting healthy relationships, promote the concepts of boys and men as partners in IPV prevention and prevention of violence.
- Break the cycle of partner violence by promoting parenting education programmes and treatment for children, youth, and families at risk.
- Boost family economic support systems by strengthening the financial stability of the family and bolstering the work-family support system.
- Support survivors to increase safety and lessen harm by enhancing victim-centred services with improved first responder and civil legal protection.
- Involvement of private health clinics in providing assessment of IPV to identify victims (and perpetrators) and provide referrals to victim-centred services and one stop crisis centres.

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**Table 19.4.1: Prevalence of lifetime and past year Intimate Partner Violence (IPV) by types of violence,
NHMS 2022: MCH (n=1,887)**

Types of violence		Unweighted Count	Estimated population	Prevalence (%)	95% CI	
					Lower	Upper
Lifetime	Sexual Violence	30	98643	1.6	0.93	2.83
	Physical Violence	57	218068	3.6	2.47	5.20
	Psychological Violence	86	359368	5.9	4.13	8.42
	Any	104	432089	7.1	5.19	9.69
Past Year	Sexual Violence	15	50081	0.8	0.38	1.77
	Physical Violence	19	96863	1.6	0.82	3.12
	Psychological Violence	43	212017	3.5	1.98	6.08
	Any	53	268375	4.4	2.73	7.07
Controlling Behaviour		612	2102735	24.5	21.25	27.97

APPENDICES



APPENDIX 1: RESEARCH TEAM MEMBERS

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MOTHER WITH CHILDREN UNDER AGE 2

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Dato' Dr. Mohd Rushdan Bin Md Noor
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Dr. Tuty Aridzan Irdawati Binti Mohsinon
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Dr. Thamil Arasu A/L Saminathan
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Pn. Aleijjah Binti Ali
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Child Discipline

Dr. Shubash Shander A/L Ganapathy
 Dr. Noor Raihan Binti Khamal
 Dr. Amy Nur Diyana Binti Mohamed Nasir
 Pn. Azmaini Binti Isa
 Datin Dr. Sheila A/P Marimuthu
 Dr. Farah Nini Binti Dusuki
 Dr. Hargeet Kaur A/P Basant Singh
 En. Muhammad Hanafi Bin Bakri
 Pn. Norzawati Binti Yoep
 Pn. Nurul Haniyah Binti Rosslan

Vaccine Hesitancy

Pn. Nor'ain Binti Ab Wahab
 Pn. Eida Nurhadzira Binti Muhammad
 Dr. Rozita Binti Ab Rahman
 Dr. Noor Ani Binti Ahmad
 Dr. Chong Zhuo Lin
 Pn. Norliza Binti Shamsuddin

Anaemia

En. Khairul Hasnan Bin Amali
 Pn. Rusidah Binti Selamat
 Cik Teh Wai Siew
 Pn. Kimberly Wong Tuin Y'ng

ASSESSMENT FOR CHILDREN UNDER AGE 5**Anthropometry Measurement (Nutritional Status)**

Dr. Ahmad Ali Bin Haji Zainuddin
 Dr. Lai Wai Kent
 Pn. Rusidah Binti Selamat
 Pn. Teh Wai Siew
 En. Azli Bin Baharudin@Shaharuddin
 Pn. Syafinaz Binti Sallehuddin
 Pn. Murnizar Binti Mokhtar
 Pn. Nurul Huda Binti Ibrahim
 Pn. Nurzaima Binti Zulaily
 Pn. Sulhariza Binti Husni Zain

Child Development

Dr. Nur Hamizah Binti Nasaruddin
 Dr. Rozita Binti Ab Rahman
 Dr. Sabeera Begum Binti Kader Ibrahim
 Dr. Ranjini A/P S Sivanesom
 Dr. Farah Inaz Binti Syed Abdullah
 Dr. Sharifah Nazeera Binti Syed Anera
 Dr. Sathyabama A/P Ramachandram
 Pn. Siti Balkhis Binti Shafie
 En. Mohd Amierul Fikri Bin Mahmud
 Pn. Noor Syaqilah Binti Shawaluddin

Vaccination Coverage

Dr. Muhammad Azri Adam Bin Adnan
 Dr. Rozita Binti Ab Rahman
 Dr. Jamiatul Aida Binti Md Sani
 Dr. Mohd Shaiful Azlan Bin Kassim
 Dr. Chong Zhuo Lin
 Pn. Nor'ain Binti Ab Wahab
 Pn. Norlaila Binti Hamid
 Pn. Wan Sarifah Ainin Binti Wan Jusoh

WOMEN OF REPRODUCTIVE AGE (15 – 49 YEARS)**Contraception**

Dr. Mohd Shaiful Azlan Bin Kassim
 Dr. Majdah Binti Mohamed
 Dr. Muhammad Firdaus Bin Ujang
 Dr. Zamzaireen Binti Zainal Abidin
 Dr. Wan Hilya Munira Binti Mustapha
 Dr. Wan Nur Baiti Binti Sudin
 Pn. Noor Azlin Binti Muhammad Sapri
 Pn. Nur Airena Aireen Binti Azman
 Assoc. Prof. Dr. Rosliza Binti Abdul Manaf
 Pn. Norhafizah Binti Sharil
 Dr. Fazila Haryati Binti Ahmad
 En. Mohamad Aznuddin Bin Abd Razak
 Pn. Norliza Binti Shamsuddin
 Pn. Chan Ying Ying

Miscarriage/ Abortion

Pn. Norhafizah Binti Sahril
 Dr. Majdah Binti Mohamed
 Dr. Nik Rubiah Binti Nik Abdul Rashid
 Dr. Zamzaireen Binti Zainal Abidin
 Dr. Wan Hilya Munira Binti Mustapha
 Dr. Wan Nur Baiti Binti Sudin
 Pn. Noor Azlin Binti Muhammad Sapri
 Pn. Nur Airena Aireen Binti Azman
 Assoc. Prof. Dr. Rosliza Binti Abdul Manaf
 Dr. Fazila Haryati Binti Ahmad
 Dr. Noor Aliza Binti Lodz

Intimate Partner Violence

Pn. Hamizatul Akmal Binti Abd Hamid
 Dr. Noor Raihan Binti Khamal
 Prof. Dato' Dr Rashidah Binti Shuib
 Prof. Dr. Sajaratulnisah Binti Othman
 Pn. Chan Ying Ying
 En. Mohd Ruhaizie Bin Riyadzi
 Dr. Thamil Arasu A/L Saminathan
 Dr. Muhammad Fadhli Bin Mohd Yusoff
 Dr. Tania Gayle A/P Robert Lourdes

APPENDIX 2: LIST OF STATE LIAISON OFFICER

1. Dr. Nurul Nadiah Binti Kamarudin
Senior Principal Assistant Director
Family Health Development Branch
Federal Territory of Kuala Lumpur and Putrajaya
Health Department
2. Dr. Saidatul Fadzlyana Binti Mohamad Isa
Medical Officer
Family Health Unit
Selangor State Health Department
3. Dr. Siti Khatijah Binti Abdul Rahim
Public Health Specialist
Family Health Unit
Johor State Health Department
4. Dr. Siti Nurbaya Binti Abdul Aziz
Head of Family Health Unit
Family Health Unit
Melaka State Health Department
5. Dr. Massitah Binti Mihat
Senior Principal Assistant Director II
Family Health Unit
Negeri Sembilan State Health Department
6. Dr. Anies Hazlina Binti Sa'ari
Principal Assistant Director (Maternal & Child
Health)
Family Health Development Unit
Kelantan State Health Department
7. Dr. Nurnajayati Binti Omar
Senior Principal Assistant Director
Family Health Development Sector
Terengganu State Health Department
8. Dr. Latifatul Nur Binti Ahmad Hanbali
Principal Assistant Director
Family Health Development Unit
Pahang State Health Department
9. Dr. Julaidah Binti Sharip
Public Health Specialist
Family Health Development Branch
Perak State Health Department
10. Dr. Nurul Azwa Binti Mohd Ismail
Senior Principal Assistant Director
Family Health Development Branch
Pulau Pinang State Health Department
11. Dr. Siti Rohana Binti Ahmad
Senior Principal Assistant Director
Family Health Division
Kedah State Health Department
12. Dr. Izwana Binti Hamzah
Senior Principal Assistant Director
Family Health Unit
Perlis State Health Department
13. Dr. Sophia Magdalene Augustine
Assistant Director
Family Health Development Unit
Sabah State Health Department
14. Dr. Natalie Paul Bernard
Medical Officer
Federal Territory of Labuan Health Clinic
15. Dr. Azizah Binti Azhar
Public Health Specialist
Family Health Development Branch
Sarawak State Health Department

APPENDIX 3: STATE DATA COLLECTION TEAM MEMBERS

TERENGGANU

Field Supervisors

En. Mohd Ruhazie Bin Riyadzi
Dr. Fazila Haryati Binti Ahmad
En. Tuan Mohd Amin Bin Tuan Lah

Nurses

Pn. Rosayah Binti Ngah
Pn. Nor Hasidah Ngah
Pn. Jumaliah Binti Jusoh
Pn. Zarida Binti Samat
Pn. Raja Malina Binti Raja Ahmad
Pn. Sharipah Binti Ahmad
Pn. Rohana Binti Hussin
Pn. Nurul Aiza Binti Khalid
Pn. Nur Zariza Binti Abdul Aziz
Pn. Noor Lily Ashikeen Binti Ishak
Pn. Zuliana Binti Zakaria

Research Assistants

Nurul Ain Binti Haziah
Nor Shazlifah Binti Abdul Rahman
Siti Nur Sharmiela Binti Ayob
Nurul Shafiqah Binti Kusno
Naimie Binti Mohd Nawawi
Muhammad Azraie Bin Alias
Mohd Amirsahrudin Bin Mat Jusoh
Nurul Salihin Binti Faizalzully
Muhammad Najmi Alif Bin Muda
Nor Hazlin Binti Abd Ghani

KELANTAN

Field Supervisors

Dr. Kishwen Kanna Yoga Ratnam
Pn. Noor Syaqilah Binti Shawaluddin
Dr. Noor Syamlina Binti Che Abdul Rahim

Nurses

Pn. Nur Zahiera Binti Hassan
Pn. Nik Norhamizah Binti Nik Abd Kadir
Pn. Siti Eishah Binti Hamzah
Pn. Ku Marina Binti Che Ku Muda
Pn. Masrina Binti Mustapha
Pn. Musnira Binti Mustapha
Pn. Noor Fadzlina Binti Mohamed
Pn. Nor Azihan Binti Abd Manaf
Pn. Norashikin Binti Mohamad
Pn. Azila Binti Tahar
Pn. Rosmiha Binti Mohamad Zuki
Pn. Noor Azira Binti Ibrahim

Pn. Noorhasliza Binti Rosli
Pn. Wan Noor Azean Binti Wan Hamat
Pn. Anita Binti Ab Ghani
Pn. Izuwati Binti Harun
Pn. Norazilawati Binti Zakaria
Pn. Wan Nurnadilla Binti Wan Yusoff
Pn. Rosnida Binti Husain
Pn. Cik Marni Binti Che Man

Research Assistants

Nurul Farhani Binti Faizol
Siti Hajar Binti Ishak
Mohamad Azli Bin Che Daud
Muhamad Sahasrizan Bin Samat
Muhamad Izzat Amir Bin Mohd Nasir
Muhammad 'Izzuddin Bin Che Ismail
Nur Azziani Binti Zawawi
Wan Nur Hikmah Binti Wan Ab Aziz
Siti Fatimah Zaharah Binti Ahmad
Ahmad Najmi Bin Mohd Nordin

PAHANG

Field Supervisors

Dr. Fatin Athira Binti Tahir
En. Mohd Farihan Bin Md Yatim
Pn. Siti Balkhis Binti Shafie
Pn. Noor Hasiah Binti Mat Sudin
Pn. Rosley Binti Dunuk

Nurses

Pn. Suriana Binti Mohd Zainal Abidin
Pn. Suzielawati Binti Sulaiman
Pn. Nurul Nabila Binti Mohamed Razal
Pn. Nor Azmawati Binti Aziz
Pn. Nik Norniza Binti Nik Razali
Pn. Nor Suriani Binti Saadan
Pn. Norlina Binti Zulkipeli
Pn. Badariah Binti Abu Bakar

Research Assistants

Nur Syuhada Binti Zahid
Siti Aisyah Binti Ibrahim
Mohd Pauzan Bin Razali
Norhayati Binti Kamarudin
Norhidayah Binti Abdul Majid
Mohd Taufik Bin Mokhtar
Zakaria Bin Mohammad
Gabriel Jatum
Ihsan Bin Hashim
Muhamad Firdaus Bin Paizol
Nur Amirah Syahirah Binti Abdul Aziz

JOHOR**Field Supervisors**

Pn. Munawara Binti Pardi
 En. Hanafi Bin Bakri
 Pn. Murnizar Binti Mokhtar

Nurses

Pn. Norliza Binti Abu Bakar
 Pn. Norermawati Binti Zolkepli
 Pn. Siti Nur Alya Binti Alham
 Pn. Azura Binti Ahmad
 Pn. Naimah Binti Mat Yusof

Research Assistants

Siti Noorul Nadhirah Binti Zamrus
 Nor Diana Binti Zulkefli
 Nurfatin Syazwana Binti Ayob
 Muhammad Farid Bin Hj Dzulkifeli
 Norsyafina Binti Gorganius
 Natasha Alesia Alex
 Noor Faralina Izzati Binti Kamarunzaman

WPKL & PUTRAJAYA**Field Supervisors**

Dr. Tania Gayle A/P Robert
 Pn. Nazirah Binti Alias
 En. Chong Chean Tat
 Pn. Sulhariza Binti Husni Zain

Nurses

Pn. Siti Nur Hazirah Binti Abd Halim
 Pn. Esah Nini Binti Tajuddin
 Pn. Rokiah Binti Mohamed Atan
 Pn. Rozimah Binti Talib
 Pn. Nor Ira Fazira Binti Zainudin
 Pn. Khairina Binti Sapran
 Pn. Shymala A/P Raman
 Pn. Syahidah Binti Ismail
 Pn. Azizah Binti Madulan
 Pn. Che Marini Binti Che Malid

Research Assistants

Aida Marina Binti Jamin
 Noor Aiman Afaf Binti Afiffudden
 Izzati Binti Wan Azelee
 Rabi'ahntul Assuhadah Binti Mohd Rafa'ai
 Nurfarhani Binti Mohd Sirat
 Nurul Ashikin Binti Nosarodin
 Nur Ain Binti Md Lukmanul Hakim
 Erma Natasa Binti Norhan
 Nur Faiqah Faqihah Binti Haji Hurairy
 Zulaikha Zahris Binti Abdul Haris

SELANGOR**Field Supervisors**

Pn. Syafinaz Binti Mohd Sallehuddin
 Dr. Nur Hamizah Binti Nasaruddin
 Pn. Norzawati Binti Yoep

Nurses

Pn. Nazila Binti Izha
 Pn. Norhidayah Binti Sazali
 Pn. Faten Az-Zahra Binti Md Zahari
 Pn. Rekha A/P Perumal
 Pn. Nur Izzaty Binti Basri
 Pn. Nur Aznah Binti Abd Razak
 Pn. Azlina Binti Idzhar
 Pn. Soon A/P Pot
 Pn. Haslina Binti Harun
 Pn. Zainab Binti Sidek
 Pn. Nur Amira Binti Mohamad Esa
 Pn. Jessica A/P David
 Pn. Halimaton Sa'adiah Binti Che Ahmad
 Pn. Vanija A/P Stephen
 Pn. Norriati Binti Mohd Radin
 Pn. Siti Aishah Binti Mohd Ali Khan
 Pn. Zaidaton Binti Mad Yatim
 Pn. Norizah Binti Masri

Research Assistants

Nurul Atikah Binti Mohd Rozi
 Mohd Sanusi Bin Aziz
 Amirah Binti Ali
 Nur Amirah Binti Alias
 Muhammad Danial Akim Bin Abu Baker
 Muhammad Hafizat Bin Md Jais
 Azizah Nurfauziah Binti Jafri
 Ahmad Amiruddin Bin Helmi
 Adib Iman Bin Osman
 Muhammad Muazzam Bin Abdul Rahman
 Rohana Binti Saharudin
 Fatin Haziqah Binti Mohamad Zaini

MELAKA**Field Supervisors**

Dr. Muhammad Azri Adam Bin Adnan
 Dr. Fazila Haryati Binti Ahmad
 En. Zulkarnain Bin Ramli

Nurses

Pn. Kamilah Binti Md Said
 Pn. Nuradriana Gloria Binti Nyagin
 Pn. Sulyzah Binti Duwasa
 Pn. Siti Rohana Binti Abdullah

Research Assistants

Erma Safwan Binti Erison
 Nur Anis Syafiqah Binti Zulkefli
 Nurizzatie Binti Mohd Sis
 Nuramirah Binti Nordin
 Siti Hajar Binti Mohd Sanif
 Anees Farhana Binti Abd Karim
 Norfazirah Binti Amlan
 Nurhanis Binti Mohd Hawari

NEGERI SEMBILAN

Field Supervisors

Dr. Noor Aliza Binti Lodz
Pn. Liew Siaw Hun

Nurses

Pn. Ramani Ammal A/P Poomalay
Pn. Rohaizan Binti Husin
Pn. Marlia Binti Abu Bakar
Pn. Umi Nurul Hani Binti Othman

Research Assistants

Siti Aishah Binti Abdul Rahman
Nurul Syafinaz Binti Ab Latib
Nur Adibah Binti Hassan
Nur Syafiqah Idayu Binti Azmi
Arif Farhan Bin Mohd Razali
Khairil Aqmal Petra Bin Osman
Siti Zuraida Binti Hassan
Muhammad Syadza Bin Ruslan

PERAK

Field Supervisors

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Pn. Norliza Binti Shamsudin
En. Faizul Akmal Bin Abdul Rahim

Nurses

Pn. Wan Hasmin Binti Wan Deris
Pn. Rohana Binti Mokhtar
Pn. Wan Nor Azlina Binti Wan Saleh
Pn. Manorasyikin Binti Zubri
Pn. Nor Farhana Ezati Binti Mohd Shahida
Pn. Siti Sarah Binti Che Johan

Research Assistants

Azmarhani Binti Abdul Rahman
Noorain Binti Mohamad
Salsabeela Binti Mohd Ariff
Raja Nor Fatihah Binti Raja Omar
Nurul Huda Binti Dahlan
Amirul Amin Bin Mohamed Tarmizi
Ishahrulnizam Bin Isahak
Zawahir Binti Ngah Said
Mohammad Nazrin Bin Nazmuding
Muhammad Syawal Azim Bin Mohd Hisham

PULAU PINANG

Field Supervisors

Pn. Rafidah Binti Ali
Dr. Khaw Wan Fei
Dr. Lai Wai Kent

Nurses

Pn. Masaida Binti Samsuri
Pn. Safarina Binti Zainudin @ Ahmad
Pn. Norasikin Binti Nordin
Pn. Norlinda Binti Johari

Research Assistants

Nazran Bazlan Bin Nawi
Fabian Anak Mathew
Azieda Binti Abu Bakar
Nurul Asyikin Binti Mohd Azman
Tan Jun Xian
Siti Aisyah Binti Ahmad Munir
Amni Zulaika Binti Ahmad Azmi
Muhammad Azrol Bin Mohd Rozi
Syifaa' Na'imullah Binti Ahmad Sabri

KEDAH

Field Supervisors

Pn. Lalitha A/P Palaniveloo
En. Mohd Hazrin Bin Hasim @ Hashim
En. Muhammad Faiz Bin Mohd Hisham

Nurses

Pn. Nora'shikin Binti Mat Esa
Pn. Khadijah Binti Ahmad
Pn. Sing Hui Theng
Pn. Asmaria Binti Ibrahim
Pn. Norhayati Binti Mohammad

Research Assistants

Siti Nur Adibah Binti Zainudin
Noor Fazira Binti Mhd Sofbri
Nur Hawanis Binti Hashim
Nur Hafiza Najwa Binti Jamal Hisham
Siti Balqis Binti Nor Jasni
Muhammad Shahrul Arieff Bin Shahruddin
Mohamad Najmi Bin Shahrin
Nurul Nadia Binti Abdul Razak

PERLIS

Field Supervisors

En. Mohd Amierul Fikri Bin Mahmud
En. Azli Bin Baharudin @ Shaharuddin
Dr. Suhaila Binti Abdul Ghaffar

Nurses

Pn. Tina anak Minggu
Pn. Zaharis Binti Ramli
Pn. Noor Arfah Binti Abd Rashid
Pn. Nor Fatihah Binti Awang Fadzil

Research Assistants

Fairuz Tasnim Binti Shafie
Nor Najihah Binti Muslim
Noor Asmin Binti Ali
Nurul Farahatul Akmal Binti Alias
Mohd Aizam Bin Zahid
Ahmad Husaini Bin Abdul Razak
Muhammad Faiz Bin Yusmi
Mohammad Amiruddin Bin Mohammad

SABAH & WP LABUAN

Field Supervisors

Cik Nur Faraeein Binti Zainal Abidin
 Dr. Mohd Nizam Bin Misiran
 Datin Dr. Mona Lisa Binti Md Rasip
 Pn. Aini Binti Anjan
 Pn. Aminah Binti Daud
 Pn. Juhinah Binti Saupin
 Pn. Saridewi Binti Sapon
 Pn. Hasnizar Binti Awi
 Pn. Martina Khingsan

Nurses

Pn. Stephanie J Edwin
 Pn. Siti Farahsyafiqah Binti Muhd Amlil
 Pn. Khamisah Binti Hassan
 Pn. Muharinah Binti Karimin
 Pn. Fazlyn @ Clarice Imelda Binti Junis
 Pn. Nor Aisah Binti Mohd Nadzam
 Pn. Sheryleyn Joeminit

Research Assistants

Wan Misly Kindon
 Noor Azni Binti Adzmain
 Jeldy Galoh
 Joel Sonny Saimin
 Mawarsari Binti Said
 Mohd Hafizan Bin Sani
 Fyrah James
 Haslinda Binti Hasan
 Javiksen James
 Mohd Jazlan Harith Bin Abdul Razak
 Niveno Eldo Sonny Mat
 Steve Glantdenventure Benjamin

Pn. Monica Embai AK Manggang
 Pn. Munah AK Layang
 Pn. Noreen AK Tuah
 Pn. Alice AK Ason
 Pn. Yap Vivina Kenyalang
 Pn. Liza Binti Drahman
 Pn. Nurhafiza Meyer Abdullah
 Pn. Yong Ping
 Pn. Rosemina AK Jaraw
 Pn. Daine Christy Leba Anak Ujai

Research Assistants

Wilkinson anak Welling
 Aelsa anak Anthony
 Happilyn anak Libin
 Melissa Ramji
 Gifsie anak Barahim
 Noami Enya anak Sinju
 Afiq Fakhru Bin Ismail
 Sulia anak Sabat
 Siti Syahidatul Binti Mu' al
 Catherine Mawas Anak Sujang
 Mohd Zahir Bin Rasol
 Mohammed Hefalani Bin Azman

SARAWAK

Field Supervisors

En. Mohd Hatta Bin Abdul Mutalip
 Pn. Angela Mendong AK Edward
 Pn. Norhajjah Binti Umar
 Pn. Patricia Dora AK Duncan Libui
 Pn. Roseny Anak Mangki
 Pn. Wini AK Chundau
 Pn. Tilen Jok

Nurses

Pn. Nayun AK Rum
 Pn. Nurulfazielah Binti Bujang
 Pn. Rodziana Binti Mahmud
 Pn. Veturina Monggong
 Pn. Lizawati Anak Sandai
 Pn. Daphiny Rini Stephen Kalong
 Pn. Nurfelisia Bernet
 Pn. Teresa Anak Julin
 Pn. Lolin AK Martin
 Pn. Nadia Estorina AK Meseng
 Pn. Min Chedan @ Nur Adila Binti Abdullah
 Pn. Christina Anak Jabol
 Pn. Brambun AK Joseph
 Pn. Rita Rosly

APPENDIX 4: STATE LISTING STAFF (NURSE)

WPKL & PUTRAJAYA

Field Supervisor

En. Chong Chean Tat

State Matron

Pn. Norzainida Binti Abdul Ghani

Listing Staff

Pn. Amiera Binti Zainudin
 Pn. Anis Amira Binti Mohamed
 Pn. Asmida Binti Muhdar
 Pn. Azimah Binti Zakaria
 Pn. Diana Binti Awi
 Pn. Farah Aqilah Binti Mohamed Ali Apiah
 Pn. Faridah Binti Mustapha
 Pn. Fazila Binti Ahmad
 Pn. Florayanti Binti A. Rahim
 Pn. Mailin Binti Juspin
 Pn. Mazlena Binti Mat Yaakob
 Pn. Nazahatulida Binti Jamahari
 Pn. Nik Suriani Binti Nik Mat Rawi
 Pn. Noor Fazura Binti Mat Ali
 Pn. Noor Hayati Binti Musa
 Pn. Noor Ilyani Binti Abdul Manaf
 Pn. Nor Ikma Binti Ibrahim
 Pn. Norhayati Binti Yahaya
 Pn. Norshamshila Binti Mohd Saad.
 Pn. Noryati Binti Abdullah
 Pn. Nur Ezzati Binti Ismail
 Pn. Nur Fatihah Binti Nokman
 Pn. Nur Islam Shashikala Binti Abdullah Muniandy
 Pn. Nur Liyana Binti Ramli
 Pn. Nur Mazian Binti Ahmed
 Pn. Nur Syakila Binti Ahmad Ghazali
 Pn. Nur Syakira Hazwani Binti Muhamad Rudian
 Pn. Nurulhuda Binti Abdul Halim
 Pn. Riau Azlin Binti Mohd Amin
 Pn. Rebecca Anak Ngelah
 Pn. Rosmaniza Binti Abd Razak
 Pn. Rosniza Marlina Binti Mohammad
 Pn. Ruhaiza Sukma Binti Ruslan
 Pn. Salina Binti Ashaari
 Pn. Siti Aishah Binti Jaafar
 Pn. Siti Azreena Binti Kopomasba
 Pn. Siti Maharani Binti Muhammad Salleh
 Pn. Syahida Binti Kamaruddin
 Pn. Zarith Syelleza Binti Ibrahim

SELANGOR

Field Supervisor

Pn. Norzawati Binti Yoep

State Matron

Pn. Rosinah Binti Hashim
 Pn. Nor Azianawati Binti Jaaffar

Listing Staff

Pn. Alisya Angela Binti Abdullah
 Pn. Azizah Binti Mohd Yusof
 Pn. Che Ku Noraini Binti Che Ku Zainudin
 Pn. Cik Ripah Binti Ismail
 Pn. Evelyn Lai
 Pn. Fatin Sabrina Binti Mohd Asri
 Pn. Gajalakshimi A/P Krishmasamy
 Pn. Halimatus Sa'adiah Binti Zainal
 Pn. Hamidah Binti Kassim
 Pn. Hazelin Binti Muniami
 Pn. Jamilah Binti Ramali
 Pn. Jenny Jok
 Pn. Julia Anak Ngabong
 Pn. Juliana Binti Musa
 Pn. Kalmiza Binti Mohamad
 Pn. Kavitha A/P Terumany
 Pn. Law Wei Ming
 Pn. Maiyati Binti Mat Salleh
 Pn. Maizatul Asma Binti Che Musa
 Pn. Nadhirah Zaharah Binti Badri
 Pn. Narinderpal Kaur
 Pn. Nazirah Binti Ahmad
 Pn. Noor Aidah Binti Awang Teh
 Pn. Noor Yasmalaila Binti Yahya
 Pn. Nor Hasiah Binti Mamat
 Pn. Nor Hasliza Binti Ahmad Sadri
 Pn. Nor Hidayah Binti Ibrahim
 Pn. Nor Hidayah Binti Rahim
 Pn. Nor Hilwa Binti Bajuri
 Pn. Nor Syazliyantie Binti Shuhaimi
 Pn. Noraini Binti Zahir
 Pn. Norbaizura Binti Mohd Amin
 Pn. Norhidayah Binti Wahab
 Pn. Norliana Binti Sulaiman
 Pn. Norlida Binti Abd Ahmad
 Pn. Norlida Binti Abd Hamid
 Pn. Norlida Binti Khalid
 Pn. Norzarina Binti Mustafa
 Pn. Nur Azmina Syahirah Binti Mohd Zul
 Pn. Nur Aznah Binti Abd. Razak
 Pn. Nur Izzatty Binti Basri

Pn. Nurain Hikma Binti Mansor
 Pn. Nurul Ain Binti Mohamad Razali
 Pn. Nurul Khidayu Binti Hussin
 Pn. Nurwahidah Binti Fawzi
 Pn. Rafeah Binti Mustafa
 Pn. Rahayu Binti Rimi
 Pn. Rasidah Binti Abdullah Sani
 Pn. Robiatun Binti Ahmad
 Pn. Rohayu Binti Mahayedin
 Pn. Rosilawati Binti Ghazal
 Pn. Roslihaidah Binti Mat Hassan
 Pn. Rosnawati Binti Mustaffa
 Pn. Rozinha Binti Abd Aziz
 Pn. Saydatul Affiza Binti Mansor
 Pn. Shalaziah Binti Md Zin
 Pn. Siti Nazura Binti Rusli
 Pn. Siti Nor Sarah Binti Abdul Rafar
 Pn. Siti Noratini Binti Noon
 Pn. Siti Norlina Binti Tarmizi
 Pn. Siti Nurul Afiah Binti Widan
 Pn. Siti Rohayati Binti Salikin
 Pn. Siti Zubaidah Binti Mamat
 Pn. Siti Zulaiha Binti Ismail
 Pn. Suhaila Binti Wahab
 Pn. Suliana Binti Hamzah
 Pn. Tuan Nursalihah Binti Salleh
 Pn. Vianney Anggau
 Pn. Wan 'Atiqah Hanis Binti Wan Hussin
 Pn. Wan Nor Azlida Binti Wan Abdul Rahman
 Pn. Wan Nor Raihan Binti Wan Abdullah
 Pn. Wan Rukminin Binti Wan Deris
 Pn. Yannazida Binti Mohamed Nor
 Pn. Zarina Binti Kadir

JOHOR

Field Supervisor

Dr. Muhammad Khairul Nazrin Bin Khalil
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State Matron

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 Pn. Norhaida Binti Yusuf
 Pn. Norhidayah Binti Ayob
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 Pn. Nur Hidayah Binti Azmi
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 Pn. Nurhayati Binti Mustapah
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 Pn. Nurul Syuhada Binti Khodar
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 Pn. Rohaizan Binti Muda
 Pn. Rosiah Binti Roslan
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 Pn. Samsiah Binti Abd Wahid
 Pn. Shazwani Binti Zailan
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 Pn. Siti Noor Binti Zainol Abidin
 Pn. Siti Noramirah Binti Mohd Ali
 Pn. Siti Norhaliza Binti Tubin
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 Pn. Sucin A/P Eah Sai

Pn. Sumathi A/P Murugiah

Pn. Tuan Syarifah Binti Tuan Ya
 Pn. Wan Nur Amalina Binti Wan Rosli

Pn. Yazni Ernie Binti A. Yazid

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 Pn. Mariah Binti Md Yusof
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 Pn. Nadirah Izzati Binti Mohd Nasir
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 Pn. Noor Azlina Binti Maamor
 Pn. Noor Azura Binti Hashim
 Pn. Nor Ashikin Binti Ismail
 Pn. Nor Azian Binti Mustafa
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 Pn. Norhanisa Binti Othman
 Pn. Norhaniza Binti Ismail
 Pn. Norhayati Binti Kamarulzaman
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 Pn. Norizan Binti Mohamad
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 Pn. Nurull Liyana Binti Iskandar
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 Pn. Rabiatun Adauyah Binti Abd Manaf
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 Pn Norhayati Binti Mohamad
 Pn Rohati Binti Yusoff
 Pn Salmiah Binti Mamat
 Pn Sukarwati Binti Nawang
 Pn Zaidah Binti Salleh
 Pn Zarina Binti Nor
 Pn. Afizan Binti Muhamad
 Pn. Aliza Binti Yaacob
 Pn. Asiah Binti Ayub
 Pn. Asiah Binti Muhamad
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 Pn. Azliza Binti Mohamad
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 Pn. Che Samiah Binti Che Othman
 Pn. Diana Marzita Binti Ismail
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 Pn. Faridah Binti Ismail
 Pn. Faridah Binti Omar
 Pn. Habibah Binti Ibrahim
 Pn. Haslina Binti Mat Jusoh
 Pn. Haslina Binti Mohd Zain
 Pn. Hasnizan Binti Ismail
 Pn. Hazrina Binti Nordin
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 Pn. Nik Nizawati Binti Nik Ab Rahman
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 Pn. Noor Salawati Binti Mahmud
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 Pn. Nor Aza Binti Mat Deris
 Pn. Nor Azila Binti Mat
 Pn. Nor Azizah Binti Mahat
 Pn. Nor Byzura Binti Mohamad
 Pn. Nor Hasanah Abas
 Pn. Nor Hasniza Binti Sahak
 Pn. Nor Maslina Binti Awang
 Pn. Nor Shahira Binti Mohamad

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 Pn. Noraslawati Binti Mohd Arip
 Pn. Norasyikin Binti Mustapha
 Pn. Norhayati Binti Mamat
 Pn. Norisah Binti Ab'lah
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 Pn. Norlaili Binti Mohmad
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 Pn. Nur Zahiera Binti Abu Hassan
 Pn. Nurul Ain Binti Hassan
 Pn. Nurul Huda Binti Mohd Asri
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 Pn. Rahmah Binti Ibrahim
 Pn. Raihan Binti Ismail
 Pn. Rohaida Binti Ibrahim
 Pn. Rohani Binti Awang
 Pn. Rohaya Binti Ismail
 Pn. Rohayu Musliana Binti Mustapha
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 Pn. Rosmaini Binti Mustafa
 Pn. Rosmanira Binti Mokhtar
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 Pn. Siti Eshah Binti Hamzah
 Pn. Siti Nasrolazmawate Binti Rokman
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 Pn. Siti Zuraida Binti Ibrahim
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 Pn. Zainun Binti Mamat
 Pn. Zawiah Binti Kasim
 Pn. Zuhaida Binti Yahya
 Pn. Zurina Binti Ibrahim

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 Pn. Maziah Binti Mat Udin
 Pn. Maznah Binti Mohamad
 Pn. Nafishah Binti Muhammad
 Pn. Noor Asyila Binti Abd. Rahman
 Pn. Noor Lily Ashikeen Binti Ishak
 Pn. Noorhana Binti Salleh
 Pn. Nor Akmar Salim
 Pn. Nor Akmawati Binti Derasid
 Pn. Nor Azira Binti Mohammed
 Pn. Nor Hariza Binti Mat Nong
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 Pn. Norwati Binti Jaafar
 Pn. Norwati Binti Jalil
 Pn. Nur Ashikin Binti Mustaffa
 Pn. Nur Athirah Binti Md Nawawi
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 Pn. Raja Norazlinda Binti Raja Hassan
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 Pn. Rosmaliana Binti Embong
 Pn. Rosmarizal Binti Yahya
 Pn. Rosnita Binti Mat Rani
 Pn. Rozaini Binti Mat Tahar
 Pn. Rozilah Binti Mohamed Lazin
 Pn. Rozita Binti Mohd Dahan
 Pn. Salwani Binti Abd Razak
 Pn. Siti Fatimah Binti Nordin
 Pn. Siti Hajar Binti Mamat
 Pn. Siti Rokiah Binti Kadir
 Pn. Syairah Binti Abdullah
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 Pn. Wan Arnida Wati Binti W Ghazali

Pn. Wan Norasiah Binti Wan Ismail
 Pn. Wan Rozita Binti Wan Nik
 Pn. Zanariah Binti Ahmad
 Pn. Zanariah Binti Yusof
 Pn. Zauyah Binti Musa
 Pn. Zuaidah Binti Yasin
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 Pn. Normarliana Binti Raalim

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 Pn. Shazwani Binti Abd Rahim
 Pn. Shuhaida Binti Murjaman
 Pn. Siti Aishah Binti Kassim
 Pn. Siti Rahayu Binti Nor @ Muhamad Nor
 Pn. Syaila Binti Ramlan
 Pn. Tengku Adeebah Akmal Binti Tengku Lockman
 Pn. Tuan Nor Baizura Binti Tuan Yusoff
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 Pn. Haslinsky Binti Mat Ludin
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 Pn. Irne Juwita Binti Bidin
 Pn. Jaharahnorma Binti Tamat
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 Pn. Junainah Binti Jaffar
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 Pn. Noor Maya Binti Hamzah
 Pn. Maizatul Aini Binti Moamed Noordin
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 Pn. Nazira Binti Abu Bakar
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 Pn. Noor Hana Binti Abu Hassan
 Pn. Noor Nadia Binti Mohamad Yahaya
 Pn. Noor Zuriyati Binti Mahazir
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 Pn. Nor Adzwati Affiza Binti Razali
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 Pn. Nor Amiza Binti Ismail
 Pn. Nor Anina Azwin Binti Mohd Ghazali
 Pn. Nor Atika Binti Mahpop
 Pn. Nor Azilah Binti Mohd Nordin
 Pn. Nor Faradila Binti Mohd Musthaba
 Pn. Nor Fatin Fasihah Binti Mat Nawi
 Pn. Nor Saezah Binti Sadri
 Pn. Nor Salinda Binti Ariffin
 Pn. Noradila Binti Abdul Malek
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 Pn. Norazian Binti Hamzah
 Pn. Norazian Binti Ibrahim
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 Pn. Norhapizah Binti Ramli
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 Pn. Norhayati Binti Ahmad
 Pn. Norma Binti Abd Rahman
 Pn. Norshahera Binti Roni
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 Pn. Nur Hydayati Ramlee
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 Pn. Cik Nur Amani Binti Soh Siva
 Pn. Elmimaya Binti Umar
 Pn. Faridah Binti Ismail
 Pn. Faridah Binti Pandak Ramli
 Pn. Fauziah Binti Mohamed Yusoff
 Pn. Haliza Binti Mat Isa
 Pn. Hamisah Binti Ibrahim

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 Pn. Nurul Afiqah Binti Adnan
 Pn. Nurulain Binti Musa
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 Pn. Rafidah Binti Salleh
 Pn. Riana Binti Alias
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 Pn. Roshairan Binti Mat Hassan
 Pn. Rosnani Binti Noor
 Pn. Rosnita Binti Ibrahim
 Pn. Rosnita Binti Roslee
 Pn. Roszemariza Binti Md Yusof
 Pn. Salbiah Binti Abdul Rahman
 Pn. Salmiah Binti Salman
 Pn. Salwana Binti Shafien
 Pn. Sanggetha AP Perumal
 Pn. Shahidatun Nazira Binti Jamaluddin
 Pn. Shazwani Binti A. Rashid
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 Pn. Siti Fairus Binti Sahadan
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 Pn. Siti Nor Asilah Binti Nor
 Pn. Siti Nor Faizah Binti Raza
 Pn. Siti Nor Haslina Binti Abu Hassan
 Pn. Siti Norbaya Binti Abdullah
 Pn. Siti Norshilla Binti Abdul Karim
 Pn. Suhaina Binti Sofian
 Pn. Suhaira Binti Abdul Rahman
 Pn. Suhana Binti Yaakub
 Pn. Suria Binti Ghazali
 Pn. Suriani Binti Muhammad Desa
 Pn. Susilawati Binti Salleh
 Pn. Suzana Binti Azizuddin
 Pn. Thurkadevi A/P Muniandy
 Pn. Tina Sulyawati Binti Tajul Arus
 Pn. Wan Noorhidayah Binti Abu Kassim
 Pn. Wan Ros Niza Binti Wan Zon
 Pn. Zainab Binti Zainal Abidin
 Pn. Zulila Binti Abdullah
 Pn. Zuraida Binti Zainon Abidin
 Pn. Zurina Binti Rosli

PULAU PINANG

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State Matron

Pn. Kuay May Jiuan

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 Pn. Jasmin Haryati Binti Mohd Al Kamal
 Pn. Kasturi A/P Vijaya Kumar
 Pn. Mahasrina Binti Mokhtar
 Pn. Mai Norwanis Binti Ahmad Hezazi
 Pn. Massrina Binti Mohd Nasir
 Pn. Noormala Binti Hisham
 Pn. Norfairose Binti Abd Ghaffar

Pn. Norma Binti Abdullah
 Pn. Nur Nadiah Binti Azmi
 Pn. Nurshafina Binti Saari
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 Pn. Zahira Binti Ismail

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 Pn. Azlina Binti Mansor
 Pn. Che Romawan Binti Mat Zin
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 Pn. Fariza Binti Musa
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 Pn. Hasmalaila Binti Yahya
 Pn. Haziana Binti Wan Mat Taib
 Pn. Illany Binti Ismail
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 Pn. Juariah Binti Muda
 Pn. Julia Binti Jalil
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 Pn. Mashitoh Binti Abu
 Pn. Mashitoh Binti Abu
 Pn. Mazeranida Binti Che Nawang
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 Pn. Noor Akmariah Binti Embong
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 Pn. Noor Shaliany Binti Saad
 Pn. Noor Sharina Binti Suib
 Pn. Noorsyaharina Binti Arsad
 Pn. Nor Aishah Binti Rozale
 Pn. Nor Azni Binti Othman
 Pn. Norasmira Binti Abdullah
 Pn. Norazliana Binti Mohd Nor
 Pn. Norazliana Binti Mohd Nor
 Pn. Norazmani Binti Osman
 Pn. Norhafiza Binti Ali
 Pn. Norlihan Binti Zainudin
 Pn. Normahizalmiera Binti Che Deris
 Pn. Normala Binti Md Esa
 Pn. Norshuhada Binti Hashim
 Pn. Nur Adila Binti Yaacob
 Pn. Nur Adlia Binti Abdul Rahim
 Pn. Nur Atiqah Binti Mat Ali
 Pn. Nur Farahana Binti Mohamed

Pn. Nur Iwana Binti Che Noh
 Pn. Nur Syazwani Binti Mohd Zaki
 Pn. Nurmaizura Binti Ahmad Shafir
 Pn. Nurul Asmidar Binti Md Noh
 Pn. Nurul Diana Binti Yahaya
 Pn. Nurul Jannah Binti Abdul Rahim
 Pn. Nurul Nadiah Binti Ibrahim
 Pn. Rabiatul Adawiyah Binti Abd Rahim
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 Pn. Rozaini Binti Abu Bakar
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 Pn. Sabrina Binti Sabry
 Pn. Sagunthala Devi A/P Nadarajan
 Pn. Salmah Binti Saad
 Pn. Shahida Binti Shaaban
 Pn. Shamshuriati Binti Mukhtar
 Pn. Sharlizah Binti Ramli
 Pn. Sing Hui Teng
 Pn. Siti Aishah Binti Abu Hassan
 Pn. Siti Azureen Binti Mohd Noor Madi
 Pn. Siti Fazilah Binti Osman
 Pn. Siti Hajar Binti Abu Sahar
 Pn. Siti Hajar Binti Azhar
 Pn. Siti Maryam Binti Hassan
 Pn. Siti Rozieana Binti Razali
 Pn. Siti Salmah Binti Samsudin
 Pn. Siti Zubaidah Binti Zainol
 Pn. Syafawati Binti Othman
 Pn. Syakinah Binti Ismail
 Pn. Wan Noor Ashikin Binti Wan Zain
 Pn. Wan Shakimah Binti Wan An
 Pn. Zaidah Binti Ramli
 Pn. Zailawati Binti Zainol Abidin
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 Pn. Zarina Binti Abdullah Chik
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 Pn. Nor Sila Binti Hassan
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 Pn. Rosnah Binti Mat
 Pn. Rosnita Binti Roslan
 Pn. Saadah Nabilah Binti Mohd Zahid
 Pn. Shakirah Binti Saud
 Pn. Siti Hajar Binti Aziz
 Pn. Siti Rohaya Binti Arshad
 Pn. Siti Rohaya Binti Ramli
 Pn. Suhaida Binti Saadan
 Pn. Wan Noraini Binti Ahmad
 Pn. Zariah Binti Ahmad
 Pn. Zawiah Binti Abdullah

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 Pn. Anita Neulin
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 Pn. Cynthia G.Gujiloh
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 Pn. Diany Petrus
 Pn. Elizabeth Jane Leo
 Pn. Elwina James
 Pn. Epiah Binti Kadisun
 Pn. Evelin Koumin
 Pn. Ezra Joey
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 Pn. Fatimah Yasau
 Pn. Fitri Aryani Binti Ruspin
 Pn. Hadijah Binti Hamilin
 Pn. Hatikah Jiman
 Pn. Hilni Satumin
 Pn. Ika Suzaimah Binti Muslim
 Pn. Jaliah Binti Sulaiman
 Pn. Jecontesa Binti Jaissen Buntang
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 Pn. Jurini Muridih

Pn. Jusiah @ Siti Hayani Bigul
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 Pn. Lee Shiu Vui
 Pn. Linda Billy
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 Pn. Onong @Susana Bulangai
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 Pn. Rohana Binti Tassim
 Pn. Rosheila Salimun
 Pn. Rosline Binti Jarip
 Pn. Rosmawati Raimon
 Pn. Rujitah Abdul Kinu
 Pn. Rusfitah @ Nurul Athirah Suanin
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 Pn. Shakina Binti Jasri
 Pn. Siska Binti Chu Kimbing
 Pn. Siti Fathmawati Binti Subbi
 Pn. Siti Lana Binti Omar
 Pn. Sitti Satra Hamsyah
 Pn. Soulin Nasir
 Pn. Stephanie Eddy Jampang
 Pn. Stephanie J. Edwin
 Pn. Suhaila @ Bongsu Ab. Latif291
 Pn. Suhaini Sahbuddin
 Pn. Sulida Chung
 Pn. Suriyati Satari
 Pn. Suzana Baizura Binti Ibrahim
 Pn. Tseu Li Fong
 Pn. Vennita Joisa
 Pn. Vyllorida Dius
 Pn. Winnie Doin

WP LABUAN

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 Pn. Asliwati Binti Ramlee
 Pn. Esther Patrick
 Pn. Fajaria Petrus
 Pn. Hasnizar Binti Awi
 Pn. Louraline Arcadius
 Pn. Martina Khingsan
 Pn. Norjainah Juhara
 Pn. Paimi Ahkau
 Pn. Sarifah Binti Ismail
 Pn. Sheryleyn Joeminit
 Pn. Tiawa Binti Mahmud

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En. Mohd Hatta Bin Abdul Mutalip

State Matron

Pn. Jaminah Binti Yahya

Listing Staff

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 Pn. Brambun Anak Joseph
 Pn. Christina Ak Abol
 Pn. Daine Christy Leba Anak Ujai.
 Pn. Daphny Rini Stephen
 Pn. Lisa Anak Taeng
 Pn. Liza Binti Drahman
 Pn. Lizawati Anak Sandai
 Pn. Lolin Anak Martin
 Pn. Min Chendan @ Nur Adila Abdullah
 Pn. Monica Embai Ak Manggang
 Pn. Munah Anak Layang
 Pn. Nadia Estorina Ak Meseng
 Pn. Nayun Ak Rum
 Pn. Noreen Anak Tuah
 Pn. Nurfelisia Bernet
 Pn. Nurhafiza Mayer Abdullah
 Pn. Nurulfazielah Binti Ujang
 Pn. Rita Rosly
 Pn. Rodziana Binti Mahmud
 Pn. Rosemina Anak Jaraw
 Pn. Steffie Rozie Robert
 Pn. Veterina Monggong
 Pn. Wini Anak Chundau
 Pn. Yap Vivina Kenyalang
 Pn. Yong Ping

APPENDIX 5: DATA AND FIELD IMPLEMENTATION

FLOWCHART OF DATA COLLECTION FOR NHMS 2022: MCH

Team leader was assigned to schedule appointment with the household of eligible LQ.

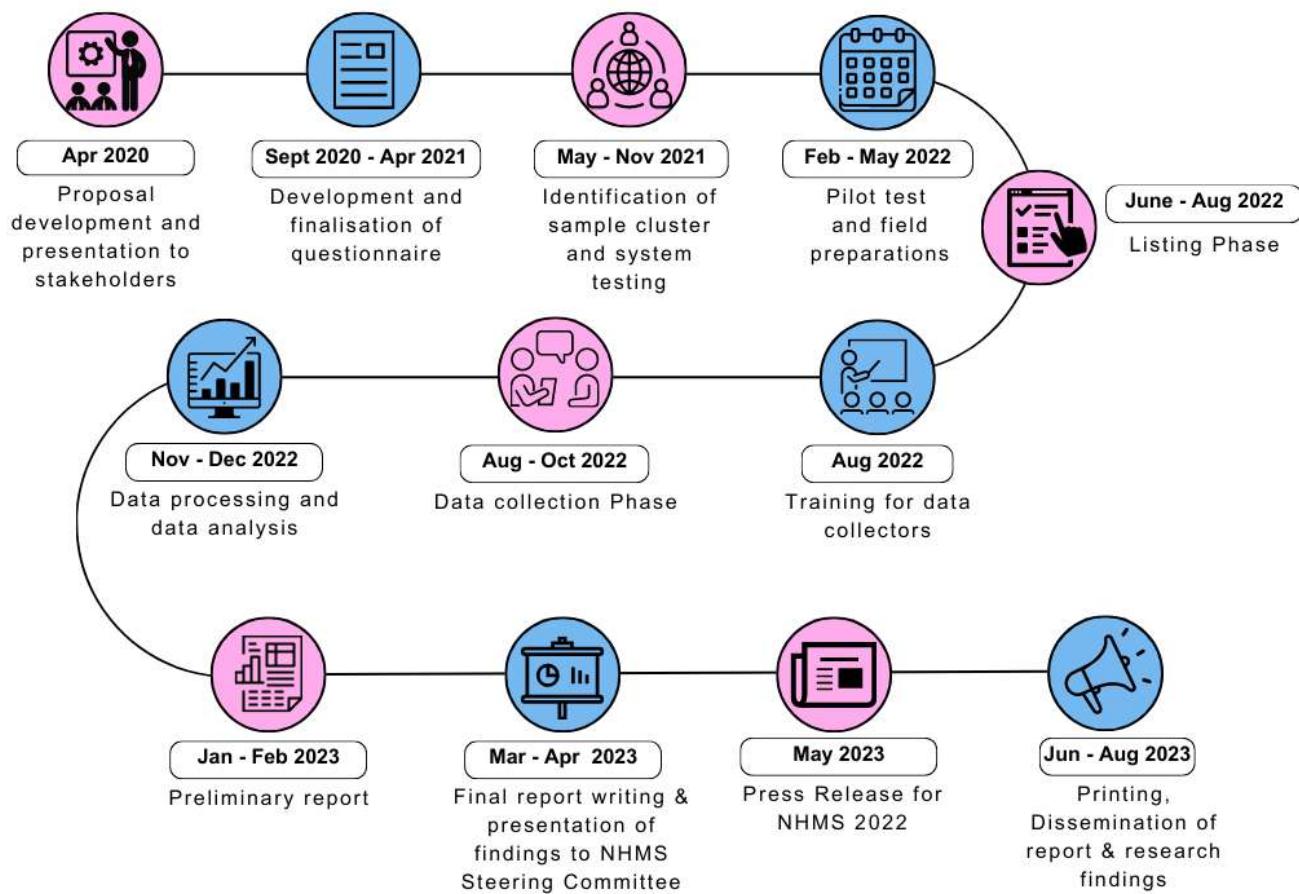
Information regarding the survey were explained to the respondents who were taking part in the survey. Consent form for respondent above 18 years old (Appendix 6A) and assent form for respondents below 18 years old (Appendix 6B & 6C) were obtained during the visit

If the eligible respondent was not available during the first visit, the team had to revisit several times.

At least 3 visits must be made before the household deemed unsuccessful.

During the data collection period, any respondent who have medical issues were referred to appropriate health facilities for further assessment

THE SUMMARY OF NHMS 2022: MCH IMPLEMENTATION AND MILESTONES



APPENDIX 6: NHMS 2022: MCH MATERIALS

A. PARTICIPANT INFORMATION SHEET (18 Years and Above)

PARTICIPANT INFORMATION SHEET (18 YEARS AND ABOVE)

- 1. Title of study:**
National Health and Morbidity Survey (NHMS): Maternal and Child Health (MCH).
- 2. Name of Investigator and institution:**
Principal Investigator: Dr. Mohd Shaiful Azlan bin Kassim, Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia.

Co-Principal Investigator: Dr. Suhaila binti Abdul Ghaffar, Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia.
- 3. Name of sponsor:**
Ministry of Health, Malaysia.
- 4. Introduction:**
The Ministry of Health is conducting a National Health and Morbidity Survey (NHMS) MCH focusing on maternal and child health. This leaflet will explain the details of this survey. It is important for you to understand why the survey is being done and what will be involved. Please take your time to read through and consider this information carefully before you decide if you are willing to participate. If you have any questions or need more information, you can ask any team member of this survey. Once you understand the survey information and you wish to participate, you must sign a **Consent Form** which is included on the last page of this information sheet. Your participation is voluntary and you may withdraw at any time. You may opt to not answer any of the questions or withdraw if you choose to do so. Your refusal to participate or withdrawal will not affect your existing rights to any medical or health care. In the event that should require termination of the overall study, the existing data captured will be analyzed and the result will be published. This study is fully sponsored by the Ministry of Health Malaysia and has been approved by the Medical Research and Ethics Committee, Ministry of Health Malaysia.
- 5. What is the purpose of the survey?**
The purpose of this study is to obtain information on the health status of mother and children in Malaysia including women of reproductive age of 15 to 49 years old. The collected information will be reviewed and evaluated in order to improve the health service especially to the mothers and children in our country.
- 6. What will happen if I decide to take part?**
You will need to sign the **Consent Form**. Before collecting data, you will be explained in detail on the data collection procedure. This survey will include:
 - a) Face-to-face interview:
 - To give feedback/ respond during the face-to-face interview session for modules on maternal and child health issues.
 - Interview session is estimated to take around 20 – 30 minutes.
 - b) Self-Administered Questionnaires (SAQ):
 - The SAQ questionnaires will ask about sensitive information such as questions related to mental health.
 - SAQ is estimated to take around 5 – 10 minutes.
- 7. What are my responsibilities when taking part in this survey?**
It is important that every participant to follow the instruction which has been given by the survey team. Participant is also reminded to answer the questions honestly and completely. Any doubt or enquiries can be addressed to the Principal Investigator or survey team in each site. Participation in this survey will definitely not incur any cost to you.
- 8. What are the potential risks and side effects of being in this survey?**
There is no risk if you participate in the face-to-face interview in this survey. The self-administered questionnaires consist of very sensitive and personal questions. All information and answers we receive from you are treated **CONFIDENTIAL**. The information will be kept safe and will not be shared with others including your family members or friends. We will ensure your privacy and confidentiality. Your honesty in answering all these questions is greatly appreciated. If participants face any problems relating to this study during the data collection period, participants are advised to report it to the data collectors.
- 9. What are the benefits of being in this survey?**
There will be no immediate health benefits if you take part in this survey. However, the information obtained from this study will help the policy making and planning towards improving health services and health program for mothers and children in the country.
- 10. Who is funding this study?**
This study is funded by research grant from the Ministry of Health Malaysia. We appreciate your time spent on this study. There is no monetary incentive for participating in this study but a token of appreciation will be given to all participants who take part in this study.

11. Will my study information be kept private?

All your information obtained in this study will be kept and handled in a confidential manner, in accordance with applicable laws and/or regulations. Your identity as a participant in the study is strictly confidential. All information available in the study records will always be kept confidential and used only for research purposes. When publishing or presenting the study results, your identity will not be revealed without your expressed consent. Individuals involved in this study and in your medical care, qualified monitors and auditors, the sponsor or its affiliates and governmental or regulatory authorities may inspect and copy your study information, where appropriate and necessary. Only you and the study team involved will gain all the result and it will be distributed in a confidential manner.

12. Who should I call if I have questions?

If you have any enquiries about or further information about this study, please contact Principal Investigator, Dr. Mohd Shaiful Azlan Bin Kassim, from Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia, No 1, Jalan Setia Murni U13/52, Seksyen U13 Bandar Setia Alam, 40170, Shah Alam, Selangor at 03-33628798/8702. You may also visit our website at <http://www.iku.gov.my> to view developments on this research project.

If you have any questions regarding your rights as a respondent in this survey, please contact:

**Medical Research & Ethics Committee,
Ministry of Health Malaysia,
Kompleks Institut Kesihatan Negara (NIH),
No 1, Jalan Setia Murni U13/52, Seksyen U13 Setia Alam, 40170, Shah Alam,
No. Tel: 03-33628407/8205/8888**

RESPONDENT'S COPY CONSENT FORM (ABOVE 18 YEARS OLD)	<p>Title : National Health and Morbidity Survey (NHMS) MCH Principal Investigator : Dr. Mohd Shaiful Azlan Bin Kassim, Institute for Public Health, Ministry of Health Malaysia</p> <p><i>Mark ✓ in the box.</i></p> <p>By signing below, I certify that:</p> <ul style="list-style-type: none"> <input type="checkbox"/> I have been given information about the survey both verbally and in print, and I have read and understand all the information provided in this brochure, <input type="checkbox"/> I have had sufficient time to consider my application in this survey and was given the opportunity to ask questions and all my questions have been answered satisfactorily. <input type="checkbox"/> I understand that my participation is voluntary and I may withdraw from this survey at any time without giving any reason. <input type="checkbox"/> I understand that this survey involves very sensitive issues and the possible risks and benefit of this survey. I freely give my informed consent to participate. I understand that I must follow the researchers' instructions associated with my participation in this survey. <input type="checkbox"/> I understand that the researchers and the relevant authorities have direct access to my data in conducting the survey. All personal information and data will be ensured confidential. <input type="checkbox"/> I will receive a copy of the subject information / informed consent form that was signed and dated. <p>Respondent: _____ I/C No : _____ Name : _____ Signature / Left thumb print: _____ Date : _____</p> <p>Researcher coordinating the process of signing the consent form: _____ I/C No : _____ Name : _____ Signature: _____ Date : _____</p> <p>Witness impartial / fair: (Required, if subject is illiterate and content of patient information sheet is delivered orally to subject): _____ I/C No : _____ Name : _____ Signature: _____ Date : _____</p> <hr/> <p>RESEARCHER'S COPY ID: <input type="checkbox"/> Negeri <input type="checkbox"/> DP <input type="checkbox"/> DB <input type="checkbox"/> BP <input type="checkbox"/> Strata <input type="checkbox"/> TK <input type="checkbox"/> Isi Rumah <input type="checkbox"/> Individu</p> <p>CONSENT FORM (ABOVE 18 YEARS OLD)</p> <p>Title : National Health and Morbidity Survey (NHMS) MCH Principal Investigator : Dr. Mohd Shaiful Azlan Bin Kassim, Institute for Public Health, Ministry of Health Malaysia</p> <p><i>Mark ✓ in the box.</i></p> <p>By signing below, I certify that:</p> <ul style="list-style-type: none"> <input type="checkbox"/> I have been given information about the survey both verbally and in print, and I have read and understand all the information provided in this brochure, <input type="checkbox"/> I have had sufficient time to consider my application in this survey and was given the opportunity to ask questions and all my questions have been answered satisfactorily. <input type="checkbox"/> I understand that my participation is voluntary and I may withdraw from this survey at any time without giving any reason. <input type="checkbox"/> I understand that this survey involves very sensitive issues and the possible risks and benefit of this survey. I freely give my informed consent to participate. I understand that I must follow the researchers' instructions associated with my participation in this survey. <input type="checkbox"/> I understand that the researchers and the relevant authorities have direct access to my data in conducting the survey. All personal information and data will be ensured confidential. <input type="checkbox"/> I will receive a copy of the subject information / informed consent form that was signed and dated. <p>Respondent: _____ I/C No : _____ Name : _____ Signature / Left thumb print: _____ Date : _____</p> <p>Researcher coordinating the process of signing the consent form: _____ I/C No : _____ Name : _____ Signature: _____ Date : _____</p> <p>Witness impartial / fair: (Required, if subject is illiterate and content of patient information sheet is delivered orally to subject): _____ I/C No : _____ Name : _____ Signature: _____ Date : _____</p>
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RISALAH MAKLUMAT (18 TAHUN KE ATAS)

1. Tajuk:

Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS): Kesihatan Ibu dan Anak (MCH).

2. Nama Penyelidik Utama dan Institusi:

Dr. Mohd Shaiful Azlan bin Kassim, Institut Kesihatan Umum, Institut Kesihatan Negara, Kementerian Kesihatan Malaysia.

Penyelidik bersama: Dr. Suhaila binti Abdul Ghaffar, Institut Kesihatan Umum, Institut Kesihatan Negara, Kementerian Kesihatan Malaysia.

3. Nama Penaja:

Kementerian Kesihatan Malaysia.

4. Pengenalan:

Kementerian Kesihatan Malaysia sedang menjalankan Tinjauan Kebangsaan Kesihatan dan Morbiditi MCH dengan memberi tumpuan kepada kesihatan ibu dan anak. Risalah ini akan menerangkan perincian tinjauan ini. Adalah penting untuk anda memahami tujuan tinjauan ini dilakukan dan apa yang akan terlibat. Sila ambil masa yang secukupnya untuk membaca dengan teliti penerangan yang diberi sebelum anda bersetuju untuk menyertai tinjauan ini. Jika anda mempunyai sebarang kemusyikilan ataupun memerlukan maklumat lanjut, anda boleh bertanya dengan mana-mana ahli kumpulan tinjauan ini. Setelah anda memahami maklumat tinjauan ini dan ingin mengambil bahagian, anda perlu menandatangani **Borang Persetujuan Responden** yang disertakan pada muka surat terakhir risalah ini. Penyertaan anda dalam tinjauan ini adalah secara sukarela dan anda boleh menarik diri pada bila-bila masa. Anda boleh memilih untuk tidak menjawab mana-mana soalan atau menarik diri dari pemeriksaan yang disebutkan sekiranya tidak setuju. Keenggan anda untuk mengambil bahagian, atau penarikan diri anda tidak akan menjelaskan sebarang manfaat perubatan atau kesihatan yang disediakan. Sekiranya tinjauan ini perlu diberhentikan atas sebab yang tidak dapat dielakkan, data sedia ada yang telah dikumpulkan akan dianalisis dan hasilnya akan diterbitkan. Tinjauan ini ditaja sepenuhnya oleh Kementerian Kesihatan Malaysia dan telah mendapat kelulusan Jawatankuasa Etika dan Penyelidikan Perubatan, Kementerian Kesihatan Malaysia.

5. Apakah tujuan tinjauan ini dilakukan?

Tujuan tinjauan ini dijalankan adalah untuk memperolehi maklumat berkaitan dengan status kesihatan ibu dan anak serta wanita dalam golongan umur reproduktif yang berumur 15-49 tahun di Malaysia. Maklumat yang diperolehi dapat meningkatkan lagi taraf perkhidmatan kesihatan untuk ibu dan anak yang sedia ada.

6. Apakah yang perlu saya lalui/lakukan sekiranya bersetuju untuk menyertai tinjauan ini?

Anda perlu menandatangani **Borang Persetujuan Responden**. Anda juga akan dijelaskan secara terperinci mengenai prosedur yang perlu dipatuhi sebelum pengumpulan data. Tinjauan ini akan meliputi:

a) Temuramah secara bersemuka:

- Memberi maklum balas untuk modul mengenai isu kesihatan ibu dan anak semasa sesi temuramah bersemuka.
- Sesi temuramah dianggarkan akan mengambil masa selama 20 - 30 minit.

b) Soal selidik dijawab sendiri:

- Borang soal selidik yang perlu dijawab sendiri akan bertanya mengenai isu sensitif seperti kesihatan mental.
- Soal selidik dijawab sendiri dianggarkan akan mengambil masa selama 5 - 10 minit.

7. Apakah tanggungjawab saya sewaktu menyertai tinjauan ini?

Adalah penting untuk anda mengikuti arahan yang telah diberikan oleh pasukan tinjauan. Anda juga diingatkan untuk menjawab kesemua soalan yang ditanya oleh ahli tinjauan dengan jujur dan lengkap. Sebarang keraguan atau pertanyaan boleh diajukan kepada Penyelidik Utama atau ahli tinjauan di lapangan. Tiada sebarang perbelanjaan perlu dikeluarkan untuk menyertai tinjauan ini.

8. Apakah risiko dan kesan-kesan sampingan menyertai tinjauan ini?

Tiada apa-apa risiko jika anda menyertai sesi temuramah secara bersemuka dalam tinjauan ini. Soal selidik yang jawab sendiri mengandungi soalan yang agak sensitif dan peribadi tetapi semua maklumat dan jawapan yang diterima daripada anda adalah **SULIT**. Maklumat akan disimpan dengan selamat dan tidak akan dikongsi dengan orang lain termasuk ahli keluarga atau rakan anda. Kami akan memastikan privasi dan kerahsiaan anda. Kejujuran anda dalam menjawab semua soalan ini amat dihargai. Sekiranya anda menghadapi sebarang masalah yang berkaitan dengan tinjauan ini dalam tempoh pengumpulan data, anda disarankan untuk melaporkannya kepada pengumpul data.

9. Apakah manfaatnya saya menyertai tinjauan ini?

Tiada faedah kesihatan segera jika anda mengambil bahagian dalam tinjauan ini. Walau bagaimanapun, maklumat yang diperolehi daripada tinjauan ini akan membantu Kementerian Kesihatan Malaysia dalam meningkatkan kualiti perkhidmatan kesihatan dan program kesihatan bagi golongan ibu dan anak di negara ini.

10. Siapakah yang menyokong perbelanjaan untuk tinjauan ini?

Tinjauan ini dibayai oleh geran penyelidikan dari Kementerian Kesihatan Malaysia. Kami menghargai masa yang anda luangkan dalam tinjauan ini. Tidak ada insentif kewangan bagi pelingbatan dalam tinjauan ini tetapi token (tuala) akan diberikan kepada setiap peserta yang mengambil bahagian dalam tinjauan ini sebagai tanda penghargaan.

11. Adakah maklumat perubatan saya akan dirahsiakan?

Semua maklumat anda yang diperolehi dalam tinjauan ini akan disimpan dan dikendalikan secara sulit, bersetujuan dengan peraturan-peraturan dan/atau undang-undang yang berkenaan. Sekiranya hasil tinjauan ini diterbitkan atau dibentangkan kepada orang awam, identiti anda tidak akan didedahkan tanpa kebenaran anda terlebih dahulu.

12. Siapakah yang perlu saya hubungi sekiranya saya mempunyai sebarang pertanyaan?

Sekiranya anda mempunyai sebarang soalan mengenai tinjauan ini atau memerlukan keterangan lanjut, tuan/puan boleh hubungi Penyelidik Utama, Dr. Mohd Shaiful Azlan Bin Kassim, Institut Kesihatan Umum, Institut Kesihatan Negara, Kementerian Kesihatan Malaysia di alamat Blok B5 & B6, No.1, Jalan Setia Murni U13/52, Seksyen U13, Setia Alam, 40170 Shah Alam, Selangor di talian 03-33628798/8702. Perkembangan tentang penyelidikan ini juga boleh didapati daripada laman sesawang rasmi Institut Kesihatan Umum <http://www.iku.gov.my>.

Jika anda mempunyai sebarang pertanyaan berkaitan dengan hak-hak anda sebagai responden dalam tinjauan ini, sila hubungi:

**Jawatankuasa Etika & Penyelidikan Perubatan,
Bahagian Dasar & Perancangan Penyelidikan,
Kementerian Kesihatan Malaysia,
Kompleks Institut Kesihatan Negara (NIH),
No 1, Jalan Setia Murni U13/52, Seksyen U13 Setia Alam, 40170, Shah Alam,
No. Tel: 03-33628407/8205/8888**

SALINAN RESPONDEN	BORANG PERSETUJUAN RESPONDEN																									
<p>Tajuk : Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS) MCH Penyelidik Utama : Dr. Mohd Shaiful Azlan Bin Kassim, Institut Kesihatan Umum, Kementerian Kesihatan Malaysia</p> <p><i>Sila tandakan ✓ di dalam kotak.</i></p> <p>Dengan menandatangani borang ini, saya mengesahkan bahawa:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Saya telah diberi maklumat tentang tinjauan di atas secara lisan dan bertulis dan saya telah membaca dan memahami segala maklumat yang diberikan di dalam risalah ini. <input type="checkbox"/> Saya mempunyai masa yang secukupnya untuk mempertimbangkan penyertaan saya dalam tinjauan ini dan telah diberi peluang untuk bertanyakan soalan dan semua soalan saya telah dijawab dengan memuaskan. <input type="checkbox"/> Saya faham bahawa penyertaan saya adalah secara sukarela dan saya boleh menarik diri daripada tinjauan ini pada bila-bila masa tanpa memberi sebarang sebab. <input type="checkbox"/> Saya faham bahawa tinjauan ini melibatkan isu sensitif dan kemungkinan risiko dan faedah tinjauan ini. Saya dengan bebas memberikan persetujuan saya untuk mengambil bahagian. Saya faham bahawa saya mesti mengikuti arahan penyelidik yang berkaitan dengan penyertaan saya dalam tinjauan ini. <input type="checkbox"/> Saya faham bahawa penyelidik dan pihak berkuasa yang berkaitan mempunyai akses terus ke data saya untuk memastikan tinjauan ini dijalankan dengan betul, dan data dicatat dengan betul. Semua maklumat dan data peribadi akan dipastikan sult. <input type="checkbox"/> Saya akan menerima satu salinan maklumat tinjauan/borang persetujuan responden ini yang telah ditandatangani dan bertarikh. 																										
<p>Responden: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan / Cop Ibu Jari Kiri: _____</p> <p>Penyelidik yang mengendalikan proses menandatangani borang keizinan: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p> <p>Saksi tidak berpihak/adil: (Diperlukan; jika responden adalah buta huruf dan kandungan risalah maklumat disampaikan secara lisan kepada responden): No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p>																										
<p>SALINAN PENYELIDIK</p> <p>ID: <table style="margin-left: auto; margin-right: auto; border: none;"> <tr> <td><input type="checkbox"/></td> </tr> <tr> <td>Negeri</td> <td>DP</td> <td>DB</td> <td>BP</td> <td>Strata</td> <td>TK</td> <td>Isi Rumah</td> <td>Individu</td> </tr> </table></p> <p>BORANG PERSETUJUAN RESPONDEN</p> <p>Tajuk : Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS) MCH Penyelidik Utama : Dr. Mohd Shaiful Azlan Bin Kassim, Institut Kesihatan Umum, Kementerian Kesihatan Malaysia</p> <p><i>Sila tandakan ✓ di dalam kotak.</i></p> <p>Dengan menandatangani borang ini, saya mengesahkan bahawa:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Saya telah diberi maklumat tentang tinjauan di atas secara lisan dan bertulis dan saya telah membaca dan memahami segala maklumat yang diberikan di dalam risalah ini. <input type="checkbox"/> Saya mempunyai masa yang secukupnya untuk mempertimbangkan penyertaan saya dalam tinjauan ini dan telah diberi peluang untuk bertanyakan soalan dan semua soalan saya telah dijawab dengan memuaskan. <input type="checkbox"/> Saya faham bahawa penyertaan saya adalah secara sukarela dan saya boleh menarik diri daripada tinjauan ini pada bila-bila masa tanpa memberi sebarang sebab. <input type="checkbox"/> Saya faham bahawa tinjauan ini melibatkan isu sensitif dan kemungkinan risiko dan faedah tinjauan ini. Saya dengan bebas memberikan persetujuan saya untuk mengambil bahagian. Saya faham bahawa saya mesti mengikuti arahan penyelidik yang berkaitan dengan penyertaan saya dalam tinjauan ini. <input type="checkbox"/> Saya faham bahawa penyelidik dan pihak berkuasa yang berkaitan mempunyai akses terus ke data saya untuk memastikan tinjauan ini dijalankan dengan betul, dan data dicatat dengan betul. Semua maklumat dan data peribadi akan dipastikan sult. <input type="checkbox"/> Saya akan menerima satu salinan maklumat tinjauan/borang persetujuan responden ini yang telah ditandatangani dan bertarikh. <p>Responden: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan / Cop Ibu Jari Kiri: _____</p> <p>Penyelidik yang mengendalikan proses menandatangani borang keizinan: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p> <p>Saksi tidak berpihak/adil: (Diperlukan; jika responden adalah buta huruf dan kandungan risalah maklumat disampaikan secara lisan kepada responden): No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p>											<input type="checkbox"/>	Negeri	DP	DB	BP	Strata	TK	Isi Rumah	Individu							
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																			
Negeri	DP	DB	BP	Strata	TK	Isi Rumah	Individu																			

B. FORM A: PARENT/GUARDIAN INFORMATION SHEET

FORM A: PARENT / GUARDIAN INFORMATION SHEET

1. Title of study:

National Health and Morbidity Survey (NHMS): Maternal and Child Health (MCH).

2. Name of Investigator and institution:

Principal Investigator: Dr. Mohd Shaiful Azlan Bin Kassim, Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia.

Co-Principal Investigator: Dr. Suhaila binti Abdul Ghaffar, Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia

3. Name of sponsor:

Ministry of Health, Malaysia.

4. Introduction:

The Ministry of Health is conducting a National Health and Morbidity Survey (NHMS) MCH focusing on maternal and child health. This leaflet will explain the details of this survey. It is important for you to understand why the survey is being done and what your child will be involved. Please take your time to read through and consider this information carefully before you give consent for your child to participate in this survey. If you have any questions or need more information, you can ask any team member of this survey. Once you understand the survey information and you wish to allow your child to participate, you must sign **Form A: Parent / Guardian Consent Form** which is included on the last page of this information sheet. Your child's participation is voluntary and may withdraw at any time. You may opt to not answer any of the questions or withdraw if you choose to do so. Your refusal to participate or withdrawal will not affect your existing rights to any medical or health care. In the event that should require termination of the overall study, the existing data captured will be analyzed and the result will be published. This study is fully sponsored by the Ministry of Health Malaysia and has been approved by the Medical Research and Ethics Committee, Ministry of Health Malaysia.

5. What is the purpose of the survey?

The purpose of this study is to obtain information on the health status of mothers and children in Malaysia including women of reproductive age of 15 to 49 years old. The collected information will be reviewed and evaluated in order to improve the health service especially to the mothers and children in our country.

6. What will happen if I decide to let my child takes part?

You will need to sign the **Form A: Parent/Guardian Consent Form**. Before collecting data, you will be explained in detail on the data collection procedure. This survey will include:

a) Face-to-face interview:

- To give feedback/respond during the face-to-face interview session for modules on maternal and child health issues on behalf of children under your care.
- Interview session is estimated to take around 20 – 30 minutes.

b) Anthropometry measurement:

- Measurement of height, length (for child under 2 years old) and weight.

7. What are my responsibilities when allowing my child taking part in this survey?

It is important that every participant to follow the instruction which has been given by the survey team. Participant is also reminded to answer the questions honestly and completely. Any doubt or enquiries can be addressed to the Principal Investigator or survey team in each site. Participation in this survey will definitely not incur any cost to you.

8. What are the potential risks and side effects of being in this survey?

There is no risk if you participate in the face-to-face interview in this survey. All information and answers we receive from you are treated **CONFIDENTIAL**. The information will be kept safe and will not be shared with others including your family members or friends. We will ensure your privacy and confidentiality. Your honesty in answering all these questions is greatly appreciated.

9. What are the benefits of being in this survey?

There will be no immediate health benefits if you take part in this survey. However, the information obtained from this study will help the policy making and planning towards improving health services and maternal and child health program for mothers and children in the country.

10. Who is funding this study?

This study is funded by research grant from the Ministry of Health Malaysia. We appreciate your time spent on this study. There is no monetary incentive for participating in this study but a token of appreciation will be given to all participants who take part in this study.

11. Will my child's study information be kept private?

All your child's information obtained in this study will be kept and handled in a confidential manner, in accordance with applicable laws and/or regulations. Your child's identity as a participant in the study is strictly confidential. All information available in the study records will always be kept confidential and used only for research purposes. When publishing or presenting the study results, your child's identity will not be revealed without your expressed consent. Individuals involved in this study and in your medical care, qualified monitors and auditors, the sponsor or its affiliates and governmental or regulatory authorities may inspect and copy your child's study information, where appropriate and necessary. Only you and the survey team involved will gain all the result and it will be distributed in a confidential manner.

12. Who should I call if I have questions?

If you have any enquiries or further information about this study, please contact Principal Investigator, Dr. Mohd Shaiful Azlan Bin Kassim, from Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia, No 1, Jalan Setia Murni U13/52, Seksyen U13 Setia Alam, 40170, Shah Alam, Selangor at 03-33628798/8702. You may also visit our website at <http://www.iku.gov.my> to view developments on this research project.

If you have any questions regarding your rights as a respondent in this survey, please contact:

**Medical Research & Ethics Committee,
Ministry of Health Malaysia,
Kompleks Institut Kesihatan Negara (NIH),
No 1, Jalan Setia Murni U13/52, Seksyen U13 Setia Alam, 40170, Shah Alam,
No. Tel: 03-33628407/8205/8888**

BORANG A: RISALAH MAKLUMAT IBU BAPA/ PENJAGA

1. Tajuk:

Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS): Kesihatan Ibu dan Anak (MCH).

2. Nama Penyelidik Utama dan Institusi:

Dr. Mohd Shaiful Azlan bin Kassim, Institut Kesihatan Umum, Institut Kesihatan Negara, Kementerian Kesihatan Malaysia.

Penyelidik bersama: Dr. Suhaila binti Abdul Ghaffar, Institut Kesihatan Umum, Institut Kesihatan Negara, Kementerian Kesihatan Malaysia.

3. Nama Penaja:

Kementerian Kesihatan Malaysia.

4. Pengenalan:

Kementerian Kesihatan Malaysia sedang menjalankan Tinjauan Kebangsaan Kesihatan dan Morbiditi MCH dengan memberi tumpuan kepada kesihatan ibu dan anak. Risalah ini akan menerangkan perincian tinjauan ini. Adalah penting untuk anda memahami tujuan tinjauan ini dilakukan dan apa yang akan terlibat. Sila ambil masa yang secukupnya untuk membaca dengan teliti penerangan yang diberi sebelum anda bersetuju untuk menyertai tinjauan ini. Jika anda mempunyai sebarang kemusyikan ataupun memerlukan maklumat lanjut, anda boleh bertanya dengan mana-mana ahli kumpulan tinjauan ini. Setelah anda memahami maklumat tinjauan ini dan anda ingin memberi keizinan untuk anak anda mengambil bahagian, anda perlu menandatangani **Borang A: Persetujuan Ibu bapa/ Penjaga** yang disertakan pada muka surat terakhir risalah ini. Penyertaan anak anda dalam tinjauan ini adalah secara sukarela dan anak anda boleh menarik diri pada bila-bila masa. Anak anda boleh memilih untuk tidak menjawab mana-mana soalan atau menarik diri dari pemeriksaan yang disebutkan sekiranya tidak setuju. Keengganan anak anda untuk mengambil bahagian, atau penarikan diri anak anda tidak akan menjelaskan sebarang manfaat perubatan atau kesihatan yang disediakan. Sekiranya tinjauan ini perlu diberhentikan atas sebab yang tidak dapat dielakkan, data sedia ada yang telah dikumpulkan akan dianalisis dan hasilnya akan diterbitkan. Tinjauan ini ditaja sepenuhnya oleh Kementerian Kesihatan Malaysia dan telah mendapat kelulusan Jawatankuasa Etika dan Penyelidikan Perubatan, Kementerian Kesihatan Malaysia.

5. Apakah tujuan tinjauan ini dilakukan?

Tujuan tinjauan ini dijalankan adalah untuk memperolehi maklumat berkaitan dengan status kesihatan ibu dan anak serta wanita dalam golongan umur reproduktif berumur 15 hingga 49 tahun di Malaysia. Maklumat yang diperolehi dapat meningkatkan lagi taraf perkhidmatan kesihatan untuk ibu dan anak yang sedia ada.

6. Apakah yang perlu saya lalui/lakukan sekiranya bersetuju untuk menyertai tinjauan ini?

Anda perlu menandatangani **Borang A: Persetujuan Ibu bapa/ Penjaga**. Anda juga akan dijelaskan secara terperinci mengenai prosedur yang perlu dipatuhi sebelum pengumpulan data. Tinjauan ini akan meliputi:

a) Temuramah secara bersemuka:

- Memberi maklum balas untuk modul mengenai isu kesihatan ibu dan anak bagi pihak anak di bawah jagaan anda semasa sesi temuramah bersemuka.
- Sesi temuramah dianggarkan akan mengambil masa selama 20 - 30 minit.

b) Pemeriksaan antropometri:

- Pemeriksaan tinggi, panjang (untuk kanak-kanak bawah 2 tahun), dan berat badan.

7. Apakah tanggungjawab saya sewaktu saya mengizinkan anak saya menyertai tinjauan ini?

Adalah penting untuk setiap peserta mengikuti arahan yang telah diberikan oleh ahli pasukan tinjauan. Peserta juga diingatkan untuk menjawab kesemua soalan yang ditanya oleh ahli tinjauan dengan jujur dan lengkap. Sebarang keraguan atau pertanyaan boleh diajukan kepada Penyelidik Utama atau ahli tinjauan di lapangan. Tiada sebarang perbelanjaan perlu dikeluarkan untuk menyertai tinjauan ini.

8. Apakah risiko dan kesan-kesan sampingan menyertai tinjauan ini?

Tiada apa-apa risiko jika anda menyertai sesi temuramah secara bersemuka dalam tinjauan ini. Soal selidik yang jawab sendiri mengandungi soalan yang agak sensitif dan peribadi tetapi semua maklumat dan jawapan yang diterima daripada anda adalah **SULIT**. Maklumat akan disimpan dengan selamat dan tidak akan dikongsi dengan orang lain termasuk ahli keluarga atau rakan anda. Kami akan memastikan privasi dan kerahsiaan anda. Kejujuran anda dalam menjawab semua soalan ini amat dihargai.

9. Apakah manfaatnya saya menyertai tinjauan ini?

Tiada faedah kesihatan segera jika anda mengambil bahagian dalam tinjauan ini. Walau bagaimapun, maklumat yang diperolehi daripada tinjauan ini akan membantu Kementerian Kesihatan Malaysia dalam meningkatkan kualiti perkhidmatan kesihatan dan program kesihatan bagi golongan ibu dan anak di negara ini.

10. Siapakah yang menyokong perbelanjaan untuk tinjauan ini?

Tinjauan ini dibayai oleh geran penyelidikan dari Kementerian Kesihatan Malaysia. Kami menghargai masa yang anda luangkan dalam tinjauan ini. Tidak ada insentif kewangan bagi penglibatan dalam tinjauan ini tetapi token (tuala) akan diberikan kepada setiap peserta yang mengambil bahagian dalam tinjauan ini sebagai tanda penghargaan.

11. Adakah maklumat perubatan anak saya akan dirahsiakan?

Semua maklumat anak anda yang diperolehi dalam tinjauan ini akan disimpan dan dikendalikan secara sulit, bersesuaian dengan peraturan-peraturan dan/atau undang-undang yang berkenaan. Sekiranya hasil tinjauan ini diterbitkan atau dibentangkan kepada orang awam, identiti anda tidak akan didedahkan tanpa kebenaran anda terlebih dahulu.

12. Siapakah yang perlu saya hubungi sekiranya saya mempunyai sebarang pertanyaan?

Sekiranya anda mempunyai sebarang soalan mengenai tinjauan ini atau memerlukan keterangan lanjut, tuan/puan boleh hubungi Penyelidik Utama, Dr. Mohd Shaiful Azlan Bin Kassim, Institut Kesihatan Umum, Institut Kesihatan Negara, Kementerian Kesihatan Malaysia di alamat Blok B5 & B6, No.1, Jalan Setia Murni U13/52, Seksyen U13, Setia Alam, 40170 Shah Alam, Selangor di talian 03-33628798/8702. Perkembangan tentang penyelidikan ini juga boleh didapati daripada laman sesawang rasmi Institut Kesihatan Umum <http://www.iku.gov.my>.

Jika anda mempunyai sebarang pertanyaan berkaitan dengan hak-hak anda sebagai responden dalam tinjauan ini, sila hubungi:

**Jawatankuasa Etika & Penyelidikan Perubatan,
Bahagian Dasar & Perancangan Penyelidikan,
Kementerian Kesihatan Malaysia,
Kompleks Institut Kesihatan Negara (NIH),
No 1, Jalan Setia Murni U13/52, Seksyen U13 Setia Alam, 40170, Shah Alam,
No. Tel: 03-33628407/8205/8888**

SALINAN RESPONDEN	BORANG A: PERSETUJUAN IBU BAPA/ PENJAGA									
<p>Tajuk : Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS) MCH Penyelidik Utama : Dr. Mohd Shaiful Azlan Bin Kassim, Institut Kesihatan Umum, Kementerian Kesihatan Malaysia</p> <p><i>Sila tandakan ✓ di dalam kotak.</i></p> <p>Dengan menandatangani borang ini, saya mengesahkan bahawa:</p> <p class="list-style-type: none; padding-left: 0;"> <input type="checkbox"/> Saya telah diberi maklumat tentang tinjauan di atas secara lisan dan bertulis dan saya telah membaca dan memahami segala maklumat yang diberikan di dalam risalah ini. <input type="checkbox"/> Saya mempunyai masa yang secukupnya untuk mempertimbangkan penyertaan anak saya dalam tinjauan ini dan telah diberi peluang untuk bertanyakan soalan dan semua soalan saya telah dijawab dengan memuaskan. <input type="checkbox"/> Saya faham bahawa penyertaan anak saya adalah secara sukarela dan anak saya boleh menarik diri daripada tinjauan ini pada bila-bila masa tanpa memberi sebarang sebab. <input type="checkbox"/> Saya faham bahawa tinjauan ini melibatkan isu sensitif dan kemungkinan risiko dan faedah tinjauan ini. Saya dengan bebas memberikan keizinan untuk anak saya mengambil bahagian dalam tinjauan ini. Saya faham bahawa anak saya mesti mengikuti arahan penyelidik yang berkaitan dengan penyertaan anak saya dalam tinjauan ini. <input type="checkbox"/> Saya faham bahawa penyelidik dan pihak berkuasa yang berkaitan mempunyai akses terus ke data anak saya untuk memastikan tinjauan ini dijalankan dengan betul, dan data dicatat dengan betul. Semua maklumat dan data peribadi akan dipastikan sult. <input type="checkbox"/> Saya akan menerima satu salinan maklumat tinjauan/borang persetujuan ibu bapa/penjaga ini yang telah ditandatangani dan bertarikh. </p>										
<p>Ibu bapa/Penjaga: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan / Cop Ibu Jari Kiri:</p> <p>Penyelidik yang mengendalikan proses menandatangani borang keizinan: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p> <p>Saksi tidak berpihak/adil: (Diperlukan; jika ibu bapa/penjaga adalah buta huruf dan kandungan risalah maklumat disampaikan secara lisan kepada ibu bapa/penjaga). No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p>										
<p>SALINAN PENYELIDIK</p> <p>ID: <input type="checkbox"/> <input type="checkbox"/></p> <p style="text-align: center;">Negeri DP DB BP Strata TK Isi Rumah Individu</p>										
BORANG A: PERSETUJUAN IBU BAPA/ PENJAGA										
<p>Tajuk : Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS) MCH Penyelidik Utama : Dr. Mohd Shaiful Azlan Bin Kassim, Institut Kesihatan Umum, Kementerian Kesihatan Malaysia</p> <p><i>Sila tandakan ✓ di dalam kotak.</i></p> <p>Dengan menandatangani borang ini, saya mengesahkan bahawa:</p> <p class="list-style-type: none; padding-left: 0;"> <input type="checkbox"/> Saya telah diberi maklumat tentang tinjauan di atas secara lisan dan bertulis dan saya telah membaca dan memahami segala maklumat yang diberikan di dalam risalah ini. <input type="checkbox"/> Saya mempunyai masa yang secukupnya untuk mempertimbangkan penyertaan anak saya dalam tinjauan ini dan telah diberi peluang untuk bertanyakan soalan dan semua soalan saya telah dijawab dengan memuaskan. <input type="checkbox"/> Saya faham bahawa penyertaan anak saya adalah secara sukarela dan anak saya boleh menarik diri daripada tinjauan ini pada bila-bila masa tanpa memberi sebarang sebab. <input type="checkbox"/> Saya faham bahawa tinjauan ini melibatkan isu sensitif dan kemungkinan risiko dan faedah tinjauan ini. Saya dengan bebas memberikan keizinan untuk anak saya mengambil bahagian dalam tinjauan ini. Saya faham bahawa anak saya mesti mengikuti arahan penyelidik yang berkaitan dengan penyertaan anak saya dalam tinjauan ini. <input type="checkbox"/> Saya faham bahawa penyelidik dan pihak berkuasa yang berkaitan mempunyai akses terus ke data anak saya untuk memastikan tinjauan ini dijalankan dengan betul, dan data dicatat dengan betul. Semua maklumat dan data peribadi akan dipastikan sult. <input type="checkbox"/> Saya akan menerima satu salinan maklumat tinjauan/borang persetujuan ibu bapa/penjaga ini yang telah ditandatangani dan bertarikh. </p>										
<p>Ibu bapa/Penjaga: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan / Cop Ibu Jari Kiri:</p> <p>Penyelidik yang mengendalikan proses menandatangani borang keizinan: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p> <p>Saksi tidak berpihak/adil: (Diperlukan; jika ibu bapa/penjaga adalah buta huruf dan kandungan risalah maklumat disampaikan secara lisan kepada ibu bapa/penjaga). No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p>										

C. ASSENT FORM
PARTICIPANT INFORMATION SHEET (15 – 17 YEARS OLD)

PARTICIPANT INFORMATION SHEET (15 - 17 YEARS OLD)

1. Title of study:

National Health and Morbidity Survey (NHMS): Maternal and Child Health (MCH).

2. Name of Investigator and institution:

Principal Investigator: Dr. Mohd Shaiful Azlan Bin Kassim, Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia.

Co-Principal Investigator: Dr. Suhaila binti Abdul Ghaffar, Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia.

3. Name of sponsor:

Ministry of Health, Malaysia.

4. Introduction:

The Ministry of Health is conducting a National Health and Morbidity Survey (NHMS) MCH focusing on maternal and child health. This leaflet will explain the details of this survey. It is important for you to understand why the survey is being done and what will be involved. Please take your time to read through and consider this information carefully before you decide if you are willing to participate. If you have any questions or need more information, you can ask any team member of this survey. Once you understand the survey information and you wish to participate, you must sign a **Assent Form (15-17 years old)** which is included on the last page of this information sheet. Your participation is voluntary and you may withdraw at any time. You may opt to not answer any of the questions or withdraw if you choose to do so. Your refusal to participate or withdrawal will not affect your existing rights to any medical or health care. In the event that should require termination of the overall study, the existing data captured will be analyzed and the result will be published. This study is fully sponsored by the Ministry of Health Malaysia and has been approved by the Medical Research and Ethics Committee, Ministry of Health Malaysia.

5. What is the purpose of the survey?

The purpose of this study is to obtain information on the health status of mothers and children in Malaysia including women of reproductive age (15-49 years). The collected information will be reviewed and evaluated in order to improve the health service especially to the mothers and children in our country.

6. What will happen if I decide to take part?

You will need to sign the **Assent Form**. Before collecting data, you will be explained in detail on the data collection procedure. This survey will include:

a) Face-to-face interview:

- To give feedback/ respond during the face-to-face interview session for modules on women reproductive health issues.
- Interview session is estimated to take around 20 – 30 minutes.

b) Self-Administered Questionnaires (SAQ):

- The SAQ questionnaires will ask about sensitive information.
- SAQ is estimated to take around 5 – 10 minutes.

7. What are my responsibilities when taking part in this survey?

It is important that every participant to follow the instruction which has been given by the survey team. Participant is also reminded to answer the questions honestly and completely. Any doubt or enquiries can be addressed to the Principal Investigator or survey team in each site. Participation in this survey will definitely not incur any cost to you.

8. What are the potential risks and side effects of being in this survey?

There is no risk if you participate in the face-to-face interview in this survey. All information and answers we receive from you are treated **CONFIDENTIAL**. The information will be kept safe and will not be shared with others including your family members or friends. We will ensure your privacy and confidentiality. Your honesty in answering all these questions is greatly appreciated. If participants face any problems relating to this study during the data collection period, participants are advised to report it to the survey team.

9. What are the benefits of being in this survey?

There will be no immediate health benefits if you take part in this survey. However, the information obtained from this study will help the policy making and planning towards improving health services for women of reproductive age (15-49 years) in the country.

10. Who is funding this study?

This study is funded by research grant from the Ministry of Health Malaysia. We appreciate your time spent on this study. There is no monetary incentive for participating in this study but a token of appreciation will be given to all participants who take part in this study.

11. Will my study information be kept private?

All your information obtained in this study will be kept and handled in a confidential manner, in accordance with applicable laws and/or regulations. Your identity as a participant in the study is strictly confidential. All information available in the study records will always be kept confidential and used only for research purposes. When publishing or presenting the study results, your identity will not be revealed without your expressed consent. Individuals involved in this study and in your medical care, qualified monitors and auditors, the sponsor or its affiliates and governmental or regulatory authorities may inspect and copy your study information, where appropriate and necessary. Only you and the study team involved will gain all the result and it will be distributed in a confidential manner.

12. Who should I call if I have questions?

If you have any enquiries or further information about this study, please contact Principal Investigator, Dr. Mohd Shaiful Azlan Bin Kassim, from Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia, No 1, Jalan Setia Murni U13/52, Seksyen U13 Setia Alam, 40170, Shah Alam, Selangor at 03-33628798/8702. You may also visit our website at <http://www.iku.gov.my> to view developments on this research project.

If you have any questions regarding your rights as a respondent in this survey, please contact:

Medical Research & Ethics Committee,
Ministry of Health Malaysia,
Kompleks Institut Kesihatan Negara (NIH),
No 1, Jalan Setia Murni U13/52, Seksyen U13 Setia Alam, 40170, Shah Alam,
No. Tel: 03-33628407/8205/8888

<p>RESPONDENT'S COPY</p> <p align="center">ASSENT FORM (15 – 17 YEARS OLD)</p> <p>Title : National Health and Morbidity Survey (NHMS) MCH Principal Investigator : Dr. Mohd Shaiful Azlan Bin Kassim, Institute for Public Health, Ministry of Health Malaysia</p> <p>Mark ✓ in the box.</p> <p>By signing below, I certify that:</p> <ul style="list-style-type: none"> <input type="checkbox"/> I have been given information about the survey both verbally and in print, and I have read and understand all the information provided in this brochure, <input type="checkbox"/> I have had sufficient time to consider my application in this survey and was given the opportunity to ask questions and all my questions have been answered satisfactorily. <input type="checkbox"/> I understand that my participation is voluntary and I may withdraw from this survey at any time without giving any reason. <input type="checkbox"/> I understand that this survey involves very sensitive issues and the possible risks and benefit of this survey. I freely give my informed consent to participate. I understand that I must follow the researchers' instructions associated with my participation in this survey. <input type="checkbox"/> I understand that the researchers and the relevant authorities have direct access to my data in conducting the survey. All personal information and data will be ensured confidential. <input type="checkbox"/> I will receive a copy of the subject information / informed consent form that was signed and dated. <p>Respondent: _____ I/C No : _____ Name : _____</p> <p>Signature / Left thumb print: _____ Date : _____</p> <p>Researcher coordinating the process of signing the assent form: _____ I/C No : _____ Name : _____</p> <p>Signature: _____ Date : _____</p> <p>Witness Parent/ Guardian _____ I/C No : _____ Name : _____</p> <p>Signature: _____ Date : _____</p> <hr/> <p>RESPONDENT'S COPY</p> <p>ID: <input type="checkbox"/> Negeri <input type="checkbox"/> DP <input type="checkbox"/> DB <input type="checkbox"/> BP <input type="checkbox"/> Strata <input type="checkbox"/> TK <input type="checkbox"/> Isi Rumah <input type="checkbox"/> Individu</p> <p align="center">ASSENT FORM (15 – 17 YEARS OLD)</p> <p>Title : National Health and Morbidity Survey (NHMS) MCH Principal Investigator : Dr. Mohd Shaiful Azlan Bin Kassim, Institute for Public Health, Ministry of Health Malaysia</p> <p>Mark ✓ in the box.</p> <p>By signing below, I certify that:</p> <ul style="list-style-type: none"> <input type="checkbox"/> I have been given information about the survey both verbally and in print, and I have read and understand all the information provided in this brochure, <input type="checkbox"/> I have had sufficient time to consider my application in this survey and was given the opportunity to ask questions and all my questions have been answered satisfactorily. <input type="checkbox"/> I understand that my participation is voluntary and I may withdraw from this survey at any time without giving any reason. <input type="checkbox"/> I understand that this survey involves very sensitive issues and the possible risks and benefit of this survey. I freely give my informed consent to participate. I understand that I must follow the researchers' instructions associated with my participation in this survey. <input type="checkbox"/> I understand that the researchers and the relevant authorities have direct access to my data in conducting the survey. All personal information and data will be ensured confidential. <input type="checkbox"/> I will receive a copy of the subject information / informed consent form that was signed and dated. <p>Respondent: _____ I/C No : _____ Name : _____</p> <p>Signature / Left thumb print: _____ Date : _____</p> <p>Researcher coordinating the process of signing the assent form: _____ I/C No : _____ Name : _____</p> <p>Signature: _____ Date : _____</p> <p>Witness Parent/ Guardian _____ I/C No : _____ Name : _____</p> <p>Signature: _____ Date : _____</p>

RISALAH MAKLUMAT (15 - 17 TAHUN)

1. Tajuk:

Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS): Kesihatan Ibu dan Anak (MCH).

2. Nama Penyelidik Utama dan Institusi:

Dr. Mohd Shaiful Azlan Bin Kassim, Institut Kesihatan Umum, Institut Kesihatan Negara, Kementerian Kesihatan Malaysia.

Penyelidik bersama: Dr. Suhaila binti Abdul Ghaffar, Institut Kesihatan Umum, Institut Kesihatan Negara, Kementerian Kesihatan Malaysia.

3. Nama Penaja:

Kementerian Kesihatan Malaysia

4. Pengenalan:

Kementerian Kesihatan Malaysia sedang menjalankan Tinjauan Kebangsaan Kesihatan dan Morbiditi MCH dengan memberi tumpuan kepada kesihatan ibu dan anak. Risalah ini akan menerangkan perincian tinjauan ini. Adalah penting untuk anda memahami tujuan tinjauan ini dilakukan dan apa yang akan terlibat. Sila ambil masa yang secukupnya untuk membaca dengan teliti penerangan yang diberi sebelum anda bersetuju untuk menyertai tinjauan ini. Jika anda mempunyai sebarang kemasukan atau apur merlukan maklumat lanjut, anda boleh bertanya dengan mana-mana ahli kumpulan tinjauan ini. Setelah anda memahami maklumat tinjauan ini dan ingin mengambil bahagian, anda perlu menandatangani **Borang Persetujuan** yang disertakan pada muka surat terakhir risalah ini. Penyertaan anda dalam tinjauan ini adalah secara sukarela dan anda boleh menarik diri pada bila-bila masa. Anda boleh memilih untuk tidak menjawab mana-mana soalan atau menarik diri dari pemeriksaan yang disebutkan sekiranya tidak setuju. Keingganan anda untuk mengambil bahagian, atau penarikan diri anda tidak akan menjasakan sebarang manfaat perubatan atau kesihatan yang disediakan. Sekiranya tinjauan ini perlu diberhentikan atas sebab yang tidak dapat dielakkkan, data yang sedia ada yang telah dikumpulkan akan dianalisis dan hasilnya akan diterbitkan. Tinjauan ini ditaja sepenuhnya oleh Kementerian Kesihatan Malaysia dan telah mendapat kelulusan Jawatankuasa Etika dan Penyelidikan Perubatan, Kementerian Kesihatan Malaysia.

5. Apakah tujuan tinjauan ini dilakukan?

Tujuan tinjauan ini dijalankan adalah untuk memperolehi maklumat berkaitan dengan status kesihatan ibu dan kanak-kanak serta wanita dalam golongan umur reproduktif berumur 15 hingga 49 tahun di Malaysia. Maklumat yang diperolehi dapat meningkatkan lagi taraf perkhidmatan kesihatan untuk ibu dan anak yang sedia ada.

6. Apakah yang perlu saya lalui/lakukan sekiranya bersetuju untuk menyertai tinjauan ini?

Anda perlu menandatangani **Borang Persetujuan**. Anda juga akan dijelaskan secara terperinci mengenai prosedur yang perlu dipatuhi sebelum pengumpulan data. Tinjauan ini akan meliputi:

a) Temuramah secara bersemuka:

- Memberi maklum balas untuk modul mengenai isu kesihatan reproduktif wanita semasa sesi temuramah bersemuka.
- Sesi temuramah dianggarkan akan mengambil masa selama 20 - 30 minit.

b) Soal selidik dijawab sendiri:

- Borang soal selidik yang perlu dijawab sendiri akan bertanya mengenai isu sensitif seperti kesihatan mental.
- Soal selidik dijawab sendiri dianggarkan akan mengambil masa selama 5 - 10 minit.

7. Apakah tanggungjawab saya sewaktu menyertai tinjauan ini?

Adalah penting untuk anda mengikuti arahan yang telah diberikan oleh pasukan tinjauan. Anda juga diingatkan untuk menjawab kesemua soalan yang ditanya oleh ahli tinjauan dengan jujur dan lengkap. Sebarang keraguan atau pertanyaan boleh diajukan kepada Penyelidik Utama atau ahli tinjauan di lapangan. Tiada sebarang perbelanjaan perlu dikeluarkan untuk menyertai tinjauan ini.

8. Apakah risiko dan kesan-kesan sampingan menyertai tinjauan ini?

Tiada apa-apa risiko jika anda menyertai sesi temuramah secara bersemuka dalam tinjauan ini. Soal selidik yang dijawab sendiri mengandungi soalan yang agak sensitif dan peribadi tetapi semua maklumat dan jawapan yang diterima daripada anda adalah **SULIT**. Maklumat akan disimpan dengan selamat dan tidak akan dikongsi dengan orang lain termasuk ahli keluarga atau rakan anda. Kami akan memastikan privasi dan kerahsiaan anda. Kejujuran anda dalam menjawab semua soalan ini amat dihargai. Sekiranya anda menghadapi sebarang masalah yang berkaitan dengan tinjauan ini dalam tempoh pengumpulan data, anda disarankan untuk melaporkannya kepada pengumpul data.

9. Apakah manfaatnya saya menyertai tinjauan ini?

Tiada faedah kesihatan segera jika anda mengambil bahagian dalam tinjauan ini. Walau bagaimanapun, maklumat yang diperolehi daripada tinjauan ini akan membantu Kementerian Kesihatan Malaysia dalam meningkatkan kualiti perkhidmatan kesihatan dan program kesihatan bagi golongan ibu dan anak di negara ini.

10. Siapakah yang menyokong perbelanjaan untuk tinjauan ini?

Tinjauan ini dibayai oleh geran penyelidikan dari Kementerian Kesihatan Malaysia. Kami menghargai masa yang anda luangkan dalam tinjauan ini. Tidak ada insentif kewangan bagi penglibatan dalam tinjauan ini tetapi token (tuala) akan diberikan kepada setiap peserta yang mengambil bahagian dalam tinjauan ini sebagai tanda penghargaan.

11. Adakah maklumat perubatan saya akan dirahsiakan?

Segala maklumat anda yang diperolehi dalam tinjauan ini akan disimpan dan dikendalikan secara sulit, bersetujuan dengan peraturan-peraturan dan/atau undang-undang yang berkenaan. Sekiranya hasil tinjauan ini diterbitkan atau dibentangkan kepada orang awam, identiti anda tidak akan didedahkan tanpa kebenaran anda terlebih dahulu.

12. Siapakah yang perlu saya hubungi sekiranya saya mempunyai sebarang pertanyaan?

Sekiranya anda mempunyai sebarang soalan mengenai tinjauan ini atau memerlukan keterangan lanjut, tuan/puan boleh hubungi Penyelidik Utama, Dr. Mohd Shafiful Azlan Bin Kassim, Institut Kesihatan Umum, Institut Kesihatan Negara, Kementerian Kesihatan Malaysia di alamat Blok B5 & B6, No.1, Jalan Setia Murni U13/52, Seksyen U13, Setia Alam, 40170 Shah Alam, Selangor di talian 03-33628798/8702. Perkembangan tentang penyelidikan ini juga boleh didapati daripada laman sesawang rasmi Institut Kesihatan Umum <http://www.iku.gov.my>.

Jika anda mempunyai sebarang pertanyaan berkaitan dengan hak-hak anda sebagai responden dalam tinjauan ini, sila hubungi:

**Jawatankuasa Etika & Penyelidikan Perubatan,
Bahagian Dasar & Perancangan Penyelidikan,
Kementerian Kesihatan Malaysia,
Kompleks Institut Kesihatan Negara (NIH),
No 1, Jalan Setia Murni U13/52, Seksyen U13 Setia Alam, 40170, Shah Alam,
No. Tel: 03-33628407/8205/8888**

	<p>SALINAN RESPONDEN</p> <p align="center">BORANG PERSETUJUAN (15-17 TAHUN)</p> <p>Tajuk : Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS) MCH Penyelidik Utama : Dr. Mohd Shaiful Azlan Bin Kassim, Institut Kesihatan Umum, Kementerian Kesihatan Malaysia</p> <p><i>Sila tandakan ✓ di dalam kotak.</i></p> <p>Dengan menandatangani borang ini, saya mengesahkan bahawa:</p> <p class="list-item-l1"><input type="checkbox"/> Saya telah diberi maklumat tentang tinjauan di atas secara lisan dan bertulis dan saya telah membaca dan memahami segala maklumat yang diberikan di dalam risalah ini.</p> <p class="list-item-l1"><input type="checkbox"/> Saya mempunyai masa yang secukupnya untuk mempertimbangkan penyertaan saya dalam tinjauan ini dan telah diberi peluang untuk bertanyakan soalan dan semua soalan saya telah dijawab dengan memuaskan.</p> <p class="list-item-l1"><input type="checkbox"/> Saya faham bahawa penyertaan saya adalah secara sukarela dan saya boleh menarik diri daripada tinjauan ini pada bila-bila masa tanpa memberi sebarang sebab.</p> <p class="list-item-l1"><input type="checkbox"/> Saya faham bahawa tinjauan ini melibatkan isu sensitif dan kemungkinan risiko dan faedah tinjauan ini. Saya dengan bebas memberikan persetujuan saya untuk mengambil bahagian. Saya faham bahawa saya mesti mengikuti arahan penyelidik yang berkaitan dengan penyertaan saya dalam tinjauan ini.</p> <p class="list-item-l1"><input type="checkbox"/> Saya faham bahawa penyelidik dan pihak berkuasa yang berkaitan mempunyai akses terus ke data saya untuk memastikan tinjauan ini dijalankan dengan betul, dan data dicatat dengan betul. Semua maklumat dan data peribadi akan dipastikan sult.</p> <p class="list-item-l1"><input type="checkbox"/> Saya akan menerima satu salinan maklumat tinjauan/borang persetujuan responden ini yang telah ditandatangani dan bertarikh.</p> <p>Responden: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan / Cop Ibu Jari Kiri: _____</p> <p>Penyelidik yang mengendalikan proses menandatangani borang keizinan: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p> <p>Saksi (Ibu bapa / Penjaga): No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p> <hr/> <p>SALINAN PENYELIDIK</p> <p>ID: <table style="margin-left: auto; margin-right: auto;"><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td>Negeri</td><td>DP</td><td>DB</td><td>BP</td><td>Strata</td><td>TK</td><td>Isi Rumah</td><td>Individu</td></tr></table></p> <p align="center">BORANG PERSETUJUAN (15-17 TAHUN)</p> <p>Tajuk : Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS) MCH Penyelidik Utama : Dr. Mohd Shaiful Azlan Bin Kassim, Institut Kesihatan Umum, Kementerian Kesihatan Malaysia</p> <p><i>Sila tandakan ✓ di dalam kotak.</i></p> <p>Dengan menandatangani borang ini, saya mengesahkan bahawa:</p> <p class="list-item-l1"><input type="checkbox"/> Saya telah diberi maklumat tentang tinjauan di atas secara lisan dan bertulis dan saya telah membaca dan memahami segala maklumat yang diberikan di dalam risalah ini.</p> <p class="list-item-l1"><input type="checkbox"/> Saya mempunyai masa yang secukupnya untuk mempertimbangkan penyertaan saya dalam tinjauan ini dan telah diberi peluang untuk bertanyakan soalan dan semua soalan saya telah dijawab dengan memuaskan.</p> <p class="list-item-l1"><input type="checkbox"/> Saya faham bahawa penyertaan saya adalah secara sukarela dan saya boleh menarik diri daripada tinjauan ini pada bila-bila masa tanpa memberi sebarang sebab.</p> <p class="list-item-l1"><input type="checkbox"/> Saya faham bahawa tinjauan ini melibatkan isu sensitif dan kemungkinan risiko dan faedah tinjauan ini. Saya dengan bebas memberikan persetujuan saya untuk mengambil bahagian. Saya faham bahawa saya mesti mengikuti arahan penyelidik yang berkaitan dengan penyertaan saya dalam tinjauan ini.</p> <p class="list-item-l1"><input type="checkbox"/> Saya faham bahawa penyelidik dan pihak berkuasa yang berkaitan mempunyai akses terus ke data saya untuk memastikan tinjauan ini dijalankan dengan betul, dan data dicatat dengan betul. Semua maklumat dan data peribadi akan dipastikan sult.</p> <p class="list-item-l1"><input type="checkbox"/> Saya akan menerima satu salinan maklumat tinjauan/borang persetujuan responden ini yang telah ditandatangani dan bertarikh.</p> <p>Responden: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan / Cop Ibu Jari Kiri: _____</p> <p>Penyelidik yang mengendalikan proses menandatangani borang keizinan: No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p> <p>Saksi (Ibu bapa / Penjaga): No. K/P : _____ Nama : _____ Tarikh : _____</p> <p>Tandatangan: _____</p>	<input type="checkbox"/>	Negeri	DP	DB	BP	Strata	TK	Isi Rumah	Individu															
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
Negeri	DP	DB	BP	Strata	TK	Isi Rumah	Individu																		

D. QUESTIONNAIRES

TINJAUAN KEBANGSAAN KESIHATAN DAN MORBIDITI (NHMS)
NATIONAL HEALTH AND MORBIDITY SURVEY (NHMS)

KESIHATAN IBU DAN ANAK
MATERNAL AND CHILD HEALTH (MCH)

BUKU SOAL SELIDIK
QUESTIONNAIRE BOOK

INSTITUT KESIHATAN UMUM
INSTITUTE FOR PUBLIC HEALTH

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Petikan:
Buku Soal Selidik. Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS): Kesihatan Ibu dan Anak (MCH).
Institut Kesihatan Umum, Institut Kesihatan Negara, Kementerian Kesihatan Malaysia.

Dicetak dan diedarkan oleh:

Tinjauan Kebangsaan Kesihatan dan Morbiditi (NHMS): Kesihatan Ibu dan Anak (MCH)
Institut Kesihatan Umum,
Institut Kesihatan Negara,
No. 1, Jalan Setia Murni U13/52,
Seksyen U13, Setia Alam,
40170 Shah Alam, Selangor.

Tel : 03-33627800/8702
Emel : nhms2021.iku@moh.gov.my

ISI KANDUNGAN

SEKSYEN	PERKARA	MUKA SURAT
Modul HH: Isi Rumah		
HH1	Sosiodemografi	4
HH2	Air dan Sanitasi	6
Modul MC: Ibu yang Mempunyai Anak Terakhir Di Bawah Umur 2 Tahun		
MCSD	Sosiodemografi	8
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MC3	Penjagaan Pra-Kehamilan	17
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CH1	Pemakanan Bayi dan Kanak-Kanak	27
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**TINJAUAN KESIHATAN
IBU & ANAK
MATERNAL & CHILD HEALTH SURVEY**

NHMS MCH



**MODUL HH
ISI RUMAH**
MODULE HH: HOUSEHOLD

(UNTUK DIISI OLEH PENEMU RAMAH)

ID:	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
	Negeri (2 digit)	DP & DB (2 digit) (3 digit)	BP (4 digit)	UB (3 digit)	TK (3 digit)	Strata (1 digit)	Isi Rumah & Individu (2 digit) (2 digit)

KEPUTUSAN TEMURAMAH <i>(sila tanda ✓ kotak yang berkenaan)</i>	BERJAYA	<input type="checkbox"/>
	TIDAK BERJAYA	<input type="checkbox"/>
	SEBAB-SEBAB TIDAK BERJAYA	
	ENGGAN JAWAB	<input type="checkbox"/>
	MASALAH BAHASA	<input type="checkbox"/>
	MASALAH KESIHATAN	<input type="checkbox"/>
	TIADA DI RUMAH	<input type="checkbox"/>

TARIKH TEMURAMAH	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
	Haribulan	Bulan	Tahun

MASA TEMURAMAH	MULA :	TAMAT :
	LATITUDE :	<input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

KOORDINAT LOKASI GEOGRAFI	LONGITUDE :	<input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
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SEKSYEN HH1: SOSIODEMOGRAFI / SOCIODEMOGRAPHY

Soalan untuk diisi oleh penemuramah: Pilih SATU jawapan sahaja.

HH1001	Siapakah yang telah menjawab borang soal selidik ini? <i>Who answered this questionnaire?</i>	1. Ahli isirumah sendiri / <i>Household member themselves</i> 2. Ahli isirumah dibantu oleh penterjemah (boleh jadi sesiapa sahaja) / <i>Household member aided by translator (can be anyone)</i> 3. Proksi (bagi pihak ahli isirumah) / <i>Proxy (for the household member)</i> 4. Proksi dengan bantuan penterjemah / <i>Proxy aided by translator</i>
HH1002	Siapakah nama anda? <i>What is your name?</i>	.....
HH1003	Apakah jantina anda? <i>What is your gender?</i>	1. Lelaki / <i>Male</i> 2. Perempuan / <i>Female</i>
HH1004	Bilakah tarikh lahir anda? <i>When is your birth date?</i>	<input type="text"/> <input type="text"/> D D <input type="text"/> <input type="text"/> M M <input type="text"/> <input type="text"/> Y Y <input type="text"/> <input type="text"/>

[PENEMURAMAH: Sekiranya 'TT' tuliskan '01' untuk hari '07' untuk bulan '9999' untuk tahun]

HH1005	Berapakah umur anda? <i>How old are you?</i>	<input type="text"/> <input type="text"/> Tahun Genap (-7) TT (-9) EJ
HH1006	Apakah bangsa anda? <i>What is your ethnicity?</i>	1. Melayu / <i>Malay</i> 2. Cina / <i>Chinese</i> 3. India / <i>Indian</i> 4. Orang Asli Semenanjung / <i>Aborigines</i> 5. Bumiputera Sabah / <i>Bumiputera of Sabah</i> , Sila nyatakan: <i>Please specify:</i> 6. Bumiputera Sarawak / <i>Bumiputera of Sarawak</i> , Sila nyatakan: <i>Please specify:</i> 7. Lain-lain / <i>Others</i> , Sila nyatakan / <i>Please specify:</i>
HH1007	Apakah taraf kewarganegaraan anda? <i>What is your citizenship status?</i>	1. Warganegara Malaysia / <i>Malaysian Citizen</i> 2. Permastautin tetap / <i>Permanent Resident of Malaysia</i> 3. Bukan warganegara Malaysia <i>Non-Malaysian Citizen</i> (-7) TT (-9) EJ
HH1008	Apakah taraf perkahwinan anda? <i>What is your marital status?</i>	1. Tidak pernah berkahwin / <i>Never married</i> 2. Berkahwin / <i>Married</i> 3. Berpisah / <i>Separated</i> 4. Janda / Duda / <i>Divorcee</i> 5. Balu / <i>Widow / Widower</i> 6. Tinggal bersama pasangan / <i>Living with partner</i> (-7) TT (-9) EJ

HH1009	<p>Apakah tahap pendidikan tertinggi anda? <i>What is your highest education level?</i></p>	<ol style="list-style-type: none"> 1. Tidak pernah bersekolah / <i>Never attended school</i> 2. Tidak habis sekolah rendah / <i>Did not complete primary school</i> 3. Tamat darjah 6 / <i>Completed standard 6</i> 4. Tamat tingkatan 3 / <i>Completed form 3</i> 5. Tamat tingkatan 5 / <i>Completed form 5</i> 6. Tamat tingkatan 6 / sijil / diploma / <i>Completed form 6 / certificate / diploma</i> 7. Tamat pengajian peringkat sarjana muda / <i>Completed Bachelor degree</i> 8. Tamat pengajian peringkat sarjana / <i>Completed Master degree</i> 9. Tamat pengajian peringkat kedoktoran (PhD) / <i>Completed Doctoral qualification (PhD)</i> 10. Lain-Lain / <i>Others</i>, Sila nyatakan / <i>Please specify:</i> (-7) TT (-9) EJ 												
HH1010	<p>Adakah anda ... <i>Are you a</i></p> <p>Pilih satu jawapan UTAMA sahaja. <i>Choose only one MAIN answer.</i></p>	<ol style="list-style-type: none"> 1. Majikan / <i>Employer</i> 2. Pekerja kerajaan / <i>Government employee</i> 3. Pekerja separa kerajaan / <i>Semi-government employee</i> 4. Pekerja swasta / <i>Private employee</i> 5. Bekerja sendiri / <i>Self-employed</i> 6. Pekerja tanpa gaji / <i>Unpaid worker</i> 7. Pekerja keluarga tanpa gaji/ Sururumah / <i>Unpaid family worker/ Housewife</i> 8. Lain-lain / <i>Others</i>, Sila nyatakan / <i>Please specify:</i> (-7) TT (-9) EJ 												
		<p>Berapakah purata pendapatan kasar bulanan anda, dari segi... <i>What is your average personal gross monthly income, in terms of...</i></p>												
HH1011	<p>Anggaran pendapatan isi rumah <i>Estimated household income</i></p>	<p>RM Sebulan / <i>Monthly</i></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> <td style="border: 1px solid black; width: 12.5%; height: 1.5em;"></td> </tr> </table> <p style="text-align: center;">Sekiranya TIADA pendapatan tuliskan '0'</p> <p style="text-align: right;">(-7) TT (-9) EJ</p>												

SEKSYEN HH2: AIR DAN SANITASI / WATER AND SANITATION

Arahan kepada penemuramah:

Sila lakukan perhatian bagi mengesahkan (verifikasi) maklumat yang diberikan oleh responden adalah betul. Contoh, sistem bekalan air terawat ada tetapi responden tidak menggunakaninya, maka responden sebenarnya menggunakan bekalan air tidak terawat.

Instruction for the interviewer:

Please observe to verify that the information given by the respondent is correct. For example, if there is treated water supply system but the respondent is not using it, therefore the respondent is actually use non treated water supply.

HH2001	Apakah punca utama air minum bagi isi rumah ini? <i>What is the main source of drinking water for this household?</i>	1. Sumber dirawat / <i>Treated source</i> 2. Sumber tidak dirawat / <i>Untreated source</i> (-7) TT (-9) EJ
HH2002	Apakah yang biasanya dilakukan untuk memastikan air tersebut lebih selamat untuk diminum? <i>What do you usually do to make the water safer to drink?</i> [Boleh pilih lebih daripada satu jawapan]	<input type="checkbox"/> Mendidihkan / <i>Boil</i> <input type="checkbox"/> Menggunakan penapis air (seramik, pasir, membrane penapis ultra atau RO, dsb.) / <i>Use a water filter (ceramic, sand, ultrafiltration membrane or RO, etc.)</i> <input type="checkbox"/> Lain-lain (nyatakan) / <i>Others (specify)</i> (-7) TT (-9) EJ
HH2003	Apakah cara utama pembuangan sampah di rumah anda? <i>What is the main method of disposing your household garbage?</i>	1. Dikutip oleh kerajaan tempatan / pihak pengurusan / <i>Collected by the local authority / management</i> 2. Ditanam di luar rumah / <i>Buried outside the house</i> 3. Dibakar di luar / <i>Open burning</i> 4. Dibuang ke dalam longkang, sungai atau laut atau merata-rata / <i>Thrown into the drain, river or sea or anywhere</i> 5. Pengurangan / Kitar semula / Guna semula / <i>Reduce / Recycle / Reuse (3R)</i> 6. Lain-lain (nyatakan) / <i>Others (specify)</i>
HH2004	Apakah jenis tandas yang biasanya digunakan oleh isi rumah ini? <i>What kind of toilet facility do members of your household usually use?</i>	1. Tandas sanitari / <i>Sanitary toilet</i> 2. Tandas tidak sanitari / <i>Unsanitary toilet</i> 3. Tiada kemudahan (cth: semak) / <i>No facility (eg: bush)</i> (-7) TT (-9) EJ

TAMAT MODUL HH

**TINJAUAN KESIHATAN
IBU & ANAK
MATERNAL & CHILD HEALTH SURVEY**

NHMS MCH



MODUL MC
**IBU YANG MEMPUNYAI
ANAK TERAKHIR DI
BAWAH UMUR 2 TAHUN**
MODULE MC: MOTHER WITH LAST CHILD BELOW 2 YEARS OLD

(UNTUK DIISI OLEH PENEMU RAMAH)

ID:	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
	Negeri (2 digit)	DP & DB (2 digit) (3 digit)	BP (4 digit)	UB (3 digit)	TK (3 digit)	Strata (1 digit)	Isi Rumah & Individu (2 digit) (2 digit)

KEPUTUSAN TEMURAMAH (sila tanda ✓ kotak yang berkenaan)	BERJAYA	<input type="checkbox"/>
	TIDAK BERJAYA	<input type="checkbox"/>
	SEBAB-SEBAB TIDAK BERJAYA	<input type="checkbox"/>
	ENGGAN JAWAB	<input type="checkbox"/>
	MASALAH BAHASA	<input type="checkbox"/>
	MASALAH KESIHATAN	<input type="checkbox"/>
	TIADA DI RUMAH	<input type="checkbox"/>

TARIKH TEMURAMAH	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
	Haribulan	Bulan	Tahun

MASA TEMURAMAH	MULA :	TAMAT :
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SEKSYEN MCSD: SOSIODEMOGRAFI / SOCIODEMOGRAPHY

Soalan untuk diisi oleh penemuramah: Pilih SATU jawapan sahaja.

MCSD01	Siapakah yang telah menjawab modul HH: Isirumah? <i>Who has answer module HH: Household?</i>	1. Saya yang menjawab....terus ke soalan MCSD11 <i>I answered it</i> 2. Pasangan saya yang menjawab <i>My partner answered it</i> 3. Lain-lain <i>Others</i>
MCSD02	Siapakah nama anda? <i>What is your name?</i>	.....
MCSD03	Apakah hubungan anda dengan... (nama ketua isirumah)? <i>What is your relationship to... (name of head of household)?</i>	1. Ketua isirumah / <i>Head of Household</i> 2. Suami atau isteri / <i>Spouse</i> 3. Ibubapa / <i>Parent</i> 4. Anak / <i>Child</i> 5. Datuk/nenek atau moyang / <i>Grand- or great-grandparent</i> 6. Cucu atau cicit / <i>Grand- or great-grandchild</i> 7. Adik-beradik / <i>Siblings</i> 8. Mertua / <i>Parent-in-law</i> 9. Menantu / <i>Son- or Daughter in-law</i> 10. Ipar-Duai / <i>Brother- or Sister-in-law</i> 11. Saudara-mara lain / <i>Other relatives</i> 12. Kawan / <i>Friend</i> 13. Pekerja (pembantu rumah, tukang kebun, pemandu, lain-lain) / <i>Workers (live-in housemaid, gardener, driver, others)</i> 14. Lain-lain / <i>Others:</i> Sila nyatakan / <i>Please specify:</i>
		(-7) TT (-9) EJ
MCSD04	Bilakah tarikh lahir anda? <i>When is your birth date?</i>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> D D M M <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Y Y Y Y
[PENEMURAMAH: Sekiranya 'TT' tuliskan '01' untuk hari '07' untuk bulan '9999' untuk tahun]		
MCSD05	Berapakah umur anda? <i>How old are you?</i>	<input type="text"/> <input type="text"/> Tahun Genap
		(-7) TT (-9) EJ
MCSD06	Apakah bangsa anda? <i>What is your ethnicity?</i>	1. Melayu / <i>Malay</i> 2. Cina / <i>Chinese</i> 3. India / <i>Indian</i> 4. Orang Asli Semenanjung / <i>Aborigines</i> 5. Bumiputera Sabah / <i>Bumiputera of Sabah</i> , Sila nyatakan: <i>Please specify:</i>
		6. Bumiputera Sarawak / <i>Bumiputera of Sarawak</i> , Sila nyatakan: <i>Please specify:</i>
		7. Lain-lain / <i>Others</i> , Sila nyatakan / <i>Please specify:</i>
		(-7) TT (-9) EJ
MCSD07	Apakah taraf kewarganegaraan anda? <i>What is your citizenship status?</i>	1. Warganegara Malaysia / <i>Malaysian Citizen</i> 2. Permaisuri tetap / <i>Permanent Resident of Malaysia</i> 3. Bukan warganegara Malaysia <i>Non-Malaysian Citizen</i>
		(-7) TT (-9) EJ

MCSD08	Apakah taraf perkahwinan anda? <i>What is your marital status?</i>	<ol style="list-style-type: none"> 1. Tidak pernah berkahwin / <i>Never married</i> 2. Berkahwin / <i>Married</i> 3. Berpisah / <i>Separated</i> 4. Janda / Duda / <i>Divorcee</i> 5. Balu / <i>Widow</i> / <i>Widower</i> 6. Tinggal bersama pasangan / <i>Living with partner</i> <p style="text-align: right;">(-7) TT (-9) EJ</p>																
MCSD09	Apakah tahap pendidikan tertinggi anda? <i>What is your highest education level?</i>	<ol style="list-style-type: none"> 1. Tidak pernah bersekolah / <i>Never attended school</i> 2. Tidak habis sekolah rendah / <i>Did not complete primary school</i> 3. Tamat darjah 6 / <i>Completed standard 6</i> 4. Tamat tingkatan 3 / <i>Completed form 3</i> 5. Tamat tingkatan 5 / <i>Completed form 5</i> 6. Tamat tingkatan 6 / sijil / diploma / <i>Completed form 6 / certificate / diploma</i> 7. Tamat pengajian peringkat sarjana muda / <i>Completed Bachelor degree</i> 8. Tamat pengajian peringkat sarjana / <i>Completed Master degree</i> 9. Tamat pengajian peringkat kedoktoran (PhD) / <i>Completed Doctoral qualification (PhD)</i> 10. Lain-Lain / <i>Others</i>, Sila nyatakan / <i>Please specify:</i> <p style="text-align: right;">(-7) TT (-9) EJ</p>																
MCSD10	Adakah anda ... <i>Are you a</i> Pilih satu jawapan UTAMA sahaja. <i>Choose only one MAIN answer.</i>	<ol style="list-style-type: none"> 1. Majikan / <i>Employer</i> 2. Pekerja kerajaan / <i>Government employee</i> 3. Pekerja separa kerajaan / <i>Semi-government employee</i> 4. Pekerja swasta / <i>Private employee</i> 5. Bekerja sendiri / <i>Self-employed</i> 6. Pekerja tanpa gaji / <i>Unpaid worker</i> 7. Pekerja keluarga tanpa gaji/ Surirumah / <i>Unpaid family worker/ Housewife</i> 8. Lain-lain / <i>Others</i>, Sila nyatakan / <i>Please specify:</i> <p style="text-align: right;">(-7) TT (-9) EJ</p>																
[Arahan: Sekiranya pasangan anda telah menjawab bagi modul HH: Isirumah, sila ke modul seterusnya]																		
MCSD11	Siapakah nama pasangan anda? <i>What is your partner's name?</i>																
MCSD12	Bilakah tarikh lahir pasangan anda? <i>When is your partner's birth date?</i>	<table style="margin-bottom: 5px;"> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>D</td> <td>D</td> <td>M</td> <td>M</td> </tr> </table> <table style="margin-bottom: 5px;"> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> </tr> <tr> <td>Y</td> <td>Y</td> <td>Y</td> <td>Y</td> </tr> </table> <p style="text-align: right;">(-7) TT (-9) EJ</p>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	D	D	M	M	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Y	Y	Y	Y
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>															
D	D	M	M															
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>															
Y	Y	Y	Y															
[PENEMURAMAH: Sekiranya 'TT' tuliskan '01' untuk hari '07' untuk bulan '9999' untuk tahun]																		
MCSD13	Berapakah umur pasangan anda? <i>How old is your partner?</i>	<table style="margin-bottom: 5px;"> <tr> <td><input type="text"/></td> <td><input type="text"/></td> </tr> </table> Tahun Genap <p style="text-align: right;">(-7) TT (-9) EJ</p>	<input type="text"/>	<input type="text"/>														
<input type="text"/>	<input type="text"/>																	

MCSD14	Apakah bangsa pasangan anda? <i>What is your partner's ethnicity?</i>	<p>1. Melayu / <i>Malay</i> 2. Cina / <i>Chinese</i> 3. India / <i>Indian</i> 4. Orang Asli Semenanjung / <i>Aborigines</i> 5. Bumiputera Sabah / <i>Bumiputera of Sabah</i>, Sila nyatakan: <i>Please specify:</i> 6. Bumiputera Sarawak / <i>Bumiputera of Sarawak</i>, Sila nyatakan: <i>Please specify:</i> 7. Lain-lain / <i>Others</i>, Sila nyatakan / <i>Please specify:</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
MCSD15	Apakah taraf kewarganegaraan pasangan anda? <i>What is your partner's citizenship status?</i>	<p>1. Warganegara Malaysia / <i>Malaysian Citizen</i> 2. Permastautin tetap / <i>Permanent Resident of Malaysia</i> 3. Bukan warganegara Malaysia <i>Non-Malaysian Citizen</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
MCSD16	Apakah tahap pendidikan tertinggi pasangan anda? <i>What is your partner's highest education level?</i>	<p>1. Tidak pernah bersekolah / <i>Never attended school</i> 2. Tidak habis sekolah rendah / <i>Did not complete primary school</i> 3. Tamat darjah 6 / <i>Completed standard 6</i> 4. Tamat tingkatan 3 / <i>Completed form 3</i> 5. Tamat tingkatan 5 / <i>Completed form 5</i> 6. Tamat tingkatan 6 / sijil / diploma / <i>Completed form 6 / certificate / diploma</i> 7. Tamat pengajian peringkat sarjana muda / <i>Completed Bachelor degree</i> 8. Tamat pengajian peringkat sarjana / <i>Completed Master degree</i> 9. Tamat pengajian peringkat kedoktoran (PhD) / <i>Completed Doctoral qualification (PhD)</i> 10. Lain-Lain / <i>Others</i>, Sila nyatakan / <i>Please specify:</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
MCSD17	Adakah pasangan anda ... <i>Are your partner a</i> Pilih satu jawapan UTAMA sahaja. <i>Choose only one MAIN answer.</i>	<p>1. Majikan / <i>Employer</i> 2. Pekerja kerajaan / <i>Government employee</i> 3. Pekerja separa kerajaan / <i>Semi-government employee</i> 4. Pekerja swasta / <i>Private employee</i> 5. Bekerja sendiri / <i>Self-employed</i> 6. Pekerja tanpa gaji / <i>Unpaid worker</i> 7. Pekerja keluarga tanpa gaji/ Surirumah / <i>Unpaid family worker/ Housewife</i> 8. Lain-lain / <i>Others</i>, Sila nyatakan / <i>Please specify:</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>

SEKSYEN MC1: PENJAGAAN ANTENATAL / ANTENATAL CARE

Soalan untuk diisi oleh penemuramah: Pilih SATU jawapan sahaja.

MC1001	<p>Berapakah umur puan semasa mengandung kali pertama? <i>How old were you during your first pregnancy?</i></p> <p>Maklumat untuk penemuramah: Jika kandungan pertama tersebut berakhir dengan keguguran, ia tetap dikira.</p>	1. Umur / <i>Age</i> <input type="text"/> <input type="text"/>	2. Tahun / <i>Years</i> <input type="text"/> <input type="text"/>	(-9) EJ
MC1002	<p>Adakah puan mendapatkan pemeriksaan semasa mengandungkan (nama)? <i>Did you receive antenatal check-up during your pregnancy with (name)?</i></p> <p>Maklumat untuk penemuramah: Pemeriksaan mengandung hendaklah sekurang-kurangnya mestilah meliputi pengukuran tekanan darah, ujian air kencing dan pemeriksaan perut/abdomen dalam setiap sesi lawatan. Ujian air kencing mengeasahkan mengandung sahaja tidak diambil kira.</p>	1. Ya / <i>Yes</i> ► ke MC1003 2. Tidak / <i>No</i> } ke SEKSYEN MC2 (-9) EJ		
MC1003	<p>Semasa mengandungkan (nama), adakah puan mempunyai Buku Rekod Mengandung / "buku merah"? Boleh tunjukkan pada saya? <i>Did you have an antenatal home-based booklet during your pregnancy with (name)?</i> <i>May I see it please?</i></p> <p>Nota: Buku Rekod Mengandung ialah dokumen rekod pemeriksaan kesihatan dan pemantauan semasa mengandung. Bagi perkhidmatan di klinik kerajaan, kulit buku ini bewarna merah. Bagi perkhidmatan swasta pula, maklumat tersebut direkodkan dalam kad atau buku yang disediakan oleh fasiliti masing-masing.</p> <p>Note: An antenatal home-based booklet is a document in which the medical examination and observation throughout the pregnancy were recorded. The cover for this for this document is red in colour for government services. For private services, this information may be recorded in a card or book provided by the respective care providers.</p>	1. Ya / <i>Yes</i> Buku Rekod Mengandung ditunjukkan / <i>Antenatal home-based booklet was shown</i> 2. Ya / <i>Yes</i> Buku Rekod Mengandung tidak ditunjukkan / <i>Antenatal home-based booklet was not shown</i> 3. Tidak ada buku rekod mengandung / <i>No antenatal home-based booklet</i>		

Arahan kepada penemuramah:

Jika ditunjukkan Buku Rekod Mengandung, gunakan Buku Rekod Mengandung itu untuk semua soalan yang berkaitan. Jika tidak ditunjukkan Buku Rekod Mengandung atau tiada Buku Rekod Mengandung, semua soalan perlu ditanyakan kepada responden oleh penemuramah.

MC1004	Berapa kalikah puan pernah <i>How many times did you experience.....</i>	Bilangan / <i>Number</i>
MC1004a	....mengandung dengan kelahiran hidup / <i>live birth</i> :	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
MC1004b	.....mengandung dengan kematian bayi dalam kandungan/.... <i>stillbirth</i> : Maklumat untuk penemuramah: <i>Stillbirth</i> : kematian bayi dalam kandungan pada usia kandungan cukup 22 minggu dan ke atas serta berat lahir sekurang-kurangnya 500g ('mati dalam perut'). <i>(Arah: Rujuk MC1003. Jika jawapan 'Ya, buku rekod mengandung ditunjukkan' dan ada kematian bayi dalam kandungan, isiakan maklumat b (i) atau b (ii). Bagi jawapan lain teruskan ke MC1004c. Jika tiada maklumat lanjut tentang kematian bayi dalam kandungan, jawab -7 =TT dan terus ke MC1004c.</i>	(-9) EJ (-9) EJ
MC1004b (i)	....mengandung dengan kematian bayi dalam kandungan dengan jasad bayi masih elok secara fizikal / <i>fresh stillbirth</i> : Maklumat untuk penemuramah: <i>Fresh stillbirth</i> (FSB): jasad bayi tanpa ada perubahan fizikal seperti kulit menggelups dan mengembang.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
MC1004b (ii)	.....mengandung dengan kematian bayi dalam kandungan dengan jasad bayi tidak elok secara fizikal / <i>macerated stillbirth</i> : Maklumat untuk penemuramah: <i>Macerated stillbirth</i> (MSB): jasad bayi dengan perubahan fizikal seperti kulit menggelups dan mengembang.	(-7) TT (-9) EJ (-7) TT (-9) EJ
MC1004c	.....mengandung dengan keguguran / <i>miscarriage/termination of pregnancy</i> : Maklumat untuk penemuramah: <i>Keguguran</i> : (keguguran semulajadi/digugurkan sama ada memakan ubat atau membuat cuci rahim) pada usia kandungan di bawah 22 minggu. (<i>miscarriage/ termination of pregnancy</i>)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
MC1004d	.....mengandung anggur / <i>molar pregnancy</i> : Maklumat untuk penemuramah: <i>Kandungan Anggur / Molar</i> : Kandungan tanpa janin bayi dan mengeluarkan tisu seperti buah anggur	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
	Jumlah kehamilan / <i>Total number of pregnancies</i> :	<input type="text"/> <input type="text"/>

MC1005	Di fasiliti kesihatan manakah puan mendapatkan pemeriksaan semasa mengandung (nama)? <i>Where did you receive antenatal check-ups during your pregnancy with (name)?</i>	
MC1005a	Fasiliti pertama / <i>First Facility</i> (Fasiliti yang paling banyak dikunjungi / <i>Most visited facility</i>) (Jika fasiliti tiada dalam senarai, sila tuliskan nama, alamat dan jenis fasiliti) i. Nama Fasiliti: ii. Alamat Fasiliti: iii. Jenis Fasiliti:	..... (-9) EJ (-9) EJ 1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i> (-9) EJ
MC1005b	Fasiliti kedua / <i>Second Facility</i> (Jika fasiliti tiada dalam senarai, sila tuliskan nama, alamat dan jenis fasiliti) i. Nama Fasiliti: ii. Alamat Fasiliti: iii. Jenis Fasiliti:	..... (-9) EJ (-8) NA (-9) EJ (-8) NA 1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i> (-9) EJ (-8) NA
MC1005c	Fasiliti ketiga / <i>Third Facility</i> (Jika fasiliti tiada dalam senarai, sila tuliskan nama, alamat dan jenis fasiliti) i. Nama Fasiliti: ii. Alamat Fasiliti: iii. Jenis Fasiliti:	..... (-9) EJ (-8) NA (-9) EJ (-8) NA 1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i> (-9) EJ (-8) NA

MC1006	<p>Sebagai sebahagian daripada pemeriksaan/jagaan semasa mengandung, adakah perkara-perkara dibawah dilakukan:</p> <p><i>As part of your antenatal care during this pregnancy, were any of the following done:</i></p> <div style="background-color: #003366; color: white; padding: 5px;"> <p>Maklumat untuk penemuraman: Pemeriksaan mengandung hendaklah sekurang-kurangnya mesti meliputi pengukuran tekanan darah, ujian air kencing dan pemeriksaan perut/abdomen dalam setiap sesi lawatan. Ujian air kencing mengesahkan mengandung sahaja tidak diambil kira.</p> </div>			
MC1006a	Pengukuran tekanan darah / <i>Blood pressure Measurement</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ	
MC1006b	Sampel air kencing / <i>Urine sample</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ	
MC1006c	Pemeriksaan perut / <i>Abdominal Examination</i> <i>Nota: Pemeriksaan perut</i> meliputi pengukuran tinggi rahim, kedudukan fetus dan pemeriksaan denyutan jantung janin/ Abdominal examination includes measurement of the height of the mother's uterus, the position of the fetus and the fetal heartbeat examination.	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ	
MC1006d	Sampel darah / <i>Blood sample</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ	
MC1006e	Pemeriksaan ultrasound/scan / <i>Ultrasound examination</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ	
MC1006f	Pendidikan kesihatan mengenai kelahiran selamat / <i>Health education on safe birth</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ	
MC1006g	Menerima suntikan kancing gigi bagi mencegah jangkitan tetanus pada bayi? / <i>Receive any injection to prevent neonatal tetanus?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ	
MC1007	<p>Siapakah yang memberikan pemeriksaan/jagaan semasa mengandung?</p> <p><i>Who provided the antenatal care?</i></p> <p>[boleh pilih lebih daripada satu jawapan]</p> <div style="background-color: #003366; color: white; padding: 5px;"> <p><i>Nota:</i> Doula adalah seorang yang tidak terlatih secara formal dalam bidang perbadanan tetapi boleh memberikan sokongan emosi kepada ibu sebelum, semasa atau selepas bersalin.</p> <p><i>Note:</i> Doula is a person who is not trained in formal midwife skills but is able to give emotional supports before, during or after birth.</p> </div>	1. Doktor/ <i>Doctor</i> 2. Jururawat / <i>Nurse</i> 3. Bidan kampung / <i>Traditional birth attendant</i> 4. Doula / <i>Doula</i> 5. Lain-lain / <i>Others</i>	(-7) TT (-9) EJ	
MC1008	<p>Semasa mengandungkan (nama), berapakah usia kandungan dalam MINGGU semasa kali pertama mendapatkan pemeriksaan di fasiliti kesihatan?</p> <p><i>How many WEEKS were you pregnant with (name) when you first received antenatal care at the health facility?</i></p>	<input type="text"/> Minggu / <i>Weeks</i>	(-7) TT (-9) EJ	

MC1009	Berapa kali puau pergi ke fasiliti kesihatan untuk pemeriksaan mengandung (nama)? <i>How many times did you go to health facilities for antenatal care during this pregnancy with (name)?</i>	<input type="text"/> Kali / <i>Times</i> (-7) TT (-9) EJ
MC1010	<p>Adakah puau terlepas atau ditunda temujanji kehamilan anda disebabkan langkah penjarakan sosial (Perintah Kawalan Pergerakan, PKP) COVID-19? <i>Have you missed or delayed post-natal care appointments as a result of the COVID-19 measures?</i> (Sesetengah konsultasi dilakukan melalui telefon atau konferens video. Ini TIDAK dikira sebagai terlepas temujanji) <i>(Some providers have been seeing their patients by phone or by video conferencing. We are NOT counting those types of visits as missed.)</i></p>	<ol style="list-style-type: none"> 1. Tidak / <i>No</i> 2. Ya, kerana saya risau saya berkemungkinan dijangkiti COVID-19 di hospital/klinik kesihatan / <i>Yes, because I am afraid, I may acquire COVID19 in the hospital/health care centre</i> 3. Ya, kerana doktor/jururawat membatalkan atau menunda temujanji disebabkan COVID-19 / <i>Yes, because the doctor/nurse cancelled or rescheduled the appointment because of COVID-19</i> 4. Ya, sebab lain (sila nyatakan) / <i>Yes, other reason (please specify)</i> <p style="text-align: right;">(-9) EJ</p>

SEKSYEN MC2: PENYAKIT SEMASA MENGANDUNG / PREGNANCY COMORBIDITY

MC2001	<p>Nyatakan berat dan tinggi pada 3 bulan pertama kandungan.</p> <p>Please state the weight and height. (Only accept weight within first 3 months of pregnancy).</p> <p>Arahan kepada penemuramah: <i>Soalan ini memerlukan berat dan ibu tinggi pada 3 bulan pertama kandungan dengan (nama). Sila rekodkan berat berdasarkan buku rekod mengandung pada lawatan yang pertama. Jika lawatan pertama berlaku selepas 3 bulan mengandung atau responden tidak mempunyai Buku Rekod Mengandung, tanyakan berat dan tinggi sebelum mengandung.</i></p>	
MC2001a	Berat badan / Body weight (kg)	<input type="text"/> . <input type="text"/> kg (-7) TT (-9) EJ
MC2001b	Tinggi/ height (cm)	<input type="text"/> . <input type="text"/> cm (-7) TT (-9) EJ
MC2002	<p>Adakah puan pernah diberitahu oleh doktor bahawa puan mengalami .....SEMASA mengandungkan (nama)?</p> <p><i>Have you ever been told by the doctor that you had.....DURING your pregnancy with (name)?</i></p>	
MC2002a	.....*tekanan darah tinggi / high blood pressure .	<p>1. Ya / Yes 2. Tidak / No</p> (-9) EJ
MC2002b	.....*kencing manis / diabetes mellitus	<p>1. Ya / Yes 2. Tidak / No</p> (-9) EJ
MC2002c	.....masalah kekurangan darah / anemia	<p>1. Ya / Yes 2. Tidak / No</p> (-9) EJ
MC2002d	.....masalah uri bawah / placenta previa	<p>1. Ya / Yes 2. Tidak / No</p> (-9) EJ

SEKSYEN MC3: PENJAGAAN PRA-KEHAMILAN / PRE-PREGNANCY CARE

Nota untuk MC 3001:

Penjagaan Pra-Kehamilan (PPK)

PPK adalah penjagaan atau intervensi yang diberikan kepada wanita di dalam umur reproduktif sebelum berlaku kehamilan tidak kira kandungan kali pertama atau kandungan yang berikutnya. Semua wanita yang mempunyai potensi untuk mengandung dan mempunyai risiko perubatan digalakkan mendapat perkhidmatan PPK. Perkhidmatan PPK hendaklah diberikan kepada wanita-wanita ini sekurang-kurangnya 3 bulan sebelum kehamilan berlaku.

Perkhidmatan yang disediakan adalah seperti:

- i. Saringan dan kaunseling bakal ibu untuk intervensi dan rawatan awal.
 - ii. Membolehkan wanita/pasangan suami isteri merancang kandungan melalui pemberian informasi yang sesuai dan mencukupi, promosi kesihatan , pendidikan dan kaunseling.
 - iii. Memberi penekanan kepada bakal ibu dan pasangan serta ahli keluarga untuk memahami dan mengamalkan cara hidup sihat ke arah kehamilan yang selamat.
- (sumber : Portal MyHealth KKM)

Pre-Pregnancy Care (PPC)

A set of interventions that aims to identify and modify biomedical, behavioural and social risks to a woman's health or pregnancy outcome through prevention and management, emphasizing those factors that must be acted on before conception or early in pregnancy to have maximal impact (WHO 2013).

Services provided include:

- i. Screening and counselling of future mothers for early intervention and treatment.
 - ii. To enable women/couples to plan pregnancies through appropriate and adequate information dissemination, health promotion, education and counselling.
 - iii. Emphasis on healthy way of life towards a safe pregnancy, targeted towards future mothers and couples as well as family members in order to understand and practice it.
- (source: MyHealth Portal MOH).

MC3001	Adakah anda pernah diberitahu oleh doktor/ Penolong Pegawai Perubatan bahawa anda mengalami SEBELUM mengandung (nama) <i>Have you ever been told by the doctor/ Assistant Medical Officer that you have..... BEFORE your pregnancy with (name)?</i>		
MC3001a	.....Darah Tinggi / <i>Hypertensive disease</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
MC3001b	.....Kencing Manis / <i>Diabetes mellitus</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
MC3001c	.....Penyakit Jantung / <i>Heart disease</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
MC3001d	.....Talasemia / <i>Thalassemia</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
MC3001e	.....Penyakit Tiroid / <i>Thyroid disease</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
MC3001f	.....Asma atau Lelah / <i>Asthma</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
MC3001g	.....Sawan; Epilepsi / <i>Seizures; Epilepsy</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ

Arahan kepada penemuramah:

Jika jawab 'Ya' pada mana-mana soalan MC3001a sehingga MC3001g, TERUSKAN ke MC3002.

MC3002	Sebelum mengandung (nama), <i>Before being pregnant with..... (name)</i>		
MC3002a	Adakah puuan diberi penerangan risiko semasa mengandung dan kaitan dengan penyakit puuan? <i>have you ever been explained regarding pregnancy risk and your illness?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
MC3002b	.... pernahkah puuan diberi cadangan untuk menangguhkan kehamilan sehingga tahap kesihatan stabil? <i>have you ever been suggested to delay your last pregnancy until your health condition is stable?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
MC3002c	Adakah puuan pernah dicadangkan untuk mengamalkan kaedah perancang keluarga ? <i>have you ever been advised to practise family planning before last pregnancy?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ

SEKSYEN MC4: PENJAGAAN SEMASA KEHAMILAN / INTRAPARTUM CARE

MC4001	Dimanakah....(nama) dilahirkan? <i>Where was ....(name) born?</i>	1. Fasiliti kesihatan / <i>Health facility</i> 2. Rumah / <i>Home</i> 3. Lain-lain / <i>Others</i> (-9) EJ	► ke MC4001a ► ke MC4002 } terus ke mc4004
MC4001a	Fasiliti kesihatan/ <i>Health facility</i> (Jika fasiliti tiada dalam senarai, sila tuliskan nama, alamat dan jenis fasiliti / <i>If the facility is not listed, please write down the name, address and type of facility</i>)	..... ..... 1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i>	
MC4002	Kenapa puan bersalin dirumah? <i>Why did you have a home delivery?</i>	<i>Pilih SATU sebab utama sahaja bagi soalan ini.</i> <i>Choose only ONE main reason for this question.</i> <ul style="list-style-type: none"> 1. Masa sakit hingga bersalin, terlalu cepat / <i>Fast labour</i> 2. Tiada kenderaan / <i>No transport</i> 3. Tidak mendapat kebenaran suami atau ahli keluarga / <i>Not consented by husband or family member</i> 4. Masalah kewangan / <i>Financial problem</i> 5. Jauh dari fasiliti kesihatan / <i>Far from health facility</i> 6. Telah merancang untuk bersalin di rumah / <i>Planned for home delivery</i> 7. Lain-lain / <i>Others</i> (-9) EJ	} terus ke MC4004 } terus ke MC4003 } terus ke MC4004
MC4003	Siapakah yang membuat keputusan untuk bersalin dirumah? <i>Who decided for this home delivery?</i> Nota: <i>Doula adalah seorang yang tidak terlatih secara formal dalam bidang perbidanan tetapi boleh memberikan sokongan emosi kepada ibu sebelum, semasa atau selepas bersalin.</i> Note: <i>Doula is a person who is not trained in formal midwife skills but is able to give emotional supports before, during or after birth.</i>	<i>Pilih SATU jawapan sahaja bagi soalan ini.</i> <i>Choose only ONE answer for this question.</i> <ul style="list-style-type: none"> 1. Diri sendiri / <i>Self</i> 2. Suami atau pasangan / <i>Husband or partner</i> 3. Saudara mara / <i>Relatives</i> 4. Bidan Kampung / <i>Traditional Birth attendants</i> 5. Doula / <i>Doula</i> 6. Lain-lain / <i>Others</i> (-9) EJ	

Arahann kepada penemuramanah:

Jika MC4001 jawab selain daripada fasiliti kesihatan, pilihan jawapan pada MC4004 hanya 'Kelahiran biasa secara normal', Kelahiran biasa secara sonsang dan EJ sahaja.

MC4004	<p>Bagaimanakah.....(nama) dilahirkan? <i>How was .....(name) delivered?</i></p>	<ol style="list-style-type: none"> 1. Kelahiran biasa secara normal / <i>Normal vaginal delivery</i> 2. Kelahiran biasa secara songsang / <i>Breech vaginal delivery</i> 3. Kelahiran dengan bantuan vakum / <i>Vacuum delivery</i> 4. Kelahiran dengan forsep /<i>Forceps delivery</i> 5. Pembedahan Caesarean /<i>Caesarean Section</i> <p style="text-align: right;">(-9) EJ</p>
Arahan kepada penemuramah: Jika MC4004 jawab 'Kelahiran dengan bantuan vakum', 'Kelahiran dengan forsep', atau 'Pembedahan Caesarean', jawapan untuk MC4005 dan MC4006 mestilah 'Anggota Kesihatan'.		
MC4005	<p>Siapakah yang menyambut kelahiran (nama)? <i>Who conducted the delivery of (name)?</i></p>	<ol style="list-style-type: none"> 1. Anggota kesihatan / <i>Health staff</i> 2. Bidan kampung / <i>Traditional birth attendant</i> 3. Doula / <i>Doula</i> 4. Suami @ pasangan / <i>Husband@ partner</i> 5. Kawan / <i>Friend</i> 6. Saudara mara / <i>Relatives</i> 7. Dukun orang asli / <i>Shaman</i> 8. Sendiri / <i>Self</i> <p style="text-align: right;">(-9) EJ</p>
MC4006	<p>Siapakah yang memotong tali pusat (nama)? <i>Who cut the placenta cord (name)?</i></p>	<ol style="list-style-type: none"> 1. Anggota kesihatan / <i>Health staff</i> 2. Bidan kampung / <i>Traditional birth attendant</i> 3. Doula / <i>Doula</i> 4. Suami @ pasangan / <i>Husband@ partner</i> 5. Kawan / <i>Friend</i> 6. Saudara mara / <i>Relatives</i> 7. Dukun orang asli / <i>Shaman</i> 8. Sendiri / <i>Self</i> <p style="text-align: right;">(-9) EJ</p>

SEKSYEN MC5: JAGAAN SELEPAS BERSALIN / POSTNATAL CARE

Arahan kepada penemuramah:
Soalan MC5001-MC5004 ditanya hanya kepada responden dengan umur anak terakhir kurang 24 minggu dari tarikh temuramah.

MC5001	<p>Bilakah puau/ahli keluarga puau memaklumkan kelahiran (nama) kepada fasiliti kesihatan yang terdekat? <i>May I know when did you or your family member notify the (name)'s birth to the nearest health facility?</i></p>	<ol style="list-style-type: none"> 1. Dalam tempoh 24 jam / <i>Within 24 hours</i> (selepas discaj dari wad, atau selepas kelahiran jika kelahiran selain dari hospital) / <i>after discharge from ward or after delivery if delivered outside from hospital</i> 2. Selepas tempoh 24 jam / <i>After 24 hours</i> (selepas discaj dari wad atau selepas kelahiran jika kelahiran selain dari hospital / <i>after discharge from ward or delivery occurred outside hospital</i>) 3. Tidak memaklumkan / <i>No notification given</i> 	(-7) TT (-9) EJ
MC5002	<p>Adakah anggota kesihatan datang ke rumah dalam tempoh 24 jam selepas pemberitahuan kepada fasiliti kesihatan yang terdekat? <i>Did the health care provider come to your house within 24 hours after notification given to the nearest health facility?</i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 	(-9) EJ
MC5003	<p>Adakah puau menerima lawatan berjadual ke rumah daripada anggota kesihatan selepas bersalikan (nama)? <i>Did you receive scheduled home visits after having given birth to (name) by health personnel?</i></p>		
MC5003a	Dalam minggu pertama / <i>Within 1st week</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 	(-9) EJ
MC5003b	Dalam minggu kedua / <i>Within 2nd week</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 	(-9) EJ
MC5003c	Dalam minggu ke 3 hingga minggu ke 4 berpantang / <i>within week 3 to week 4 of confinement</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 	(-9) EJ
MC5004	<p>Adakah puau pergi ke fasiliti kesihatan untuk pemeriksaan selepas bersalin satu bulan selepas kelahiran (nama)? <i>Did you go to the health facility for check-up at one month after giving birth to (name)?</i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 3. Anak berusia dibawah sebulan / <i>Children under 1 month</i> 	(-9) EJ

MC5005	<p>Adakah puan terlepas temujanji atau ditunda untuk rawatan postnatal/ selepas bersalin disebabkan langkah penjarakan sosial (Perintah Kawalan Pergerakan, PKP) COVID-19?</p> <p><i>Have you missed or delayed post-natal care appointments as a result of the COVID-19 measures?</i></p> <p>(Sesetengah konsultasi dilakukan melalui telefon atau konferensi video. Ini TIDAK dikira sebagai terlepas temujanji)</p> <p><i>(Some providers have been seeing their patients by phone or by video conferencing. We are NOT counting those types of visits as missed.)</i></p>	<ol style="list-style-type: none"> 1. Tidak / No 2. Ya, kerana saya risau saya berkemungkinan dijangkiti COVID-19 di hospital/klinik kesihatan / <i>Yes, because I am afraid, I may acquire COVID-19 in the hospital/health care centre</i> 3. Ya, kerana doktor/jururawat membatalkan atau menunda temujanji disebabkan COVID-19 / <i>Yes, because the doctor/nurse cancelled or rescheduled the appointment because of COVID-19</i> 4. Ya, sebab lain (sila nyatakan) / <i>Yes, other reason (please specify)</i> <p style="text-align: right;">(-9) EJ</p>
MC5006	<p>Adakah puan mengamalkan amalan berpantang setelah bersalin?</p> <p><i>Did you practice postnatal care?</i></p>	<ol style="list-style-type: none"> 1. Ya / Yes 2. Tidak / No <p style="text-align: right;">► ke MC5009</p>
MC5007	<p>Apakah amalan berpantang setelah bersalin yang puan amalkan?</p> <p><i>What is the postnatal care did you practice?</i></p> <p>[Boleh pilih lebih daripada satu jawapan]</p>	<ol style="list-style-type: none"> 1. Urutan badan / <i>Postnatal massage</i> 2. Bertungku / <i>Hot compression</i> 3. Memakai bengkung / <i>Body wrapping</i> 4. Mandian herba / <i>Herbal bath</i> 5. Pengambilan jamu / <i>Ingestion Herbal Products</i> 6. Berpantang pengambilan makanan / <i>Dietary restrictions</i> 7. Lain-lain / <i>Others</i>
MC5008	<p>Dimanakah puan berpantang selepas bersalin?</p> <p><i>Where did you go for postnatal care?</i></p> <p>[Boleh pilih lebih daripada satu jawapan]</p>	<ol style="list-style-type: none"> 1. Rumah sendiri / <i>Own house</i> 2. Rumah keluarga kandung / <i>Parent's house</i> 3. Rumah keluarga mentua / <i>In law's house</i> 4. Rumah saudara mara / <i>Relative's house</i> 5. Hospital / <i>Hospital</i> 6. Pusat Transit Kesihatan Orang Asli (PTKOA) / <i>Orang Asli Health Transit Centre</i> 7. Pusat jagaan selepas bersalin / <i>Confinement Centre</i> 8. Lain-lain / <i>Other</i>
Arahan kepada penemuramah: Soalan MC5009 ditanya kepada responden dengan anak terakhir berumur 6 hingga 16 minggu.		
MC5009	<p>Adakah puan diberitahu oleh doktor bahawa puan mengalami masalah kemurungan selepas melahirkan (nama)?</p> <p><i>Were you told by your doctor as having depression after giving birth to (name)?</i></p> <p>*Maklumat kepada penemuramah: <i>Gabungan tanda-tanda kemurungan adalah seperti sedih yang berpanjangan, rasa bersalah, hilang rasa keseronokan, keletihan, hilang penumpuan, gangguan pada makan dan tidur.</i></p>	<ol style="list-style-type: none"> 1. Ya/ Yes 2. Tidak/ No <p style="text-align: right;">-9. EJ</p> <p style="text-align: right;">► TAMAT Modul MC</p> <p style="text-align: right;">} Sila berikan borang soal selidik isi sendiri EPDS kepada responden</p>

SOAL SELIDIK JAWAB SENDIRI / SELF-ADMINISTERED QUESTIONNAIRE

Arahan kepada penemuramah:

Sila berikan borang soal selidik EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS) kepada responden untuk dijawab sendiri dan dikembalikan setelah tamat sesi temuramah.

MC5010	<p>Sila BULATKAN jawapan yang paling hampir bagi menggambarkan apa yang anda telah rasakan DALAM MASA 7 HARI YANG LALU dan bukan sekadar hari ini sahaja.</p> <p><i>We would like to know how you are feeling in the past 7 days - Not just how you feel today. Please answer the following 10 questions by selecting the appropriate response. Thank You.</i></p>	
	Dalam masa 7 hari yang lalu: <i>In the past 7 days:</i>	
MC5010a	Saya dapat ketawa dan melihat kelucuan pada sesuatu perkara <i>I have been able to laugh and see the funny side of things</i>	<ol style="list-style-type: none"> 1. Sebanyak mana biasa / <i>As much as I always could</i> 2. Kurang daripada biasa / <i>Not quite so much now</i> 3. Sangat kurang daripada biasa / <i>Definitely not so much now</i> 4. Tiada langsung / <i>Not at all</i>
MC5010b	Saya menanti dengan penuh harapan bagi mendapat kenikmatan apabila melakukan sesuatu perkara <i>I have looked forward with enjoyment to things</i>	<ol style="list-style-type: none"> 1. Sebanyak mana biasa / <i>As much as I always did</i> 2. Agak kurang daripada biasa / <i>Rather less than I used to</i> 3. Sangat kurang daripada biasa / <i>Definitely less than I used to</i> 4. Tiada pernah langsung / <i>Hardly at all</i>
MC5010c	Saya menyalahkan diri sendiri secara tidak sepatutnya apabila sesuatu yang tidak kena terjadi <i>I have blamed myself unnecessarily when things went wrong</i>	<ol style="list-style-type: none"> 1. Ya, sepanjang masa / <i>Yes, most of the time</i> 2. Ya, kadangkala / <i>Yes, some of the time</i> 3. Jarang sekali / <i>Not very often</i> 4. Tidak pernah / <i>No, never</i>
MC5010d	Saya berasa risau atau bimbang tanpa sebab <i>I have been anxious or worried for no good reason</i>	<ol style="list-style-type: none"> 1. Tidak langsung / <i>No, not at all</i> 2. Amat jarang sekali / <i>Hardly ever</i> 3. Ya, kadangkala / <i>Yes, sometimes</i> 4. Ya, sangat kerap / <i>Yes, very often</i>
MC5010e	Saya berasa takut atau panik tanpa sebab <i>I have felt scared or panicky for no good reason</i>	<ol style="list-style-type: none"> 1. Ya, sangat kerap / <i>Yes, quite a lot</i> 2. Ya, kadangkala / <i>Yes, sometimes</i> 3. Jarang sekali / <i>No, not much</i> 4. Tidak pernah / <i>No, not at all</i>
MC5010f	Saya dibebani oleh terlalu banyak masalah <i>Things have been getting on top of me</i>	<ol style="list-style-type: none"> 1. Ya, kebanyakan masa saya tidak berupaya menanganinya langsung / <i>Yes, most of the time I haven't been able to cope at all</i> 2. Ya, kadangkala saya tidak berupaya menanganinya seperti biasa / <i>Yes, sometimes I haven't been coping as well as usual</i> 3. Tidak, kebanyakan masa saya berupaya menanganinya dengan baik / <i>No, most of the time I have coped quite well</i> 4. Tidak, saya berupaya menanganinya semua masalah dengan baik pada setiap masa / <i>No, have been coping as well as ever</i>

MC5010g	Saya berasa sungguh sedih sehingga saya mengalami kesukaran untuk tidur <i>I have been so unhappy that I have had difficulty sleeping</i>	1. Kebanyakan masa / <i>Yes, most of the time</i> 2. Kadang-kadang / <i>Yes, sometimes</i> 3. Jarang-jarang sekali / <i>Not very often</i> 4. Tidak pernah / <i>No, not at all</i>
MC5010h	Saya berasa sedih atau serabut <i>I have felt sad or miserable</i>	1. Ya, kebanyakan masa / <i>Yes, most of the time</i> 2. Ya, agak kerap / <i>Yes, quite often</i> 3. Jarang-jarang sekali / <i>Not very often</i> 4. Tidak pernah / <i>No, not at all</i>
MC5010i	Saya berasa sangat sedih sehingga saya menangis <i>I have been so unhappy that I have been crying</i>	1. Ya, kebanyakan masa / <i>Yes, most of the time</i> 2. Ya, agak kerap / <i>Yes, quite often</i> 3. Hanya sekali sekala / <i>Only occasionally</i> 4. Tidak pernah / <i>No, never</i>
MC5010j	Pernah terlintas di fikiran saya keinginan untuk mencederai diri sendiri <i>The thought of harming myself has occurred to me</i>	1. Ya, kebanyakan masa / <i>Yes, most of the time</i> 2. Ya, agak kerap / <i>Yes, quite often</i> 3. Amat jarang sekali / <i>Hardly ever</i> 4. Tidak pernah / <i>Never</i>

TAMAT MODUL MC

**TINJAUAN KESIHATAN
IBU & ANAK
MATERNAL & CHILD HEALTH SURVEY**

NHMS MCH



**MODUL CH
KANAK-KANAK
BAWAH 5 TAHUN**
MODULE CH: CHILDREN BELOW 5 YEARS OLD

(UNTUK DIISI OLEH PENEMURAMAH)

ID:	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
	Negeri (2 digit)	DP & DB (2 digit) (3 digit)	BP (4 digit)	UB (3 digit)	TK (3 digit)	Strata (1 digit)	Isi Rumah & Individu (2 digit) (2 digit)

KEPUTUSAN TEMURAMAH (sila tanda ✓ kotak yang berkenaan)	BERJAYA	<input type="checkbox"/>
	TIDAK BERJAYA	<input type="checkbox"/>
	SEBAB-SEBAB TIDAK BERJAYA	<input type="checkbox"/>
	ENGGAN JAWAB	<input type="checkbox"/>
	MASALAH BAHASA	<input type="checkbox"/>
	MASALAH KESIHATAN	<input type="checkbox"/>
	TIADA DI RUMAH	<input type="checkbox"/>

TARIKH TEMURAMAH	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
	Haribulan	Bulan	Tahun

MASA TEMURAMAH	MULA :	TAMAT :
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SEKSYEN CHSD: SOSIODEMOGRAFI

Soalan untuk diisi oleh penemuramah: Pilih SATU jawapan sahaja.

CHSD01	Siapakah nama responden (kanak-kanak)? <i>What is the respondent's name?</i>						
CHSD02	Siapakah nama ibu/ penjaga responden? <i>What is the name of the mother/ guardian?</i>						
CHSD03	Apakah jantina kanak-kanak? <i>What is your child gender?</i>	1. Lelaki / Male 2. Perempuan / Female					
CHSD04	Bilakah tarikh lahir kanak-kanak? <i>When is your child's birth date?</i>	<input type="checkbox"/> <input type="checkbox"/> D D	<input type="checkbox"/> <input type="checkbox"/> M M	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Y Y Y	<input type="checkbox"/> <input type="checkbox"/> Y Y		
CHSD05	Berapakah umur kanak-kanak? <i>How old is your child?</i>	<input type="checkbox"/> <input type="checkbox"/>	Tahun Genap		(-7) TT (-9) EJ		
CHSD06	Apakah bangsa kanak-kanak? <i>What is your child's ethnicity?</i>	1. Melayu / <i>Malay</i> 2. Cina / <i>Chinese</i> 3. India / <i>Indian</i> 4. Orang Asli Semenanjung / <i>Aborigines</i> 5. Bumiputera Sabah / <i>Bumiputera of Sabah</i> , Sila nyatakan: <i>Please specify:</i> 6. Bumiputera Sarawak / <i>Bumiputera of Sarawak</i> , Sila nyatakan: <i>Please specify:</i> 7. Lain-lain / <i>Others</i> , Sila nyatakan / <i>Please specify:</i>					
CHSD07	Apakah taraf kewarganegaraan kanak-kanak? <i>What is your child's citizenship status?</i>	1. Warganegara Malaysia / <i>Malaysian Citizen</i> 2. Permastutin tetap / <i>Permanent Resident of Malaysia</i> 3. Bukan warganegara Malaysia / <i>Non-Malaysian Citizen</i>					
		(-7) TT (-9) EJ					

SEKSYEN CH1: PEMAKANAN BAYI DAN KANAK-KANAK KECIL / INFANT AND YOUNG CHILD FEEDING PRACTICE

**(CH1001 - CH1005) Kelayakan: Kanak-kanak umur 0 – 23 bulan
(CH1001 - CH1005) Eligibility: Children aged 0 – 23 months**

CH1001	Selepas (nama anak) dilahirkan, bilakah bayi puan diletakkan ke payu dara untuk pertama kali ? <i>How long after birth was (child's name) first put to the breast?</i>	<ol style="list-style-type: none"> 1. Dalam masa 1 jam lepas bersalin / <i>Within 1 hour after birth</i> 2. Antara 1-24 jam lepas bersalin / <i>Between 1-24 hours after birth</i> 3. Selepas 1 hari bersalin / <i>After 1 day of delivery</i> 4. Tidak diletakkan ke payu dara selepas dilahirkan / <i>Never put to the breast after birth</i> <p style="text-align: right;">(-9) EJ</p>
CH1002	Adakah (nama anak) pernah disusukan dengan susu ibu (susu badan)? <i>Is (child's name) ever being breastfed?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> <p style="text-align: right;">(-9) EJ } ke CH1005</p>
CH1003	Adakah (nama anak) masih disusukan dengan susu ibu (susu badan)? <i>Is (child's name) still being breastfed?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> <p style="text-align: right;">(-9) EJ } ke CH1005</p>
CH1004	Berapa umur (nama anak) semasa berhenti menyusu susu ibu (susu badan)? <i>At what age did (child's name) stopped breastfeeding?</i> *1 – 104 minggu	<p style="text-align: center;"><input type="text"/> <input type="text"/> <input type="text"/> minggu / <i>weeks</i></p> <p>Maklumat kepada penemuramah: 1 bulan / <i>month</i> = 4 minggu / <i>weeks</i> 6 bulan / <i>months</i> = 24 minggu / <i>weeks</i></p> <p style="text-align: right;">(-9) EJ</p>
CH1005	Dalam tempoh 24 jam yang lepas (siang dan malam), adakah (nama anak) diberi apa-apa minuman atau makanan menggunakan botol susu dengan puting termasuk susu ibu di dalam botol? <i>In the last 24 hours (during the day and night) was (child's name) given any drinks or foods using feeding bottle with teat including expressed breast milk?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> <p style="text-align: right;">(-9) EJ</p>

**(CH1006 - CH1009) Kelayakan: Kanak-kanak umur 6 – 23 bulan
(CH1006 - CH1009) Eligibility: Children aged 6 – 23 months**

CH1006	Dalam tempoh 24 jam yang lepas (siang dan malam), adakah (nama anak) diberi minuman berikut termasuk minuman yang diambil di luar rumah. <i>In the last 24 hours (during the day and night) was (child's name) given the following liquids including liquids consumed outside home.</i>	Dalam tempoh 24 jam yang lepas (siang dan malam), adakah (nama anak) diberi minuman berikut termasuk minuman yang diambil di luar rumah. <i>In the last 24 hours (during the day and night) was (child's name) given the following liquids including liquids consumed outside home.</i>
	a. Air kosong / air masak / air mineral? <i>Plain water / boiled water / mineral water?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> <p style="text-align: right;">(-9) EJ</p>
	b. Jus segar daripada buah? <i>Fresh fruit juice?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> <p style="text-align: right;">(-9) EJ</p>
	c. Minuman bergula (seperti minuman jus buah komersial, kordial, air sirap, teh/ minuman bermalta contohnya milo, vico, ovaltine, horlick)? <i>Sugared water (commercial fruit juices, cordial, syrup, tea, malted drinks for example milo, vico, ovaltine, horlick)?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> <p style="text-align: right;">(-9) EJ</p>

	d. Air Garam / ORS? – DENGAN preskripsi anggota kesihatan (Doktor/ Penolong Pegawai Perubatan) <i>Oral Rehydration Salt (ORS)? – WITH health personal's prescription (Doctor's/ Medical Assistant's)</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
	e. Air Garam / ORS? – TANPA preskripsi anggota kesihatan (Doktor/ Penolong Pegawai Perubatan) <i>Oral Rehydration Salt (ORS)? WITHOUT health personal's prescription (Doctor's/ Medical Assistant's)</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
	f. Vitamin atau mineral tambahan atau sebarang ubat-ubatan? – DENGAN preskripsi anggota kesihatan (Doktor/ Penolong Pegawai Perubatan) <i>Vitamin or mineral supplement or any medicines? – WITH health personal's prescription (Doctor's/ Medical Assistant's)</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
	g. Vitamin atau mineral tambahan atau sebarang ubat-ubatan? – TANPA preskripsi anggota kesihatan (Doktor/ Penolong Pegawai Perubatan) <i>Vitamin or mineral supplement or any medicines? – WITHOUT health personal's prescription (Doctor's/ Medical Assistant's)</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
	h. Kuah sup (seperti air rebusan ayam, ikan, daging, sayur) <i>Clear broth / clear soup (chicken, fish, meat, vegetable soup)?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
	i. Susu formula bayi (susu untuk bayi berumur kurang 12 bulan) <i>Infant formula (milk for infant below 12 months)</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
	<p>Jika [CH1006i] adalah Ya, jawab CH1006i_a; Jika [CH1006i] adalah Tidak, EJ, terus ke CH1006j <i>If [CH1006i] is Yes, answer CH1006i_a; If [CH1006i] is No, EJ, proceed to CH1006j</i></p>		
	i_a. Berapa kerapkah (nama anak) minum susu formula tersebut? <i>How frequent did ....(child's name) drink milk?</i>	Kekerapan minum susu formula dalam masa 24 jam yang lepas <i>Frequency of drank milk, in the last 24 hours</i>	<input type="text"/> <input type="text"/> kali / times (Range 1 – 12 kali)
			(-9) EJ

	j. Susu selain susu ibu dan susu formula bayi seperti susu tepung atau susu segar daripada sumber haiwan contohnya susu kambing/susu lembu segar? <i>Milk other than breastmilk and infant formula such as powdered, or fresh animal milk such as goat milk or cow milk?</i> *krimmer / susu sejat/susu pekat manis tidak termasuk *creamer/evaporated milk/sweetened condensed milk are excluded	1. Ya / Yes 2. Tidak / No (-9) EJ
Jika [CH1006j] adalah Ya, jawab CH1006j_a; Jika [CH1006j] adalah Tidak, EJ, terus ke CH1007 <i>If [CH1006j] is Yes, answer CH1006j_a; If [CH1006j] is No, EJ, continue to CH1007</i>		
	j_a. Berapa kerapkah (nama anak) minum susu tersebut? <i>How frequent did (child's name) drink milk?</i>	Kekerapan minum susu dalam masa 24 jam yang lepas <i>Frequency of drank milk in the last 24 hours.</i> <input type="text"/> <input type="text"/> kali / times (Range 1 – 12 kali) (-9) EJ
CH1007	Dalam tempoh 24 jam yang lepas (siang dan malam), selain daripada susu badan / susu lain / susu botol, pernahkah (nama anak) diberi makan (makanan utama dan snek)? <i>In the last 24 hours (during the day and night), did (child's name) ever eat besides breast milk / other milk and bottle feeds (main meals and snacks)?</i>	1. Ya / Yes ► ke CH1008 2. Tidak / No (-7) TT (-9) EJ } terus ke Seksyen CH2
CH1008	Jika 'Ya', berapa kaliakah (nama anak) diberi makan (makanan utama dan snek)? <i>If 'Yes' how many times did (child's name) eats (main meals and snacks)?</i> *a 1 – 3 kali *b 1 – 3 kali <i>Snek adalah pengambilan makanan di antara makanan utama. Makanan utama ialah sarapan, makan tengahari dan makan malam. Snack is food taken between main meals. Main meals are breakfast, lunch and dinner.</i>	a. Makanan utama / Main meals <input type="text"/> <input type="text"/> kali / times (-7) TT (-9) EJ b. Snek / Snack <input type="text"/> <input type="text"/> kali / times (-7) TT (-9) EJ
CH1009	Dalam tempoh 24 jam yang lepas (siang dan malam) adakah (nama anak) diberi makanan berikut termasuk makanan yang diambil di luar rumah. <i>In the last 24 hours (during the day and night) was (child's name) given the following food including food consumed outside home.</i>	a. Hasil tenusu (seperti dadih, yogurt, keju, mentega)? <i>Other food made from milk (such as buttermilk, yogurt, cheese, butter)?</i>
		1. Ya / Yes 2. Tidak / No (-9) EJ

	b. Makanan khas untuk bayi yang dikomersialkan (seperti makanan bayi berdasarkan bijirin)? <i>Commercial baby foods (such as cereal based infant foods)?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
c.	Makanan berdasarkan bijirin (seperti nasi, roti, mee, bubur)? <i>Cereal based foods (such as rice, bread, noodles, porridge)?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
d.	Labu manis, lobak merah, keledek yang berwarna kuning atau oren ? <i>Pumpkin, carrot, and yellow or orange sweet potatoes?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
e.	Ubi-ubian yang bewarna putih (seperti ubi kentang, ubi keladi putih, keladi sarawak, ubi kayu)? <i>White potatoes, white yams, tapioca, or any other food made from roots?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
f.	Sebarang sayuran berdaun hijau ? <i>Any green leafy vegetables?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
g.	Buah-buahan yang kaya kandungan vitamin A seperti mangga, betik, tembikai, pisang, tembikai susu? <i>Fruits rich in vitamin A such as ripe mango, papaya, banana, watermelon, rockmelon?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
h.	Buah-buahan dan sayur-sayuran lain (seperti rambutan, belimbing, tomato, kabis, bunga kabis dan jagung)? <i>Other fruits and vegetables (such as rambutan, starfruit, tomato, cabbage, cauliflower and corn)?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
i.	Hati atau organ dalaman haiwan? <i>Liver or another animal's internal organ?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
j.	Sebarang daging (seperti ayam, itik, lembu, kambing, khinzir)? <i>Any meat (such as chicken, duck, beef, lamb, pork)?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
k.	Telur (seperti ayam, itik, puyuh, angsa)? <i>Eggs (such as chicken, duck, quail, goose)?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
l.	Ikan segar, ikan kering, ikan bilis atau makanan laut (seperti sotong, udang)? <i>Fresh fish, dried fish, anchovies or seafoods (such as squid, shrimp)?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
m.	Makanan berdasarkan kacang dan kekacang (seperti kacang hijau, kacang pis, kacang dhal dan lain-lain kekacang)? <i>Any food made from beans, lentils or nuts (such as green bean, peas and peanut)?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ

SEKSYEN CH2: KESIHATAN PERGIGIAN KANAK-KANAK / ORAL HEALTH AMONG CHILDREN

Kelayakan: Ibu yang mempunyai anak berumur 0 - 59 bulan
Eligibility: Mother with Children aged 0 - 59 months

CH2001	<p>Adakah anda rasa menjaga gigi anak-anak adalah penting? <i>How important is it for you to look after your children's teeth?</i></p>	<p>1. Tidak penting / <i>Not important</i> 2. Penting / <i>Important</i> 3. Sangat penting / <i>Very important</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
CH2002	<p>Adakah.....(Nama Anak) telah mempunyai gigi? <i>Does (child's name) have teeth?</i></p>	<p>1. Ya / <i>Yes</i> ► ke CH2004 2. Tidak / <i>No</i> (-7) TT (-9) EJ } ke soalan CH2011</p>
CH2003	<p>Berapa kerapkah anda membersihkan gusi anak anda? <i>How often you clean your child's gum?</i> (bagi anak yang belum mempunyai gigi/ <i>for child who does not have any tooth yet</i>)</p>	<p>1. Setiap kali selepas makan / <i>Every time after feeding</i> 2. Sekali sehari / <i>Once a day</i> 3. Dua kali sehari / <i>Twice a day</i> 4. Tidak pernah / <i>Never</i> (-8) NA (-9) EJ } ke soalan CH2011</p>
CH2004	<p>Berapa kerapkah anda membersihkan gigi anak anda atau menyelia anak anda membersihkan gigi? <i>How often you clean your child's teeth or supervising your child cleans his/her teeth?</i></p>	<p>1. Sekali sehari / <i>Once a day</i> 2. Dua kali sehari / <i>Twice a day</i> 3. Lebih dari dua kali sehari / <i>More than two times a day</i> 4. Sekali-sekala dalam beberapa hari / <i>Once in a few days</i> 5. Tidak pernah / <i>Never</i></p> <p style="text-align: right;">(-8) NA (-9) EJ</p>
CH2005	<p>Adakah anda / anak anda menggunakan berus gigi ketika membersihkan gigi mereka? <i>Do you / your child use tooth brush while brushing their teeth?</i></p>	<p>1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> (-7) TT (-9) EJ } ke soalan CH2007</p>
CH2006	<p>Adakah berus gigi tersebut... <i>Is the toothbrush...</i></p>	<p>1. Kepunyaan anak sendiri / <i>her/his own</i> 2. Berkongsi bersama ahli keluarga yang lain / <i>Sharing with other family members</i></p> <p style="text-align: right;">(-7)TT (-9) EJ</p>
CH2007	<p>Pernahkah gigi anak anda diperiksa atau dirawat di klinik gigi? <i>Have your child's teeth been examined or treated at the dental clinic?</i></p>	<p>1. Ya / <i>Yes</i> ► ke CH2009 2. Tidak / <i>No</i> (-7) TT (-8) NA (-9) EJ } ke soalan CH2011</p>

CH2008	Jika TIDAK, apakah sebabnya? <i>If NOT, what is the reason?</i>	<ol style="list-style-type: none"> 1. Anak saya terlalu kecil untuk mendapat rawatan perggigian/ <i>My child is too young to get treatment</i> 2. Klinik perggigian terlalu jauh/ <i>The dental clinic is too far</i> 3. Anak saya berasa takut dengan rawatan perggigian / <i>My child is afraid of dental treatment</i> 4. Saya berpendapat rawatan perggigian untuk gigi susu tidak penting / <i>I think dental treatment for milk teeth is not important</i> 5. Masalah pandemik covid / <i>Covid pandemic problem</i> 6. Saya rasa anak tiada masalah gigi / <i>I think my child has no dental problem.</i> 7. Lain-lain (sila nyatakan) / <i>Others (please specify)</i> <p style="text-align: right;">(-9) EJ</p>
CH2009	Bilakah kali terakhir gigi anak anda diperiksa atau dirawat? <i>When was the last time your child's teeth had been examined / treated?</i>	<ol style="list-style-type: none"> 1. Kurang daripada setahun yang lalu / <i>Less than one year ago</i> 2. Antara 1-2 tahun yang lalu / <i>1-2 years ago</i> 3. Lebih daripada dua tahun yang lalu / <i>More than 2 years ago</i> 4. Tidak pernah / <i>Never</i> <p style="text-align: right;">(-7) TT (-9) EJ</p>
CH2010	Di manakah anak anda mendapat pemeriksaan atau rawatan perggigian tersebut? <i>Where did your child receive dental examination or treatment?</i>	<ol style="list-style-type: none"> 1. Klinik Pergigian Kerajaan / <i>Government Dental Clinic</i> 2. Klinik Pergigian Swasta / <i>Private Dental Clinic</i> 3. Lain-lain (sila nyatakan) / <i>Others (please specify)</i> <p style="text-align: right;">(-9) EJ</p>
CH2011	Pada pendapat anda, pada umur berapakah anak anda perlu dibawa untuk pemeriksaan perggigian pertama? <i>In your opinion, at what age your child should be brought for her/his first dental check-up?</i>	<ol style="list-style-type: none"> 1. Kurang dari 1 tahun / <i>Less than 1 year old</i> 2. Umur 1-3 tahun/ <i>1-3 years old</i> 3. Umur lebih dari 3 tahun/ <i>More than 3 years old</i> 4. Apabila mula bersekolah/ <i>When starts schooling</i> 5. Apabila sakit gigi/ <i>When having toothache</i> <p style="text-align: right;">(-7) TT (-9) EJ</p>

SEKSYEN CH3: MORBIDITI KANAK-KANAK / CHILD MORBIDITIES

**Kelayakan: Kanak-kanak umur 0-59 bulan /
Eligibility: Children aged 0 - 59 months**

CH3001	<p>Dalam masa 2 minggu yang lepas, adakah (nama anak) pernah ada cirit-birit? <i>In the last two weeks, has (child's name) had diarrhoea?</i></p> <p>*Cirit-birit = tiga atau lebih najis berair sehari atau darah dalam najis seperti yang dilihat oleh ibu/penjaga *Diarrhoea = 3 or more loose / watery stools per day, or by blood in stool as perceived by mother/caretaker</p>	<p>1. Ya / Yes 2. Tidak / No</p> <p>(-7) TT (-9) EJ</p> <p style="margin-left: 20px;">} ke soalan CH3004</p>
CH3002	<p>Sewaktu cirit-birit itu, adakah..... (nama anak) diberikan cecair daripada pek khas bernama ORS (air garam) untuk diminum? <i>During the episode of diarrhoea, was (child' name) given to drink a fluid from a special packet called ORS?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
CH3003	<p>Adakah antibiotik diberikan untuk merawat cirit-birit tersebut? <i>Was an antibiotic given to treat the diarrhoea?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
CH3004	<p>Dalam 2 minggu yang lepas, pernahkah (nama anak) mengalami <i>In the last two weeks, has (child's name) had a</i></p> <p>a. demam? <i>fever?</i></p> <p>b. batuk? <i>cough?</i></p> <p>c. pernafasan laju atau susah bernafas? <i>fast breathing or difficulty breathing?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p> <p style="text-align: right;">(-7) TT (-9) EJ</p> <p>1. Ya / Yes 2. Tidak / No</p> <p style="text-align: right;">(-7) TT (-9) EJ</p> <p>1. Ya / Yes 2. Tidak / No</p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
Jika 'Ya' kepada mana-mana di CH3004, jawab soalan seterusnya. Jika 'Tidak/ TT/ EJ' untuk CH3004, tamat soalan dan ke Seksyen seterusnya.		
CH3005	<p>a. Adakah anda mendapatkan nasihat atau rawatan? <i>Did you seek advice or treatment?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p> <p>(-7) TT (-9) EJ</p> <p style="margin-left: 20px;">} TAMAT seksyen</p>

	b. Daripada mana anda mendapatkan nasihat atau rawatan? <i>From where did you seek advice or treatment?</i> [Boleh pilih lebih daripada satu jawapan]	<ol style="list-style-type: none"> 1. Fasiliti atau pengamal kesihatan kerajaan / <i>Government health facility or practitioner</i> 2. Fasiliti atau pengamal kesihatan swasta / <i>Private health facility or practitioner</i> 3. Tempat pengamal kesihatan tradisional atau komplementari seperti Tok Halak, sinseh, homeopati, Ayurveda, bomoh / <i>Traditional or complementary medicine premise or practitioner like Tok Halak, sinseh, homeopathy, Ayurveda, bomoh</i> 4. Lain-lain seperti farmasi, kedai, atau jiran / <i>Others like pharmacy, shop or neighbours</i> 	(-7) TT (-9) EJ
	c. Adakah (nama anak) dimasukkan ke hospital bagi kejadian ini? (≥ 24 jam) <i>Did ... (child's name) require admission to hospital for this episode? (≥ 24 hours)</i>	<ol style="list-style-type: none"> 1. Dimasukkan ke wad / <i>Admitted</i> 2. Tidak masuk wad/ <i>Not admitted</i> 	(-7) TT (-9) EJ
CH3006	Adakah (nama anak) diberikan antibiotik untuk merawat sakit ini? <i>Was.... (child's name) given an antibiotic to treat this illness?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 	(-7) TT (-9) EJ

SEKSYEN CH4: DISIPLIN KANAK-KANAK / CHILD DISCIPLINE

**KRITERIA KELAYAKAN: KANAK-KANAK BERUMUR 12 HINGGA 59 BULAN
ELIGIBILITY CRITERIA: CHILDREN AGED 12 TO 59 MONTHS**

Soalan ini mungkin agak sensitif tetapi adalah standard dan perlu saya tanya kepada semua responden.
Orang dewasa menggunakan cara-cara tertentu untuk mengajar kanak-kanak tentang tingkah laku yang betul atau untuk menangani sesuatu masalah tingkah laku. Contohnya: Merosakkan barang mainan. Saya akan membacakan beberapa cara yang mungkin digunakan. Sila beritahu sekiranya **anda atau mana-mana ahli keluarga** pernah menggunakan kaedah ini dengan (nama) **dalam sebulan yang lepas**.

These questions may be quite sensitive but they are standard and I have to ask all respondents.
Adults use certain ways to teach children the right behaviour or to address a behaviour problem. I will read various methods that are used. Please tell me if you or anyone else in the family has used this method with (name) in the past month.

CH4000	<p>Pada kebanyakan masa kanak-kanak ini sedang berjaga, siapa yang menjaga kanak-kanak ini?</p> <p><i>For majority of the time he/she is awake, who mainly looks after and takes care of the child?</i></p>	1. Ayah/ <i>Father</i> 2. Ibu/ <i>Mother</i> 3. Ahli keluarga yang lain/ <i>Other family members</i> 4. Pembantu rumah/ <i>Maid</i> 5. Pengasuh/ <i>Caregiver</i> 6. Cikgu/ <i>Teacher</i> 7. Lain-lain/ <i>Others</i>	
CH4001	<p>Dalam masa sebulan yang lepas, adakah kanak-kanak ini tinggal di rumah ini bersama ahli serumah?</p> <p><i>In the past one month, did the child live in this house with the household members?</i></p>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ
	<p>Sila beritahu sekiranya anda atau mana-mana ahli keluarga pernah menggunakan kaedah ini dengan (nama) dalam sebulan yang lepas.</p> <p><i>Please tell me if you or anyone else in the family has used this method with (name) in the past month.</i></p>		
	<p>a. Melarang sesuatu yang disukai oleh ... (nama) (contohnya melarang menonton TV, melarang bermain dengan mainan kegemaran, atau ke taman mainan kanak-kanak)</p> <p><i>Forbade something ... (name) liked (e.g. forbidden to watch TV, play with favourite toy or go to the playground)</i></p>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ
	<p>b. Menerangkan kenapa tingkah laku ... (nama) itu salah.</p> <p><i>Explained why ... (name)'s behaviour was wrong</i></p>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ
	<p>c. Menggoncangkan kanak-kanak</p> <p><i>Shook him/her</i></p>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ
	<p>d. Memarahi (nama) dengan nada suara yang tinggi</p> <p><i>Scolded (name) with harsh tone</i></p>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ
	<p>e. Memberikan kanak-kanak sesuatu yang lain untuk dilakukan (contohnya bagi mainan atau aktiviti lain)</p> <p><i>Gave him/ her something else to do.</i></p>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ
	<p>f. Memukul di punggung dengan menggunakan tangan.</p> <p><i>Spanked or hit or him/ her on the bottom with bare hand.</i></p>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>	(-9) EJ

	g. Memukul kanak-kanak pada punggung atau mana-mana bahagian badan yang lain dengan sesuatu objek seperti rotan/ 'feather duster', penyangkut baju atau objek yang keras. <i>Hit him/her on the bottom or elsewhere on the body with something like a rattan stick, feather duster, hanger, or other hard object.</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
	h. Memanggil kanak-kanak dengan kata-kata seperti bodoh, malas, atau nama yang lain. <i>Called him/her dumb, lazy, or another name like that.</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
	i. Menampar di muka, memukul di kepala atau memulas/ menarik telinga. <i>Slapped face, hit on head or twisted/pulled ear.</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
	j. Memukul/ menampar/ mencubit kanak-kanak pada tangan, lengan atau kaki/ <i>Hit, slapped or pinched him/her on the hand, arm, or leg.</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ
CH4002	Adakah anda percaya seseorang kanak-kanak perlu didisiplinkan secara fizikal untuk mendidik, atau membesarkan kanak-kanak dengan berkesan? <i>Do you believe that in order to bring up, raise, or educate a child properly, the child needs to be physically disciplined?</i>	1. Ya / Yes 2. Tidak / No	(-9) EJ

SEKSYEN CH5: KERAGUAN VAKSIN / VACCINE HESITANCY

SOAL SELIDIK JAWAB SENDIRI / SELF-ADMINISTERED QUESTIONNAIRE

Kelayakan: Ibu atau bapa yang berumur 18 tahun ke atas dan mempunyai anak berumur 0 - 24 bulan
Eligibility: Parents aged 18 and above and have children aged 0 - 24 months

Arahan kepada penemuramah:

Sila berikan borang soal selidik kepada responden untuk dijawab sendiri dan dikembalikan setelah tamat sesi temuramah.

CH5008	<p>Adakah anda risau bahawa suntikan mungkin memberi kesan sampingan yang serius kepada anak anda? (seperti alahan atau demam)</p> <p><i>How concerned are you that your child might have a serious side effect from a shot?</i></p>	<ol style="list-style-type: none"> 1. Sangat risau / <i>Very concerned</i> 2. Agak risau / <i>Somewhat concerned</i> 3. Tidak pasti / <i>Not sure</i> 4. Tidak terlalu risau / <i>Not too concerned</i> 5. Tidak risau langsung / <i>Not concerned at all</i> 																					
CH5009	<p>Adakah anda risau bahawa mana-mana suntikan untuk anak anda mungkin tidak selamat?</p> <p><i>How concerned are you that any one of the childhood shots might not be safe?</i></p>	<ol style="list-style-type: none"> 1. Sangat risau / <i>Very concerned</i> 2. Agak risau / <i>Somewhat concerned</i> 3. Tidak pasti / <i>Not sure</i> 4. Tidak terlalu risau / <i>Not too concerned</i> 5. Tidak risau langsung / <i>Not concerned at all</i> 																					
CH5010	<p>Adakah anda risau bahawa suntikan mungkin tidak dapat mencegah penyakit?</p> <p><i>How concerned are you that a shot might not prevent the disease?</i></p>	<ol style="list-style-type: none"> 1. Sangat risau / <i>Very concerned</i> 2. Agak risau / <i>Somewhat concerned</i> 3. Tidak pasti / <i>Not sure</i> 4. Tidak terlalu risau / <i>Not too concerned</i> 5. Tidak risau langsung / <i>Not concerned at all</i> 																					
CH5011	<p>Jika anda mempunyai bayi pada masa sekarang, adakah anda mahu bayi tersebut untuk menerima semua suntikan seperti yang telah disyorkan?</p> <p><i>If you had another infant today, would you want him/her to get all the recommended shots?</i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 3. Tidak tahu / <i>Don't know</i> 																					
CH5012	<p>Secara amnya, apakah tahap keraguan anda terhadap suntikan untuk kanak-kanak?</p> <p><i>Overall, how hesitant about childhood shots would you consider yourself to be?</i></p>	<ol style="list-style-type: none"> 1. Sangat ragu-ragu / <i>Very hesitant</i> 2. Agak ragu-ragu / <i>Somewhat hesitant</i> 3. Tidak pasti / <i>Not sure</i> 4. Tidak terlalu ragu-ragu / <i>Not too hesitant</i> 5. Tidak ragu-ragu langsung / <i>Not hesitant at all</i> 																					
CH5013	<p>Saya percaya dengan informasi suntikan yang saya terima. (melalui doktor, kawan atau media sosial)</p> <p><i>I trust the information I receive about shots (doctors, friends and social media).</i></p>	<ol style="list-style-type: none"> 1. Sangat tidak setuju / <i>Strongly disagree</i> 2. Tidak setuju / <i>Disagree</i> 3. Tidak pasti / <i>Not sure</i> 4. Setuju / <i>Agree</i> 5. Sangat setuju / <i>Strongly agree</i> 																					
CH5014	<p>Saya dapat berbincang tentang kebimbangan saya terhadap suntikan dengan doktor kepada anak saya secara terbuka.</p> <p><i>I am able to openly discuss my concerns about shots with my child's doctor.</i></p>	<ol style="list-style-type: none"> 1. Sangat tidak setuju / <i>Strongly disagree</i> 2. Tidak setuju / <i>Disagree</i> 3. Tidak pasti / <i>Not sure</i> 4. Setuju / <i>Agree</i> 5. Sangat setuju / <i>Strongly agree</i> 																					
CH5015	<p>Secara keseluruhan, berapa yakinkah anda terhadap doktor yang merawat anak anda?</p> <p><i>All things considered, how much do you trust your child's doctor?</i></p>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td> </td> </tr> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> </tr> </table> <p style="text-align: right;">→</p> <p>Tidak yakin langsung <i>Not sure at all</i></p> <p>Sangat yakin <i>Completely sure</i></p>											0	1	2	3	4	5	6	7	8	9	10
0	1	2	3	4	5	6	7	8	9	10													

TAMAT MODUL CH

**SEKSYEN N1: PENGUKURAN ANTROPOMETRI (STATUS NUTRISI) /
ANTHROPOMETRY MEASUREMENT (NUTRITIONAL STATUS)**

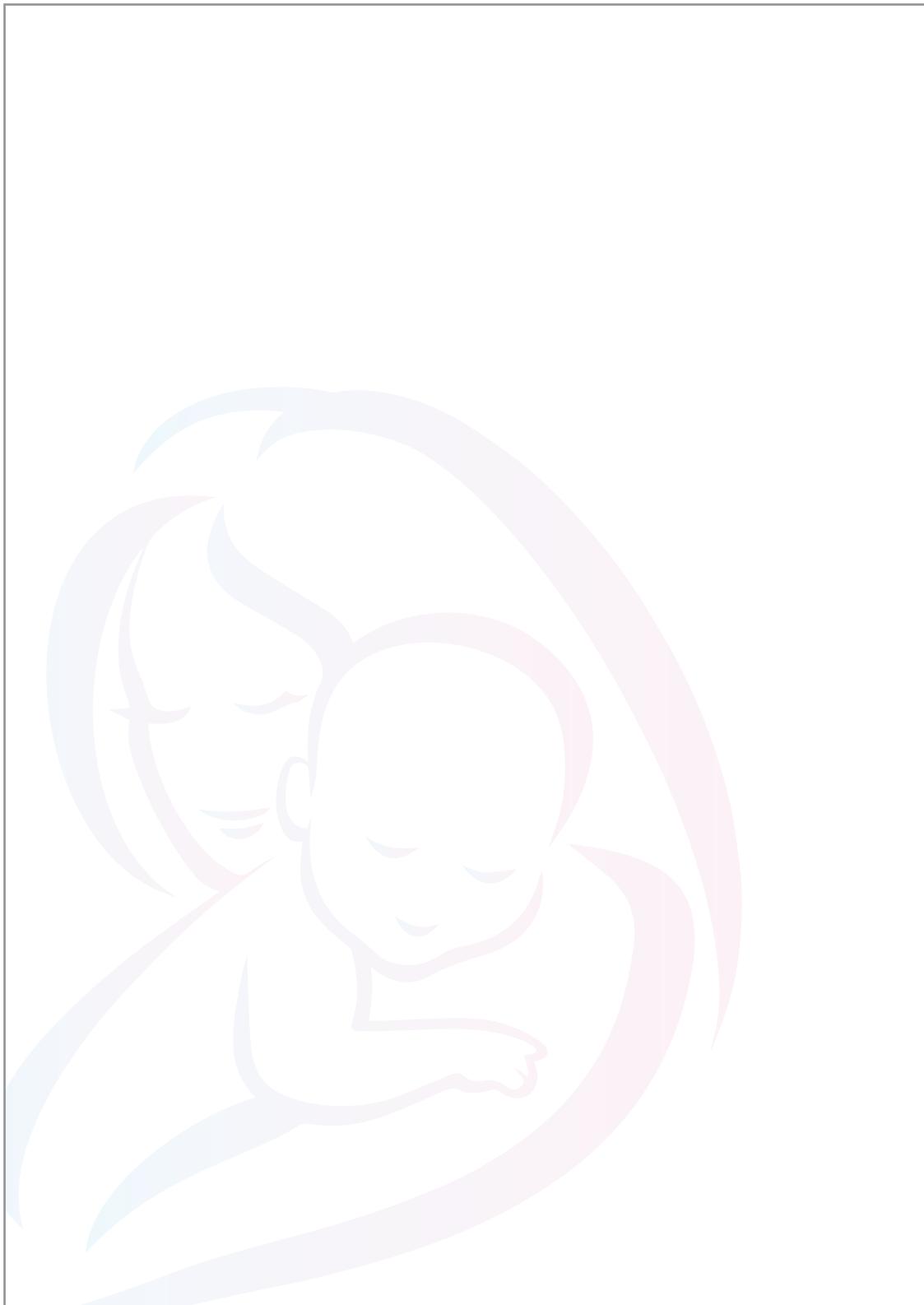
N1001	Minta Buku Rekod Kesihatan Kanak-kanak dari ibu/ penjaga untuk menyemak berat dan panjang sebenarnya SEMASA LAHIR . 1. Ada buku / <i>Book available</i> 2. Tiada buku / <i>Book not available</i>	(-9) EJ
N1002	Jangkamasa kandungan semasa kelahiran <i>Gestation week at birth</i>	<input type="text"/> <input type="text"/> minggu / <i>weeks</i> (Range 20-43)
N1003	Berat semasa lahir <i>Body weight at birth</i>	<input type="text"/> . <input type="text"/> <input type="text"/> kg
N1004	Panjang semasa lahir <i>Body length at birth</i>	<input type="text"/> <input type="text"/> . <input type="text"/> cm
N1005	Rujuk N1001: Jika jawapan =1, sila jawab N1005 Jika selain daripada 1, terus ke N1006 Apgar skor / <i>Apgar score:</i>	a. Dalam 1 minit / <i>In 1 minute</i> b. Dalam 5 minit / <i>In 5 minutes</i> (-7) TT (-7) TT
N1006	Adakah (nama anak) terlantar akibat sakit teruk / berpanjangan / kecederaan / kemalangan. <i>Is (child's name) has bed ridden - due to chronic / prolonged illness / injury / accident.</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> (-9) EJ
N1007	Adakah ....(nama anak) mengalami ketidakupayaan fizikal yang mempengaruhi pengukuran panjang/ tinggi atau menghadkan kebolehan untuk berdiri dengan tegak? <i>Is (child's name) have any physical disabilities which can affect length/ height measurement or ability to stand upright.</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> (-9) EJ

JURURAWAT : Jika 'Ya' kepada salah satu pilihan di atas (N1006-N1007) ini, tamat Seksyen N1.

N1008	Pada masa sekarang, adakah anda rasa anak anda.... <i>At the moment, how do you describe your child body weight?</i>	1. Kurang berat badan yang ketara / <i>Very underweight</i> 2. Kurang berat badan / <i>Underweight</i> 3. Mempunyai berat badan yang sesuai/ <i>Normal</i> 4. Berlebihan berat badan / <i>Overweight</i> 5. Sangat berlebihan berat badan / <i>Very overweight</i>
N1009	Apakah yang anda lakukan terhadap berat badan anak anda? <i>What are you trying to do about your child body weight?</i>	1. Saya sedang berusaha menurunkan berat badan anak saya / <i>I put effort to reduce my child body weight.</i> 2. Saya sedang berusaha menambahkan berat badan anak saya / <i>I put effort to increase my child body weight.</i> 3. Saya tidak membuat apa-apa terhadap berat badan anak saya / <i>Do nothing</i>

Berat Badan / Body Weight:

N1010	Ukuran 1 / <i>1st Measurement</i>	<input type="text"/> . <input type="text"/> <input type="text"/> kg
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**TINJAUAN KESIHATAN
IBU & ANAK
MATERNAL & CHILD HEALTH SURVEY**

NHMS MCH



**MODUL N (JURURAWAT)
PENILAIAN KANAK-KANAK
BAWAH 5 TAHUN**
**MODULE N (NURSES): ASSESSMENT FOR
CHILDREN BELOW 5 YEARS OLD**

(UNTUK DIISI OLEH PENEMURAMAH)

ID:	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
	Negeri (2 digit)	DP & DB (2 digit) (3 digit)	BP (4 digit)	UB (3 digit)	TK (3 digit)	Strata (1 digit)	Isi Rumah & Individu (2 digit) (2 digit)

NAMA KANAK-KANAK

TARIKH TEMURAMAH
 Haribulan Bulan Tahun

BERJAYA	<input type="checkbox"/>
TIDAK BERJAYA	<input type="checkbox"/>
SEBAB-SEBAB TIDAK BERJAYA	
ENGGAN JAWAB	<input type="checkbox"/>
MASALAH BAHASA	<input type="checkbox"/>
MASALAH KESIHATAN	<input type="checkbox"/>
TIADA DI RUMAH	<input type="checkbox"/>

TARIKH TEMURAMAH
 Haribulan Bulan Tahun

MASA TEMURAMAH MULA : _____ TAMAT : _____

N1011	Ukuran 2 / <i>2nd Measurement</i>	<input type="text"/> . <input type="text"/> <input type="text"/> kg
Panjang Length	► Kanak-kanak berumur bawah 2 tahun (diukur secara berbaring) ► Child under 2 years old (lying down)	
Tinggi Height	► Kanak-kanak berumur 2 – 4 tahun (diukur secara berdiri) ► Child age 2 – 4 years (standing up)	
N1012	Kaedah ukuran	1. Berbaring / <i>Recumbent length</i> 2. Berdiri / <i>Standing height</i>
N1013	Ukuran 1 / <i>1st Measurement</i>	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> cm
N1014	Ukuran 2 / <i>2nd Measurement</i>	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> cm

42 Buku Soal Selidik
Questionnaire Book

SEKSYEN N2: PERKEMBANGAN KANAK-KANAK / CHILD DEVELOPMENT

KRITERIA KELAYAKAN: KANAK-KANAK BERUMUR 6 HINGGA 59 BULAN ELIGIBILITY CRITERIA: CHILDREN AGED 6 TO 59 MONTHS		
UMUR / AGE	PERKEMBANGAN KANAK-KANAK / CHILD DEVELOPMENT Adakah bayi anda boleh / <i>Is your baby able to:</i>	JAWAPAN / ANSWER
6 – 8 bulan 6 – 8 months	<i>Bagi soalan N2001 (b), sila lakukan tugas yang dinyatakan. Jika tidak ada peluang melakukan, boleh terima melalui laporan ibu/penjaga.</i>	
N2001	a. Boleh mengawal kepala ketika ditarik dari keadaan baring ke duduk <i>Good head control, no head lag when pulled to sit</i>	1. Ya / Yes 2. Tidak / No
	b. Bayi boleh meniarap dan menelentang <i>Roll over supine to prone, prone to supine</i>	1. Ya / Yes 2. Tidak / No
	c. Bayi boleh menggenggam objek <i>Can grasp objects</i>	1. Ya / Yes 2. Tidak / No
	d. Mata bayi mengikut pergerakan objek <i>Fix and follow objects</i>	1. Ya / Yes 2. Tidak / No
	e. Bayi bertindak balas kepada bunyi <i>Baby reacts to sound</i>	1. Ya / Yes 2. Tidak / No
UMUR / AGE	PERKEMBANGAN KANAK-KANAK / CHILD DEVELOPMENT Adakah bayi anda boleh / <i>Is your baby able to:</i>	JAWAPAN / ANSWER
9 – 11 bulan 9 – 11 months	<i>Bagi soalan N2002 (b, c dan d), sila lakukan tugas yang dinyatakan. Jika tidak ada peluang melakukan, boleh terima melalui laporan ibu/penjaga.</i>	
N2002	a. Duduk tanpa disokong <i>Sit without support</i>	1. Ya / Yes 2. Tidak / No
	b. Memindahkan objek dari tangan ke tangan <i>Transfer objects from hand to hand</i>	1. Ya / Yes 2. Tidak / No
	c. Makan sendiri menyusup makanan ke mulut <i>Put food into mouth (Self-feeding)</i>	1. Ya / Yes 2. Tidak / No
	d. Meniru sebutan seperti Ma-Ma.. Ba-ba.. Da-da? <i>Imitate sounds like Ma-Ma.. Ba-ba.. Da-da?</i>	1. Ya / Yes 2. Tidak / No
UMUR / AGE	PERKEMBANGAN KANAK-KANAK / CHILD DEVELOPMENT Adakah bayi anda boleh / <i>Is your baby able to:</i>	JAWAPAN / ANSWER
12 - 14 bulan 12 - 14 months	<i>Bagi semua soalan N2003, sila lakukan tugas yang dinyatakan. Jika tidak ada peluang melakukan, boleh terima melalui laporan ibu/penjaga.</i>	
N2003	a. Berdiri seketika tanpa bantuan <i>Stand momentarily without assistant</i>	1. Ya / Yes 2. Tidak / No
	b. Mengambil benda kecil menggunakan ibu jari dan jari telunjuk <i>Take small items using thumb and index finger (pincer grip)</i>	1. Ya / Yes 2. Tidak / No
	c. Bermain ‘tepuk amai-amai’ atau melambai tangan <i>Play ‘tepuk amai-amai’ or wave his hand</i>	1. Ya / Yes 2. Tidak / No
	d. Menyebut Pa-Pa, Ma-Ma (tanpa makna) <i>Say Pa-Pa, Ma-Ma with no meaning</i>	1. Ya / Yes 2. Tidak / No

UMUR / AGE 15 - 17 bulan 15 - 17 months	PERKEMBANGAN KANAK-KANAK / CHILD DEVELOPMENT Adakah bayi anda boleh / <i>Is your baby able to:</i> <i>Bagi semua soalan N2004, sila lakukan tugas yang dinyatakan.</i> <i>Jika tidak ada peluang melakukan, boleh terima melalui laporan ibu/penjaga.</i>	JAWAPAN / ANSWER
N2004	a. Berdiri sendiri <i>Standing independently</i>	1. Ya / Yes 2. Tidak / No
	b. Mengetuk 2 kiub/objek <i>Bang 2 cubes/objects</i>	1. Ya / Yes 2. Tidak / No
	c. Menyebut 1 patah perkataan dengan makna <i>Say 1 word with meaning</i>	1. Ya / Yes 2. Tidak / No
	d. Memiru aktiviti <i>Imitate activities</i>	1. Ya / Yes 2. Tidak / No
UMUR / AGE 18 - 23 bulan 18 - 23 months	PERKEMBANGAN KANAK-KANAK / CHILD DEVELOPMENT Adakah bayi anda boleh / <i>Is your baby able to:</i> <i>Bagi semua soalan N2005, sila lakukan tugas yang dinyatakan.</i> <i>Jika tidak ada peluang melakukan, boleh terima melalui laporan ibu/penjaga.</i>	JAWAPAN / ANSWER
N2005	a. Berjalan sendiri <i>Walk independently without support/unaided</i>	1. Ya / Yes 2. Tidak / No
	b. Menconteng <i>Scribble</i>	1. Ya / Yes 2. Tidak / No
	c. Menyebut 3 perkataan dengan makna <i>Say 3 words with meaning</i>	1. Ya / Yes 2. Tidak / No
	d. Mengikut arahan yang mudah <i>Follow simple instructions</i>	1. Ya / Yes 2. Tidak / No
UMUR / AGE 24 - 35 bulan 24 - 35 months	PERKEMBANGAN KANAK-KANAK / CHILD DEVELOPMENT Adakah bayi anda boleh / <i>Is your baby able to:</i> <i>Bagi soalan N2006 (a, c dan d), sila lakukan tugas yang dinyatakan. Jika tidak ada peluang melakukan, boleh terima melalui laporan ibu/penjaga/ibu/penjaga.</i>	JAWAPAN / ANSWER
N2006	a. Boleh berlari <i>Able to run well</i>	1. Ya / Yes 2. Tidak / No
	b. Membuat menara dengan 2 kiub <i>Build a tower of 2 cubes</i>	1. Ya / Yes 2. Tidak / No
	c. Membuka pakaian <i>Able to remove clothes</i>	1. Ya / Yes 2. Tidak / No
	d. Enam (6) patah perkataan selain dari MA-MA atau PA-PA <i>Say 6 words with meaning other than MA-MA or PA-PA</i>	1. Ya / Yes 2. Tidak / No
UMUR / AGE 36 - 47 bulan 36 - 47 months	PERKEMBANGAN KANAK-KANAK / CHILD DEVELOPMENT Adakah bayi anda boleh / <i>Is your baby able to:</i> <i>Bagi soalan N2007 (b, d dan e), sila lakukan tugas yang dinyatakan. Jika tidak ada peluang melakukan, boleh terima melalui laporan ibu/penjaga.</i>	JAWAPAN / ANSWER

N2007	a. Berdiri sebelah kaki selama 1 saat <i>Stand on one foot for 1 second</i>	1. Ya / Yes 2. Tidak / No
	b. Memakai pakaian <i>Puts on clothing</i>	1. Ya / Yes 2. Tidak / No
	c. Meniru garisan melintang dan menegak mengikut pemeriksa <i>Imitate horizontal and vertical lines</i>	1. Ya / Yes 2. Tidak / No
	d. Menyatukan dua (2) patah perkataan yang berbeza <i>Make a 2-word sentence</i>	1. Ya / Yes 2. Tidak / No
	e. Boleh bermain olok-olok <i>Able to engage in pretend play</i>	1. Ya / Yes 2. Tidak / No
UMUR / AGE 48 - 59 bulan 48 - 59 months	PERKEMBANGAN KANAK-KANAK / CHILD DEVELOPMENT Adakah bayi anda boleh / <i>Is your baby able to:</i> <i>Bagi soalan N2008 (e dan f), sila lakukan tugas yang dinyatakan. Jika tidak ada peluang melakukan, boleh terima melalui laporan ibu/penjaga.</i>	JAWAPAN / ANSWER
N2008	a. Berdiri sebelah kaki untuk sekurang-kurangnya 3 saat <i>Balance on one foot for 3 seconds</i>	1. Ya / Yes 2. Tidak / No
	b. Meniru bulatan dengan lengkap <i>Copy a complete circle</i>	1. Ya / Yes 2. Tidak / No
	c. Memegang pensel (<i>active tripod grasp</i>) <i>Hold pencil (<i>active tripod grasp</i>)</i>	1. Ya / Yes 2. Tidak / No
	d. Boleh buang air kecil dan besar tanpa bantuan <i>Goes to toilet independently</i>	1. Ya / Yes 2. Tidak / No
	e. Pertuturan boleh difahami oleh semua orang dan boleh bercerita <i>Speech understood by others and can tell long stories</i>	1. Ya / Yes 2. Tidak / No
	f. Bergaul dengan kanak-kanak lain <i>Interacts with other children</i>	1. Ya / Yes 2. Tidak / No

BAHAGIAN N3: LIPUTAN VAKSINASI / VACCINATION COVERAGE

KRITERIA KELAYAKAN: KANAK-KANAK BERUMUR 12 HINGGA 23 BULAN
ELIGIBILITY CRITERIA: CHILDREN AGED 12 TO 23 MONTHS

RUJUK N1001

Sekiranya kanak-kanak mempunyai **Buku Rekod Kesihatan Bayi dan Kanak-kanak**, salin tarikh imunisasi setiap vaksin ke dalam jadual Soalan N3001.

N3001a	i. BCG / <i>BCG</i>	1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) disahkan dengan parut BCG / <i>Yes (not remember date) confirmed with BCG scar</i> 3. Tidak (disahkan tiada parut BCG) / <i>No (confirmed without BCG scar)</i>	} ke N3001a_ii	ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i> 1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i> (-7) TT (-9) EJ
N3001b	i. Hep B Dos kelahiran (HEP 1) / <i>Hep B at birth</i>	1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) / <i>Yes (not remember date)</i> 3. Tidak / <i>No</i>	} ke N3001b_ii	ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i> 1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i> (-7) TT (-9) EJ
N3001c	i. Hep B Dos 2 (HEP 2) / <i>Hep B Dose 2</i>	1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) / <i>Yes (not remember date)</i> 3. Tidak (mengikut jadual baru) / <i>No (follow new schedule)</i> 4. Tidak / <i>No</i>	} ke N3001c_ii	ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i> 1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i> (-7) TT (-9) EJ
N3001d	i. DTaP-IPV/Hib Dos 1 / <i>DTaP-IPV/Hib Dose 1</i> ATAU DTaP-IPV-HepB-Hib Dos 1 / <i>DTaP-IPV-HepB-Hib Dose 1</i>	1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) / <i>Yes (not remember date)</i> 3. Tidak / <i>No</i>	} ke N3001d_ii	ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i> 1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i> (-7) TT (-9) EJ

N3001e	<p>i. DTaP-IPV/Hib Dos 2 / <i>DTaP-IPV/Hib Dose 2</i> ATAU DTaP-IPV-HepB-Hib Dos 2 / <i>DTaP-IPV-HepB-Hib Dose 2</i></p>	<p>1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) / <i>Yes (not remember date)</i> 3. Tidak / <i>No</i></p> <p style="text-align: right;">(-9) EJ</p>	<p>ke N3001e_ii</p> <p>ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i></p> <p>1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
N3001f	<p>i. Pneumokokal Dos 1 / <i>Pneumococcal Dose 1</i></p>	<p>1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) / <i>Yes (not remember date)</i> 3. Tidak (mengikut jadual baru) / <i>No (follow new schedule)</i> 4. Tidak / <i>No</i></p> <p style="text-align: right;">(-9) EJ</p>	<p>ke N3001f_ii</p> <p>ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i></p> <p>1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
N3001g	<p>i. DTaP-IPV/Hib Dos 3 / <i>DTaP-IPV/Hib Dose 3</i> ATAU DTaP-IPV-HepB-Hib Dos 3 / <i>DTaP-IPV-HepB-Hib Dose 3</i></p>	<p>1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) / <i>Yes (not remember date)</i> 3. Tidak / <i>No</i></p> <p style="text-align: right;">(-9) EJ</p>	<p>ke N3001g_ii</p> <p>ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i></p> <p>1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
N3001h	<p>i. Hep B Dos 3 (HEP 3) / <i>Hep B Dose 3</i></p>	<p>1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) / <i>Yes (not remember date)</i> 3. Tidak (mengikut jadual baru) / <i>No (follow new schedule)</i> 4. Tidak / <i>No</i></p> <p style="text-align: right;">(-9) EJ</p>	<p>ke N3001h_ii</p> <p>ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i></p> <p>1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>
N3001i	<p>i. Pneumokokal Dos 2 / <i>Pneumococcal Dose 2</i></p>	<p>1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) / <i>Yes (not remember date)</i> 3. Tidak (mengikut jadual baru) / <i>No (follow new schedule)</i> 4. Tidak / <i>No</i></p> <p style="text-align: right;">(-9) EJ</p>	<p>ke N3001i_ii</p> <p>ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i></p> <p>1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>

N3001j	i. MMR Dos 1 / <i>MMR Dose 1</i>	1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) / <i>Yes (not remember date)</i> 3. Tidak / <i>No</i>	(-9) EJ	ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i> 1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i> (-7) TT (-9) EJ
N3001k	i. MMR Dos 2 / <i>MMR Dose 2</i>	1. Ya (ingat tarikh) / <i>Yes (remember date)</i> (Sila nyatakan tarikh) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Ya (tidak ingat tarikh) / <i>Yes (not remember date)</i> 3. Tidak / <i>No</i>	(-9) EJ	ii. Tempat mendapatkan vaksinasi / <i>Place of vaccination</i> 1. Kerajaan / <i>Government</i> 2. Swasta / <i>Private</i> (-7) TT (-9) EJ
N3002	<p>Adakah anda terlepas atau ditunda temujanji immunisasi anak anda semasa langkah penjaraikan sosial (Perintah Kawalan Pergerakan, PKP) COVID-19? <i>Have you missed or delayed vaccination appointments during the COVID-19 social distancing measures (Movement Control Order, MCO)?</i></p> <p>.....</p> <p>(-9) EJ</p>			

SEKSYEN WRSD: SOSIODEMOGRAFI / SOCIODEMOGRAPHY

Soalan untuk diisi oleh penemuramah: Pilih SATU jawapan sahaja.

WRSD01	Siapakah yang telah menjawab modul HH: Isirumah? <i>Who has answer module HH: Household?</i>	1. Saya yang menjawab.... terus ke seksyen WR1 <i>I answered it</i> 2. Lain-lain <i>Others</i>
WRSD02	Siapakah nama anda? <i>What is your name?</i>	.....
WRSD03	Apakah hubungan anda dengan... (nama ketua isirumah)? <i>What is your relationship to... (name of head of household)</i>	1. Ketua isirumah / <i>Head of Household</i> 2. Suami atau isteri / <i>Spouse</i> 3. Ibubapa / <i>Parent</i> 4. Anak / <i>Child</i> 5. Datuk/ nenek atau moyang / <i>Grand- or great-grandparent</i> 6. Cucu atau cicit / <i>Grand- or great-grandchild</i> 7. Adik-beradik / <i>Siblings</i> 8. Mertua / <i>Parent-in-law</i> 9. Menantu / <i>Son- or Daughter in-law</i> 10. Ipar-Duai / <i>Brother- or Sister-in-law</i> 11. Saudara-mara lain / <i>Other relatives</i> 12. Kawan / <i>Friend</i> 13. Pekerja (pembantu rumah, tukang kebun, pemandu, lain-lain) / <i>Workers (live-in housemaid, gardener, driver, others)</i> 14. Lain-lain / <i>Others:</i> Sila nyatakan / <i>Please specify:</i> (-7) TT (-9) EJ
WRSD04	Bilakah tarikh lahir anda? <i>When is your birth date?</i>	
[PENEMURAMAH: Sekiranya 'TT' tuliskan '01' untuk hari '07' untuk bulan '9999' untuk tahun]		
WRSD05	Berapakah umur anda? <i>How old are you?</i>	(-7) TT (-9) EJ
WRSD06	Apakah bangsa anda? <i>What is your ethnicity?</i>	1. Melayu / <i>Malay</i> 2. Cina / <i>Chinese</i> 3. India / <i>Indian</i> 4. Orang Asli Semenanjung / <i>Aborigines</i> 5. Bumiputera Sabah / <i>Bumiputera of Sabah</i> , Sila nyatakan: <i>Please specify:</i> 6. Bumiputera Sarawak / <i>Bumiputera of Sarawak</i> , Sila nyatakan: <i>Please specify:</i> 7. Lain-lain / <i>Others</i> , Sila nyatakan / <i>Please specify:</i> (-7) TT (-9) EJ
WRSD07	Apakah taraf kewarganegaraan anda? <i>What is your citizenship status?</i>	1. Warganegara Malaysia / <i>Malaysian Citizen</i> 2. Permatautin tetap / <i>Permanent Resident of Malaysia</i> 3. Bukan warganegara Malaysia <i>Non-Malaysian Citizen</i> (-7) TT (-9) EJ



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i k u . g o v . m y / n h m s

**TINJAUAN KESIHATAN
IBU & ANAK
MATERNAL & CHILD HEALTH SURVEY**

NHMS MCH



**MODUL WR
WANITA REPRODUKTIF
(15 - 49 TAHUN)**

MODULE WR: WOMEN REPRODUCTIVE AGED 15 - 49 YEARS OLD

(UNTUK DIISI OLEH PENEMU RAMAH)

ID:	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
	Negeri (2 digit)	DP & DB (2 digit) (3 digit)	BP (4 digit)	UB (3 digit)	TK (3 digit)	Strata (1 digit)	Isi Rumah & Individu (2 digit) (2 digit)

KEPUTUSAN TEMURAMAH <i>(sila tanda ✓ kotak yang berkenaan)</i>	BERJAYA	<input type="checkbox"/>
	TIDAK BERJAYA	<input type="checkbox"/>
	SEBAB-SEBAB TIDAK BERJAYA	<input type="checkbox"/>
	ENGGAN JAWAB	<input type="checkbox"/>
	MASALAH BAHASA	<input type="checkbox"/>
	MASALAH KESIHATAN	<input type="checkbox"/>
	TIADA DI RUMAH	<input type="checkbox"/>

TARIKH TEMURAMAH	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
	Haribulan	Bulan	Tahun

MASA TEMURAMAH	MULA :	TAMAT :
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SEKSYEN WRSD: SOSIODEMOGRAFI / SOCIODEMOGRAPHY

Soalan untuk diisi oleh penemuramah: Pilih SATU jawapan sahaja.

WRSD01	Siapakah yang telah menjawab modul HH: Isirumah? <i>Who has answer module HH: Household?</i>	1. Saya yang menjawab....terus ke seksyen WR1 <i>I answered it</i> 2. Lain-lain <i>Others</i>
WRSD02	Siapakah nama anda? <i>What is your name?</i>	.....
WRSD03	Apakah hubungan anda dengan... (nama ketua isirumah)? <i>What is your relationship to... (name of head of household)?</i>	1. Ketua isirumah / <i>Head of Household</i> 2. Suami atau isteri / <i>Spouse</i> 3. Ibubapa / <i>Parent</i> 4. Anak / <i>Child</i> 5. Datuk/ nenek atau moyang / <i>Grand- or great-grandparent</i> 6. Cucu atau cicit / <i>Grand- or great-grandchild</i> 7. Adik-beradik / <i>Siblings</i> 8. Mertua / <i>Parent-in-law</i> 9. Menantu / <i>Son- or Daughter in-law</i> 10. Ipar-Duai / <i>Brother- or Sister-in-law</i> 11. Saudara-mara lain / <i>Other relatives</i> 12. Kawan / <i>Friend</i> 13. Pekerja (pembantu rumah, tukang kebun, pemandu, lain-lain) / <i>Workers (live-in housemaid, gardener, driver, others)</i> 14. Lain-lain / <i>Others:</i> Sila nyatakan / <i>Please specify:</i>
		(-7) TT (-9) EJ
WRSD04	Bilakah tarikh lahir anda? <i>When is your birth date?</i>	<input style="width: 20px; height: 20px; border: 1px solid black; margin-right: 10px;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black; margin-right: 10px;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black; margin-right: 10px;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black; margin-right: 10px;" type="text"/> D D M M Y Y Y Y
[PENEMURAMAH: Sekiranya 'TT' tuliskan '01' untuk hari '07' untuk bulan '9999' untuk tahun]		
WRSD05	Berapakah umur anda? <i>How old are you?</i>	<input style="width: 20px; height: 20px; border: 1px solid black; margin-right: 10px;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black; margin-right: 10px;" type="text"/> Tahun Genap (-7) TT (-9) EJ
WRSD06	Apakah bangsa anda? <i>What is your ethnicity?</i>	1. Melayu / <i>Malay</i> 2. Cina / <i>Chinese</i> 3. India / <i>Indian</i> 4. Orang Asli Semenanjung / <i>Aborigines</i> 5. Bumiputera Sabah / <i>Bumiputera of Sabah</i> , Sila nyatakan: <i>Please specify:</i> 6. Bumiputera Sarawak / <i>Bumiputera of Sarawak</i> , Sila nyatakan: <i>Please specify:</i> 7. Lain-lain / <i>Others</i> , Sila nyatakan / <i>Please specify:</i>
		(-7) TT (-9) EJ
WRSD07	Apakah taraf kewarganegaraan anda? <i>What is your citizenship status?</i>	1. Warganegara Malaysia / <i>Malaysian Citizen</i> 2. Permastutin tetap / <i>Permanent Resident of Malaysia</i> 3. Bukan warganegara Malaysia <i>Non-Malaysian Citizen</i>
		(-7) TT (-9) EJ

WRSD08	<p>Apakah taraf perkahwinan anda? <i>What is your marital status?</i></p>	<ol style="list-style-type: none"> 1. Tidak pernah berkahwin / <i>Never married</i> 2. Berkahwin / <i>Married</i> 3. Berpisah / <i>Separated</i> 4. Janda / Duda / <i>Divorcee</i> 5. Balu / <i>Widow</i> / <i>Widower</i> 6. Tinggal bersama pasangan / <i>Living with partner</i> <p style="text-align: right;">(-7) TT (-9) EJ</p>
WRSD09	<p>Apakah tahap pendidikan tertinggi anda? <i>What is your highest education level?</i></p>	<ol style="list-style-type: none"> 1. Tidak pernah bersekolah / <i>Never attended school</i> 2. Tidak habis sekolah rendah / <i>Did not complete primary school</i> 3. Tamat darjah 6 / <i>Completed standard 6</i> 4. Tamat tingkatan 3 / <i>Completed form 3</i> 5. Tamat tingkatan 5 / <i>Completed form 5</i> 6. Tamat tingkatan 6 / sijil / diploma / <i>Completed form 6 / certificate / diploma</i> 7. Tamat pengajian peringkat sarjana muda / <i>Completed Bachelor degree</i> 8. Tamat pengajian peringkat sarjana / <i>Completed Master degree</i> 9. Tamat pengajian peringkat kedoktoran (PhD) / <i>Completed Doctoral qualification (PhD)</i> 10. Lain-Lain / <i>Others</i>, Sila nyatakan / <i>Please specify:</i> <p style="text-align: right;">(-7) TT (-9) EJ</p>
WRSD10	<p>Adakah anda ... <i>Are you a</i></p> <p>Pilih satu jawapan UTAMA sahaja. <i>Choose only one MAIN answer.</i></p>	<ol style="list-style-type: none"> 1. Majikan / <i>Employer</i> 2. Pekerja kerajaan / <i>Government employee</i> 3. Pekerja separa kerajaan / <i>Semi-government employee</i> 4. Pekerja swasta / <i>Private employee</i> 5. Bekerja sendiri / <i>Self-employed</i> 6. Pekerja tanpa gaji / <i>Unpaid worker</i> 7. Pekerja keluarga tanpa gaji/ Surirumah / <i>Unpaid family worker/ Housewife</i> 8. Lain-lain / <i>Others</i>, Sila nyatakan / <i>Please specify:</i> <p style="text-align: right;">(-7) TT (-9) EJ</p>

SEKSYEN WR1: KONTRASEPTIF / CONTRACEPTION

**KRITERIA KELAYAKAN: WANITA BERUMUR 15 HINGGA 49 TAHUN
ELIGIBILITY CRITERIA: WOMEN AGED 15 to 49 YEARS**

Saya ingin bertanyakan berkenaan satu perkara – perancang keluarga.
I would like to ask you about a subject – family planning.

WR1001	Adakah anda berkahwin sekarang? <i>Are you currently married?</i>	1. Ya / Yes ► ke WR1001a 2. Tidak / No ► ke WR1002
WR1001a	i. Tarikh berkahwin (perkahwinan sekarang): <i>Date of marriage (current marriage):</i> ii. Tarikh berkahwin (perkahwinan kali pertama): <i>Date of marriage (first marriage):</i> Arahan kepada penemuramah: <i>Jika perkahwinan sekarang adalah perkahwinan kali pertama, sila isikan tarikh berkahwin yang sama pada WR1001a.i dan WR1001a.ii.</i>	<input type="text"/> <input type="text"/> <input type="text"/> Hari/Day Bulan/Month Tahun/Year <input type="text"/> <input type="text"/> <input type="text"/> Hari/Day Bulan/Month Tahun/Year
WR1002	Adakah anda mempunyai pasangan yang tinggal bersama sekarang? <i>Do you have a partner living together now?</i>	1. Ya, tinggal bersama pasangan dan mempunyai hubungan seksual yang aktif dalam sebulan yang lepas / <i>Yes, living together with partner and sexually active in the past 1 month</i> ► ke WR1002a 2. Ya, tinggal bersama pasangan tetapi tidak mempunyai hubungan seksual yang aktif dalam sebulan yang lepas / <i>Yes, living together with partner but not sexually active in the past 1 month</i> ► ke WR1002a 3. Tidak tinggal bersama pasangan tetapi mempunyai hubungan seksual yang aktif dalam sebulan yang lepas / <i>Not living together with partner but sexually active in the past 1 month</i> ► ke WR1003 4. Tidak tinggal bersama pasangan dan tidak mempunyai hubungan seksual yang aktif dalam sebulan yang lepas / <i>Not living together with partner and not sexually active in the past 1 month</i> ► tamat Modul WR 1
WR1002a	Sejak bilakah anda mula tinggal bersama pasangan sekarang? <i>Since when did you start living with your current partner?</i> Arahan kepada penemuramah: <i>Jika kurang daripada setahun, sila catatkan jawapan dalam bulan. Jika melebihi setahun, sila bantarkan jawapan kepada bilangan tahun yang terdekat.</i>	<input type="text"/> <input type="text"/> 1. Bulan / Month <input type="text"/> <input type="text"/> 2. Tahun / Year

...sila terus ke soalan WR1003

WR1003	<p>Adakah anda pernah melahirkan anak (kelahiran hidup)? <i>Have you ever given birth (live birth)?</i></p> <p>Arahan kepada penemuraham: <i>Kelahiran hidup: anak lahir hidup</i> <i>Live birth: a birth at which a child is born alive</i></p>	<p>1. Ya (Sila nyatakan tarikh lahir anak terakhir) / Yes (Please state the date of birth of last child)</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33.33%;"><input type="text"/></td> <td style="width: 33.33%;"><input type="text"/></td> <td style="width: 33.33%;"><input type="text"/> <input type="text"/></td> </tr> <tr> <td style="text-align: center;">Hari/Day</td> <td style="text-align: center;">Bulan/Month</td> <td style="text-align: center;">Tahun/Year</td> </tr> </table> <p>2. Tidak / No ► ke WRCP01</p>	<input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/>	Hari/Day	Bulan/Month	Tahun/Year
<input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/>						
Hari/Day	Bulan/Month	Tahun/Year						
WR1003a	<p>Adakah terdapat kelahiran hidup dalam 2 tahun yang lepas? <i>Was there a live birth in the last 2 years?</i></p> <p>Arahan kepada penemuraham: <i>Soalan ini tidak perlu ditanya pada responden, sila semak sama ada responden mempunyai kelahiran hidup dalam tempoh dua (2) tahun yang lepas daripada tarikh temuduga berdasarkan maklumat tarikh lahir anak terakhir pada WR1003.</i></p>	<p>1. Ya / Yes ► ke WR1003b 2. Tidak / No ► ke WRCP01</p>						
WR1003b	<p>Semasa anda hamil dengan (nama anak terakhir), adakah anda memang merancang untuk hamil pada masa itu? <i>When you got pregnant with (name of last child), did you want to get pregnant at that time?</i></p>	<p>1. Ya / Yes ► ke WRCP01 2. Tidak / No ► ke WR1003c</p> <p>(-7) TT (-9) EJ</p>						
WR1003c	<p>Semasa itu, adakah anda merancang untuk hamil kemudian atau anda tidak inginkan anak (lagi)? <i>At that time, did you want to have a baby later on, or did you not want any (more) children?</i></p>	<p>1. Kemudian / Later 2. Tidak inginkan anak / No more</p> <p>(-7) TT (-9) EJ</p>						
WRCP01	<p>Adakah anda sedang hamil? <i>Are you pregnant now?</i></p>	<p>1. Ya, sedang hamil / Yes, currently pregnant ► ke WRCP03 2. Tidak / No</p> <p>(-7) TT (-9) EJ</p>						
WRCP02	<p>Pasangan biasanya menggunakan pelbagai cara untuk melambatkan atau mengelak dari hamil. <i>Couples use various ways or methods to delay or avoid a pregnancy.</i></p> <p>Pada ketika ini, adakah anda melakukan sesuatu atau menggunakan sebarang cara untuk melambatkan atau mengelak dari hamil? <i>Are you currently doing something or using any method to delay or avoid getting pregnant?</i></p>	<p>1. Ya / Yes ► ke WRCP07 2. Tidak / No</p> <p>(-7) TT (-9) EJ</p>						

WRCPO3	<p>Pernahkah anda melakukan sesuatu atau menggunakan apa-apa kaedah untuk melambatkan atau mengelak dari hamil? <i>Have you ever done something or used any method to delay or avoid getting pregnant?</i></p>	<ol style="list-style-type: none"> 1. Ya pernah dan sedang hamil / <i>Yes and currently pregnant</i> ► ke WRCPO4 2. Ya pernah dan tidak hamil sekarang / <i>Yes and currently not pregnant</i> ...sila ke WRCPO8 3. Tidak pernah dan sedang hamil / <i>Never and currently pregnant</i> ► ke WRCPO4 4. Tidak pernah dan tidak hamil sekarang / <i>Never and currently not pregnant</i> ► ke WRCPO8 <p style="text-align: right;">(-7) TT (-9) EJ</p>
Arahan kepada penemuramah: Soalan WRCPO4 hingga WRCPO6 hanya ditanya kepada wanita yang sedang hamil sahaja (Sila semak pilihan jawapan '1=Ya, sedang hamil' pada soalan WRCPO1).		
WRCPO4	<p>Sekarang saya ingin membincangkan mengenai kehamilan anda sekarang. Semasa anda hamil, adakah anda memang merancang untuk hamil pada masa itu? <i>Now I would like to talk to you about your current pregnancy. When you got pregnant, did you want to get pregnant at that time?</i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> ► ke WRCPO6 2. Tidak / <i>No</i> <p style="text-align: right;">(-7) TT (-9) EJ</p>
WRCPO5	<p>Adakah anda merancang untuk hamil kemudian atau anda tidak inginkan anak (lagi)? <i>Did you want to have a baby later on or did you not want any (more) children?</i></p>	<ol style="list-style-type: none"> 1. Kemudian / <i>Later</i> 2. Tidak inginkan anak / <i>No more</i> <p style="text-align: right;">(-7) TT (-9) EJ</p>
WRCPO6	<p>Sekarang saya ingin bertanyakan beberapa soalan tentang masa depan. Selepas melahirkan anak yang dikandung ini, adakah anda inginkan anak lagi, atau anda merancang untuk tidak hamil lagi? <i>Now I would like to ask some questions about the future. After the child you are now expecting, would you like to have another child, or would you prefer not to have any more children?</i></p>	<ol style="list-style-type: none"> 1. Inginkan anak lagi / <i>Have another child</i> ► ke WRCPO9 2. Tidak inginkan anak / <i>No more/ None</i> ► ke WRCP12 <p style="text-align: right;">(-7) TT (-9) EJ } ke WRCP12</p>

WRCP07	<p>Apakah yang anda lakukan untuk melambatkan atau mengelak dari hamil? <i>What are you doing to delay or avoid a pregnancy?</i></p> <p>[Boleh tanda (✓) lebih dari satu jawapan/ May tick (✓) more than one answer]</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; background-color: #e67e22; color: white;">Sila tandakan (✓)</th> </tr> </thead> <tbody> <tr><td>1. Pemandulan wanita/ <i>Female sterilization</i></td></tr> <tr><td>2. Pemandulan lelaki/ <i>Male sterilization</i></td></tr> <tr><td>3. Alat dalam rahim/ <i>Intrauterine device (IUD)</i></td></tr> <tr><td>4. Suntikan/ <i>Injectables</i></td></tr> <tr><td>5. Implan/ <i>Implants</i></td></tr> <tr><td>6. Pil perancang/ <i>Pill</i></td></tr> <tr><td>7. Kondom lelaki/ <i>Male condom</i></td></tr> <tr><td>8. Kondom perempuan/ <i>Female condom</i></td></tr> <tr><td>9. Diafragma/<i>Diaphragm</i></td></tr> <tr><td>10. Jeli/ <i>Jelly Form</i></td></tr> <tr><td>11. Kaedah amenorea laktasi*/ <i>Lactational amenorrhoea method (LAM)*</i></td></tr> <tr><td>12. Mengelak waktu subur/ <i>Periodic abstinence/ Rhythm</i></td></tr> <tr><td>13. Azal (pancut luar)/ <i>Withdrawal</i></td></tr> <tr><td>14. Tradisional (cth: jamu, akar kayu, makjun) / <i>Traditional (e.g. herbs, wood roots, makjun)</i></td></tr> <tr><td>15. Lain-lain (nyatakan)/ <i>Other (specify)</i></td></tr> </tbody> </table> <p>*Maklumat untuk penemuramah: Keberkesanannya kaedah amenorea laktasi hanya berlaku sekiranya / The effectiveness of LAM only occurs if: - Ibu belum datang haid selepas bersalin / Mother has not menstruated after childbirth - Penyusuan susu ibu yang eksklusif / Exclusive breastfeeding - Usia bayi kurang dari 6 bulan / Baby is less than 6 months old</p>	Sila tandakan (✓)	1. Pemandulan wanita/ <i>Female sterilization</i>	2. Pemandulan lelaki/ <i>Male sterilization</i>	3. Alat dalam rahim/ <i>Intrauterine device (IUD)</i>	4. Suntikan/ <i>Injectables</i>	5. Implan/ <i>Implants</i>	6. Pil perancang/ <i>Pill</i>	7. Kondom lelaki/ <i>Male condom</i>	8. Kondom perempuan/ <i>Female condom</i>	9. Diafragma/ <i>Diaphragm</i>	10. Jeli/ <i>Jelly Form</i>	11. Kaedah amenorea laktasi*/ <i>Lactational amenorrhoea method (LAM)*</i>	12. Mengelak waktu subur/ <i>Periodic abstinence/ Rhythm</i>	13. Azal (pancut luar)/ <i>Withdrawal</i>	14. Tradisional (cth: jamu, akar kayu, makjun) / <i>Traditional (e.g. herbs, wood roots, makjun)</i>	15. Lain-lain (nyatakan)/ <i>Other (specify)</i>
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(-7) TT (-9) EJ																	

WRCP08	<p>Sekarang saya ingin bertanyakan beberapa soalan tentang masa depan. Adakah anda inginkan anak (lagi), atau anda tidak inginkan anak (lagi)?</p> <p><i>Now I would like to ask you some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?</i></p>	<ol style="list-style-type: none"> 1. Inginkan anak (lagi) / <i>Have (a/another) child</i> ► ke WRCP12 2. Tidak inginkan anak (lagi) dan sedang menggunakan sebarang kaedah untuk melambatkan atau mengelak dari hamil / <i>No more/None and currently doing something or using any method to delay or avoid getting pregnant</i> 3. Tidak inginkan anak (lagi) dan tidak menggunakan sebarang kaedah untuk melambatkan atau mengelak dari hamil / <i>No more/None and do not use any method to delay or avoid getting pregnant</i> ► ke WRCP10 4. Menjawab yang dia tidak dapat hamil / <i>Says she cannot get pregnant</i> ► ke WRCP11 5. Telah melakukan pemandulan wanita / <i>Has performed female sterilization</i> ► ke WRCP12 	(-7) TT (-9) EJ
WRCP09	<p>Berapa lamakah anda mahu menunggu sebelum lahirkan seorang (lagi) anak?</p> <p><i>How long would you like to wait before the birth of (a/another) child?</i></p> <p>[Catatkan jawapan seperti yang dinyatakan oleh responden/ Record the answer as stated by respondent.]</p>	<ol style="list-style-type: none"> 1. Bulan / <i>Months</i> <input type="text"/> <input type="text"/> 2. Tahun / <i>Years</i> <input type="text"/> <input type="text"/> 3. Tidak mahu menunggu (sekarang) / <i>Does not want to wait (soon/now)</i> 4. Menjawab yang dia tidak dapat hamil / <i>Says she cannot get pregnant</i> ► ke WRCP11 5. Selepas kahwin / <i>after marriage</i> 6. Lain-lain / <i>Other</i> 	(-7) TT (-9) EJ
WRCP10s	<p>Sila pilih kenyataan yang berkenaan dengan keadaan anda sekarang.</p> <p><i>Please select the statement that applies to your current situation.</i></p>	<ol style="list-style-type: none"> 1. "Saya sedang hamil sekarang" / <i>"I am currently pregnant"</i> ► ke WRCP12 2. "Saya tidak hamil sekarang dan sedang menggunakan perancang keluarga" / <i>"I am not pregnant now and currently using contraceptive"</i> ► ke WRCP12 3. "Saya tidak hamil sekarang dan tidak menggunakan perancang keluarga" / <i>"I am not pregnant now and currently not using contraceptive"</i> ► ke WRCP10 	
WRCP10	<p>Pada masa ini, secara fizikal, adakah anda rasa anda dapat hamil?</p> <p><i>Do you think you are physically able to get pregnant at this time?</i></p> <p>*Maklumat untuk penemuramah: <i>Secara fizikal: dari segi kesihatan badan dan fungsi tubuh badan individu yang optimum</i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> ► ke WRCP12 2. Tidak / <i>No</i> 	(-7) TT (-9) EJ } ke WRCP12

WRCP11	<p>Secara fizikal, mengapakah anda rasa anda tidak dapat hamil? <i>Why do you think you are not physically able to get pregnant?</i></p> <p>1. Jarang-jarang hubungan seks / <i>Infrequent sex/ No sex</i> 2. Putus haid / <i>Menopausal</i> 3. Tidak pernah datang haid / <i>never menstruated</i> Uterus telah dibuang / <i>Hysterectomy (Surgical removal of uterus)</i> 4. Masih belum hamil walaupun telah mencuba 2 tahun atau lebih / <i>Has been trying to get pregnant for 2 years or more without result</i> 5. Tiada haid selepas pantang / <i>Postpartum amenorrhoeic</i> 6. Sedang menyusu badan / <i>Breastfeeding</i> 7. Terlalu tua / <i>Too old</i> 8. Percaya atau berpegang kepada nasib / <i>Fatalistic</i> 9. Lain-lain (nyatakan) / <i>Other (specify)</i></p> <p style="text-align: right;">► tamat Seksyen WR1</p>
WRCP12	<p>Bilakah kitaran haid terakhir anda bermula? <i>When did your last menstrual period start?</i></p> <p>[Catatkan jawapan menggunakan unit yang sama seperti yang dinyatakan oleh responden/ <i>Record the answer using the same unit stated by the respondent.</i>]</p> <p>If '1 year', probe: <i>How many months ago?</i></p> <p>Arahan kepada penemuramah: <i>Sila cuba tanyakan tarikh hari pertama datang haid terakhir untuk mengira jangka masa sejak tarikh tersebut, dan catatkan jawapan dalam unit yang sesuai.</i></p> <p>1. Berapa hari yang lepas / <i>Days ago</i> <input type="text"/> <input type="text"/> 2. Berapa minggu yang lepas / <i>Weeks ago</i> <input type="text"/> <input type="text"/> 3. Berapa bulan yang lepas / <i>Months ago</i> <input type="text"/> <input type="text"/> 4. Berapa tahun yang lepas / <i>Years ago</i> <input type="text"/> <input type="text"/> 5. Putus haid/ Uterus telah dibuang / <i>In menopause/ Has had hysterectomy</i> 6. Sebelum kehamilan terakhir / <i>Before last pregnancy</i> 7. Tidak pernah datang haid / <i>Never menstruated</i></p> <p style="text-align: right;">(-7) TT (-9) EJ</p>

SEKSYEN WR2: KEGUGURAN / PENGGUGURAN / MISCARRIAGE / ABORTION

**KRITERIA KELAYAKAN: WANITA REPRODUKTIF BERUMUR 15 HINGGA 49 TAHUN
ELIGIBILITY CRITERIA: WOMEN OF REPRODUCTIVE AGED 15 to 49 YEARS**

Saya ingin bertanyakan berkenaan satu lagi perkara – keguguran atau pengguguran.
I would like to ask you about another subject – miscarriage or abortion.

WR201	<p>Adakah cik/puan pernah mengalami keguguran? <i>Have you ever had a miscarriage?</i></p> <p>Maklumat untuk penemuraman: <i>Keguguran: keguguran secara semulajadi atau tidak sengaja tanpa menggunakan sebarang ubat atau intervensi pada usia kandungan bawah 22 minggu (natural or accidental miscarriage without the use of any medication or intervention below 22 weeks of pregnancy)</i></p>	<p>1. Ya / Yes 2. Tidak / No</p>
WR202	<p>Adakah cik/puan pernah menggugurkan kandungan? <i>Have you ever had an induced abortion?</i></p> <p>Maklumat untuk penemuraman: <i>Pernah menggugurkan kandungan: Pernah menggugurkan kandungan secara sengaja sama ada memakan ubat atau membuat cuci rahim atau melakukan sesuatu menggunakan apa-apa kaedah, pada usia kandungan bawah 22 minggu (ever had an abortion intentionally either by taking medication or surgical procedure or done something using any method, below 22 weeks of pregnancy)</i></p>	<p>1. Ya / Yes 2. Tidak / No</p>

SEKSYEN WR3: KEGANASAN PASANGAN INTIM / INTIMATE PARTNER VIOLENCE

SOAL SELIDIK JAWAB SENDIRI / SELF-ADMINISTERED QUESTIONNAIRE

KRITERIA KELAYAKAN: WANITA BERUMUR 15 HINGGA 49 TAHUN YANG PERNAH BERKAHWIN (DULU ATAU SEKARANG) ATAU PERNAH MEMPUNYAI PASANGAN YANG TINGGAL BERSAMA (DULU ATAU SEKARANG)
ELIGIBILITY CRITERIA: WOMEN AGED 15 TO 49 YEARS WHO EVER/CURRENTLY MARRIED OR LIVED/LIVING WITH PARTNER

Arahuan kepada penemuramah:

Sila berikan borang soal selidik kepada responden untuk dijawab sendiri dan dikembalikan setelah tamat sesi temuramah.

Soalan berikutnya adalah mengenai hubungan dengan pasangan yang terkini atau pasangan terdahulu (tidak tinggal bersama pada masa ini)

The following questions are about your relationship with your current partner or previous partners (not staying together at this point).

WR300	<p>Adakah cik/puan pernah berkahwin atau mempunyai pasangan yang tinggal bersama? <i>Have you ever been married or living with a partner?</i></p>	<p>1. Ya / Yes 2. Tidak / No *Jika jawab 'Tidak', soalan TAMAT. If 'No', END question.</p>
WR301	<p>Secara am, adakah benar pasangan terkini/ terakhir puan cuba menghalang puan berjumpa rakan-rakan? <i>In general, is it true that your last/ current partner has tried to stop you from meeting your friends?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p>
WR302	<p>Secara am, adakah benar pasangan terkini/ terakhir puan menghadkan perhubungan dengan keluarga kandung puan? <i>In general, is it true your last/ current partner limits your relationship with your biological family?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p>
WR303	<p>Secara am, adakah benar pasangan terkini/ terakhir puan bertegas untuk mengetahui dimanakah puan setiap masa? <i>In general, is it true that your last/ current partner insists to know where you are at all times?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p>
WR304	<p>Secara am, adakah benar pasangan terkini/ terakhir puan bertegas untuk mengetahui dimanakah puan setiap masa? <i>In general, is it true that your last/ current partner insists to know where you are at all times?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p>
WR305	<p>Secara am, adakah benar pasangan terkini/ terakhir puan menjadi marah jika puan bercakap dengan lelaki lain? <i>In general, is it true that your last/ current partner becomes angry if you speak with another man?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p>
WR306	<p>Secara am, adakah benar pasangan terkini/ terakhir puan berprasangka yang puan tidak setia? <i>In general, is it true that your last/ current partner has suspected you of being unfaithful?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p>
WR307	<p>Secara am, adakah benar pasangan terkini/ terakhir puan mahu puan meminta kebenarananya sebelum mendapatkan penjagaan kesihatan untuk puan? <i>In general, is it true that your last/ current partner wants you to ask his permission before seeking health care for yourself?</i></p>	<p>1. Ya / Yes 2. Tidak / No</p>

WR308	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>menghina puan atau membuat puan berasa teruk tentang diri sendiri?</u> <i>At any time, has your current partner or any partner before this insulted you or made you feel bad about yourself?</i>	1. Ya / Yes 2. Tidak / No ► ke WR309
WR308a	Adakah ini (perkara WR308) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR308) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas ► ke WR309 <i>/ Not within the last 12 months</i>
WR308b	Jika berlaku dalam 12 bulan yang lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / Once 2. Beberapa kali / Several times 3. Banyak kali / Many times
WR309	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>merendahkan atau memalukan puan di hadapan orang lain?</u> <i>At any time, has your current partner or any partner before this degraded or humiliated you in front of others?</i>	1. Ya / Yes 2. Tidak / No ► ke WR310
WR309a	Adakah ini (perkara WR309) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR309) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas ► ke WR310 <i>/ Not within the last 12 months</i>
WR309b	Jika berlaku dalam 12 bulan yang lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / Once 2. Beberapa kali / Several times 3. Banyak kali / Many times
WR310	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>melakukan perkara untuk mengugut atau menakut-nakutkan puan</u> (contoh: dengan cara dia melihat puan, menjerit atau memecahkan barang)? <i>At any time, has your current partner or any partner previously do things to threaten or make you scared (example: by the way he looks at you, shouts or break things)?</i>	1. Ya / Yes 2. Tidak / No ► ke WR311
WR310a	Adakah ini (perkara WR310) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR310) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas ► ke WR311 <i>/ Not within the last 12 months</i>
WR310b	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / Once 2. Beberapa kali / Several times 3. Banyak kali / Many times
WR311	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>mengugut untuk mencederakan puan atau seseorang yang puan ambil berat?</u> <i>At any time, has your current partner or any partner previously threatened to hurt you or somebody whom you cared about?</i>	1. Ya / Yes 2. Tidak / No ► ke WR312

WR311a	<p>Adakah ini (perkara WR311) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR311) happen within the last 12 months?</i></p>	<p>1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas ► ke WR312 / <i>Not within the last 12 months</i></p>
WR311b	<p>Jika berlaku dalam 12 bulan yang lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i></p>	<p>1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i></p>
WR312	<p>Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>menampar puan atau membaling sesuatu pada puan yang boleh mencederakan puan?</u> <i>At any time, has your current partner or any partner before this slapped or thrown something at you that could hurt you?</i></p>	<p>1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> ► ke WR313</p>
WR312a	<p>Adakah ini (perkara WR312) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR312) happen within the last 12 months?</i></p>	<p>1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas ► ke WR313 / <i>Not within the last 12 months</i></p>
WR312b	<p>Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i></p>	<p>1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i></p>
WR313	<p>Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>menolak atau menarik puan, atau menarik rambut puan?</u> <i>At any time, has your current partner or any partner before this pushed or grabbed you or pulled your hair?</i></p>	<p>1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> ► ke WR314</p>
WR313a	<p>Adakah ini (perkara WR313) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR313) happen within the last 12 months?</i></p>	<p>1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas ► ke WR314 / <i>Not within the last 12 months</i></p>
WR313b	<p>Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i></p>	<p>1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i></p>
WR314	<p>Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>menumbuk puan atau menggunakan sesuatu yang boleh mencederakan puan?</u> <i>At any time, has your current partner or any partner previously beat you with his fist or anything else that could hurt you?</i></p>	<p>1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> ► ke WR315</p>
WR314a	<p>Adakah ini (perkara WR314) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR314) happen within the last 12 months?</i></p>	<p>1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas ► ke WR315 / <i>Not within the last 12 months</i></p>
WR314b	<p>Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i></p>	<p>1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i></p>

WR315	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>mennenang, mengheret atau membela</u> puan? <i>At any time, has your current partner or any partner previously kicked, dragged or beaten you?</i>	1. Ya / Yes 2. Tidak / No ► ke WR316
WR315a	Adakah ini (perkara WR315) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR315) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas ► ke WR316 <i>/ Not within the last 12 months</i>
WR315b	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / Once 2. Beberapa kali / Several times 3. Banyak kali / Many times
WR316	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>mencekik atau membakar/mencucuh puan dengan sengaja</u> ? <i>At any time, has your current partner or previous partner choked or burnt you on purpose?</i>	1. Ya / Yes 2. Tidak / No ► ke WR317
WR316a	Adakah ini (perkara WR316) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR316) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas ► ke WR317 <i>/ Not within the last 12 months</i>
WR316b	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / Once 2. Beberapa kali / Several times 3. Banyak kali / Many times
WR317	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>mengancam puan menggunakan pistol, pisau atau apa-apa senjata lain</u> ? <i>At any time, has your current partner or any partner previously threatened you using a gun, knife or any other weapon?</i>	1. Ya / Yes 2. Tidak / No ► ke WR318
WR317a	Adakah ini (perkara WR317) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR317) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas ► ke WR318 <i>/ Not within the last 12 months</i>
WR317b	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / Once 2. Beberapa kali / Several times 3. Banyak kali / Many times
WR318	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>memaksa puan secara fizikal untuk hubungan seks bila puan tidak mahu</u> ? <i>At any time, has your current partner or any partner previously physically forced you to have sexual intercourse when you did not want to?</i>	1. Ya / Yes 2. Tidak / No ► ke WR319
WR318a	Adakah ini (perkara WR318) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR318) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas ► ke WR319 <i>/ Not within the last 12 months</i>

WR318b	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	<ol style="list-style-type: none"> 1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
WR319	Pernahkah puuan mengadakan hubungan seksual yang puuan tidak inginkan dengan pasangan puuan yang sekarang atau sebelumnya <u>kerana takut</u> apa yang mungkin pasangan puuan lakukan? <i>Have you ever entered into an unwanted sexual relationship with your partner or any partner previously because of fear of what your partner might do?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> <p style="text-align: right;">► ke WR320</p>
WR319a	Adakah ini (perkara WR319) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR319) happen within the last 12 months?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas ► ke WR320 <i>/ Not within the last 12 months</i>
WR319b	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	<ol style="list-style-type: none"> 1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
WR320	Pernahkah pasangan puuan memaksa puuan untuk melakukan sesuatu hubungan seksual yang puuan berasa ianya menjatuhkan maruah atau memalukan? <i>Has your partner forced you to do something sexual that you feel is degrading or humiliating?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> <p style="text-align: right;">► ke WR321</p>
WR320a	Adakah ini (perkara WR320) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item WR320) happen within the last 12 months?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas ► ke WR321 <i>/ Not within the last 12 months</i>
WR320b	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	<ol style="list-style-type: none"> 1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
WR321	Pernahkah puuan <u>ditampar, dipukul atau dibelasah</u> oleh mana-mana pasangan semasa mengandung? <i>Have you ever been slapped, hit or beaten by any partner during pregnancy?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 3. Tidak kerana tidak pernah mengandung / <i>No, because was never pregnant</i> <p style="text-align: right;">} ke WR327</p>
WR321a	Nyatakan berapa kali: / <i>State how many times:</i>	<input type="text"/> kali / times
WR322	Pernahkah puuan <u>ditumbuk atau ditendang di perut</u> semasa mengandung? <i>Have you ever been punched or kicked in the belly during pregnancy?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
WR323	Semasa puuan dipukul sewaktu mengandung kali terakhir, adakah orang yang memukul itu adalah ayah kepada anak yang dikandung? <i>During the most recent pregnancy in which you were beaten, was the person who beat you, the father of the child?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>

WR324	Adakah puan tinggal bersama orang itu ketika kejadian? <i>Were you staying with that person during the incident?</i>	1. Ya / Yes 2. Tidak / No
WR325	Adakah orang ini melakukan perkara yang sama sebelum puan mengandung? <i>Did this person do the same things before you were pregnant?</i>	1. Ya / Yes 2. Tidak / No
WR326	Adakah kekerapan keganasan berubah ketika puan mengandung? <i>Did the frequency of violence change when you were pregnant?</i>	1. Semakin kurang ketika mengandung / Less during pregnancy 2. Sama / Same 3. Semakin teruk semasa mengandung / Got worse during pregnancy
WR327	Bilakah puan mula tinggal bersama dengan suami/pasangan puan yang sekarang? <i>When did you start living together with your latest husband/partner?</i> *Jika tidak tinggal bersama pada masa ini tuliskan '01/01/1945' / if do not stay together, write '01/01/1945'	<input type="text"/> Hari/Day <input type="text"/> Bulan/Month <input type="text"/> Tahun/Year
WR328	Adakah pasangan puan yang sekarang , mendera puan secara fizikal atau seksual? <i>Does your current partner abuse you physically or sexually?</i>	1. Ya / Yes 2. Tidak / No 3. Tidak tinggal bersama pasangan / Do not live with partner
WR328a	Jika pernah didera, bilakah kali pertama ia berlaku? <i>If you have a history of having been abused, when was the first time it happened?</i>	<input type="text"/> Hari/Day <input type="text"/> Bulan/Month <input type="text"/> Tahun/Year
WR328b	Jika pernah didera, bilakah kali terakhir ia berlaku? <i>If you have a history of having been abused, when was the last time it happened?</i>	<input type="text"/> Hari/Day <input type="text"/> Bulan/Month <input type="text"/> Tahun/Year
WR329	Adakah pasangan puan yang dahulu , menzalimi puan secara fizikal atau seksual? <i>Did your previous partner abuse you physically or sexually?</i>	1. Ya / Yes 2. Tidak / No 3. Tidak mempunyai pasangan dahulu / Do not have any previous partner
WR329a	Jika pernah didera, bilakah kali pertama ia berlaku? <i>If you have a history of having been abused, when was the first time it happened?</i>	<input type="text"/> Hari/Day <input type="text"/> Bulan/Month <input type="text"/> Tahun/Year
WR329b	Jika pernah didera, bilakah kali terakhir ia berlaku? <i>If you have a history of having been abused, when was the last time it happened?</i>	<input type="text"/> Hari/Day <input type="text"/> Bulan/Month <input type="text"/> Tahun/Year
TAMAT MODUL WR		

ID:	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
Negeri (2 digit)	DP & DB (2 digit) (3 digit)	BP (4 digit)	UB (3 digit)	TK (3 digit)	Strata (1 digit)	Isi Rumah & Individu (2 digit) (2 digit)

SOAL SELIDIK JAWAB SENDIRI / SELF-ADMINISTERED QUESTIONNAIRE

Kelayakan: Ibu atau bapa yang berumur 18 tahun ke atas dan mempunyai anak berumur 0 - 24 bulan

Eligibility: Parents aged 18 and above and have children aged 0 - 24 months

Arah kepada penemuramah:

Sila berikan borang soal selidik kepada responden untuk dijawab sendiri dan dikembalikan setelah tamat sesi temuramah.

CH5001	Pernahkah anda menangguh suntikan untuk anak anda atas sebab selain daripada penyakit atau alahan? <i>Have you ever delayed having your child get a shot for reasons other than illness or allergy?</i>	<ol style="list-style-type: none"> 1. Ya / Yes 2. Tidak / No 3. Tidak tahu / Don't know 											
CH5002	Pernahkah anda mengambil keputusan untuk tidak memberi suntikan kepada anak anda atas sebab selain daripada penyakit atau alahan? (contoh: percaya vaksin adalah bahaya / rasa bayi ada imuniti sendiri?) <i>Have you ever decided not to have your child get a shot for reasons other than illness or allergy?</i>	<ol style="list-style-type: none"> 1. Ya / Yes 2. Tidak / No 3. Tidak tahu / Don't know 											
CH5003	Berapa yakinkah anda bahawa mengikuti jadual suntikan yang dicadangkan adalah baik untuk anak anda? <i>How sure are you that following the recommended shot schedule is a good idea for your child?</i>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td> </tr> </table> <p style="text-align: center;">→</p> <p style="text-align: left;">Tidak yakin langsung <i>Not sure at all</i></p> <p style="text-align: right;">Sangat yakin <i>Completely sure</i></p>	0	1	2	3	4	5	6	7	8	9	10
0	1	2	3	4	5	6	7	8	9	10			
CH5004	Kanak-kanak menerima suntikan yang lebih daripada sepatutnya. (suntikan tambahan di luar jadual vaksinasi lengkap adalah lebih baik untuk mereka) <i>Children get more shots than are good for them.</i>	<ol style="list-style-type: none"> 1. Sangat tidak setuju / Strongly disagree 2. Tidak setuju / Disagree 3. Tidak pasti / Not sure 4. Setuju / Agree 5. Sangat setuju / Strongly agree 											
CH5005	Saya percaya bahawa banyak penyakit yang serius dapat dielakkan melalui suntikan. (contoh penyakit seperti campak, batuk kokol dan lain-lain) <i>I believe that most of the severe illnesses can be prevented by shots (measles, whooping cough, etc).</i>	<ol style="list-style-type: none"> 1. Sangat tidak setuju / Strongly disagree 2. Tidak setuju / Disagree 3. Tidak pasti / Not sure 4. Setuju / Agree 5. Sangat setuju / Strongly agree 											
CH5006	Adalah lebih baik untuk anak saya mendapatkan imuniti melalui jangkitan(semulajadi) daripada suntikan(vaksin). <i>It is better for my child to develop immunity by getting sick than to get a shot.</i>	<ol style="list-style-type: none"> 1. Sangat tidak setuju / Strongly disagree 2. Tidak setuju / Disagree 3. Tidak pasti / Not sure 4. Setuju / Agree 5. Sangat setuju / Strongly agree 											
CH5007	Adalah lebih baik untuk kanak-kanak menerima kurang vaksin pada masa yang sama. (kurang daripada mengikut jadual vaksinasi sepatutnya) <i>It is better for children to get fewer vaccines at the same time.</i>	<ol style="list-style-type: none"> 1. Sangat tidak setuju / Strongly disagree 2. Tidak setuju / Disagree 3. Tidak pasti / Not sure 4. Setuju / Agree 5. Sangat setuju / Strongly agree 											

CH5008	<p>Adakah anda risau bahawa suntikan mungkin memberi kesan sampingan yang serius kepada anak anda? (seperti alahan atau demam) <i>How concerned are you that your child might have a serious side effect from a shot?</i></p>	<ol style="list-style-type: none"> 1. Sangat risau / Very concerned 2. Agak risau / Somewhat concerned 3. Tidak pasti / Not sure 4. Tidak terlalu risau / Not too concerned 5. Tidak risau langsung / Not concerned at all 																								
CH5009	<p>Adakah anda risau bahawa mana-mana suntikan untuk anak anda mungkin tidak selamat? <i>How concerned are you that any one of the childhood shots might not be safe?</i></p>	<ol style="list-style-type: none"> 1. Sangat risau / Very concerned 2. Agak risau / Somewhat concerned 3. Tidak pasti / Not sure 4. Tidak terlalu risau / Not too concerned 5. Tidak risau langsung / Not concerned at all 																								
CH5010	<p>Adakah anda risau bahawa suntikan mungkin tidak dapat mencegah penyakit? <i>How concerned are you that a shot might not prevent the disease?</i></p>	<ol style="list-style-type: none"> 1. Sangat risau / Very concerned 2. Agak risau / Somewhat concerned 3. Tidak pasti / Not sure 4. Tidak terlalu risau / Not too concerned 5. Tidak risau langsung / Not concerned at all 																								
CH5011	<p>Jika anda mempunyai bayi pada masa sekarang, adakah anda mahu bayi tersebut untuk menerima semua suntikan seperti yang telah disyorkan? <i>If you had another infant today, would you want him/her to get all the recommended shots?</i></p>	<ol style="list-style-type: none"> 1. Ya / Yes 2. Tidak / No 3. Tidak tahu / Don't know 																								
CH5012	<p>Secara amnya, apakah tahap keraguan anda terhadap suntikan untuk kanak-kanak? <i>Overall, how hesitant about childhood shots would you consider yourself to be?</i></p>	<ol style="list-style-type: none"> 1. Sangat ragu-ragu / Very hesitant 2. Agak ragu-ragu /Somewhat hesitant 3. Tidak pasti / Not sure 4. Tidak terlalu ragu-ragu / Not too hesitant 5. Tidak ragu-ragu langsung / Not hesitant at all 																								
CH5013	<p>Saya percaya dengan informasi suntikan yang saya terima. (melalui doktor, kawan atau media sosial) <i>I trust the information I receive about shots (doctors, friends and social media).</i></p>	<ol style="list-style-type: none"> 1. Sangat tidak setuju / Strongly disagree 2. Tidak setuju / Disagree 3. Tidak pasti / Not sure 4. Setuju / Agree 5. Sangat setuju / Strongly agree 																								
CH5014	<p>Saya dapat berbincang tentang kebimbangan saya terhadap suntikan dengan doktor kepada anak saya secara terbuka. <i>I am able to openly discuss my concerns about shots with my child's doctor.</i></p>	<ol style="list-style-type: none"> 1. Sangat tidak setuju / Strongly disagree 2. Tidak setuju / Disagree 3. Tidak pasti / Not sure 4. Setuju / Agree 5. Sangat setuju / Strongly agree 																								
CH5015	<p>Secara keseluruhan, berapa yakinkah anda terhadap doktor yang merawat anak anda? <i>All things considered, how much do you trust your child's doctor?</i></p>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td></td> </tr> </table> <p>Tidak yakin langsung <i>Not sure at all</i> Sangat yakin <i>Completely sure</i></p>													0	1	2	3	4	5	6	7	8	9	10	
0	1	2	3	4	5	6	7	8	9	10																

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Negeri (2 digit)	DP & DB (2 digit) (3 digit)	BP (4 digit)	UB (3 digit)	TK (3 digit)	Strata (1 digit)	Isi Rumah & Individu (2 digit) (2 digit)

SOAL SELIDIK JAWAB SENDIRI / SELF-ADMINISTERED QUESTIONNAIRE

Arah kepada penemuramah:

Sila berikan borang soal selidik EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS) kepada responden untuk dijawab sendiri dan dikembalikan setelah tamat sesi temuramah.

MC5010	<p>Sila BULATKAN jawapan yang paling hampir bagi menggambarkan apa yang anda telah rasakan DALAM MASA 7 HARI YANG LALU dan bukan sekadar hari ini sahaja.</p> <p><i>We would like to know how you are feeling in the past 7 days - Not just how you feel today. Please answer the following 10 questions by selecting the appropriate response. Thank You.</i></p>	
	<p>Dalam masa 7 hari yang lalu: <i>In the past 7 days:</i></p>	
MC5010a	<p>Saya dapat ketawa dan melihat kelucuan pada sesuatu perkara <i>I have been able to laugh and see the funny side of things</i></p>	<ol style="list-style-type: none"> 1. Sebanyak mana biasa / As much as I always could 2. Kurang daripada biasa / Not quite so much now 3. Sangat kurang daripada biasa / Definitely not so much now 4. Tiada langsung / Not at all
MC5010b	<p>Saya menanti dengan penuh harapan bagi mendapat kenikmatan apabila melakukan sesuatu perkara <i>I have looked forward with enjoyment to things</i></p>	<ol style="list-style-type: none"> 1. Sebanyak mana biasa / As much as I always did 2. Agak kurang daripada biasa / Rather less than I used to 3. Sangat kurang daripada biasa / Definitely less than I used to 4. Tiada pernah langsung / Hardly at all
MC5010c	<p>Saya menyalahkan diri sendiri secara tidak sepatutnya apabila sesuatu yang tidak kena terjadi <i>I have blamed myself unnecessarily when things went wrong</i></p>	<ol style="list-style-type: none"> 1. Ya, sepanjang masa / Yes, most of the time 2. Ya, kadangkala / Yes, some of the time 3. Jarang sekali / Not very often 4. Tidak pernah / No, never
MC5010d	<p>Saya berasa risau atau bimbang tanpa sebab <i>I have been anxious or worried for no good reason</i></p>	<ol style="list-style-type: none"> 1. Tidak langsung / No, not at all 2. Amat jarang sekali / Hardly ever 3. Ya, kadangkala / Yes, sometimes 4. Ya, sangat kerap / Yes, very often
MC5010e	<p>Saya berasa takut atau panik tanpa sebab <i>I have felt scared or panicky for no good reason</i></p>	<ol style="list-style-type: none"> 1. Ya, sangat kerap / Yes, quite a lot 2. Ya, kadangkala / Yes, sometimes 3. Jarang sekali / No, not much 4. Tidak pernah / No, not at all

MC5010f	Saya dibebani oleh terlalu banyak masalah <i>Things have been getting on top of me</i>	<ol style="list-style-type: none"> 1. Ya, kebanyakan masa saya tidak berupaya menanganinya langsung / <i>Yes, most of the time I haven't been able to cope at all</i> 2. Ya, kadangkala saya tidak berupaya menanganinya seperti biasa / <i>Yes, sometimes I haven't been coping as well as usual</i> 3. Tidak, kebanyakan masa saya berupaya menanganinya dengan baik / <i>No, most of the time I have coped quite well</i> 4. Tidak, saya berupaya menangani semua masalah dengan baik pada setiap masa / <i>No, have been coping as well as ever</i>
MC5010g	Saya berasa sungguh sedih sehingga saya mengalami kesukaran untuk tidur <i>I have been so unhappy that I have had difficulty sleeping</i>	<ol style="list-style-type: none"> 1. Kebanyakan masa / <i>Yes, most of the time</i> 2. Kadang-kadang / <i>Yes, sometimes</i> 3. Jarang-jarang sekali / <i>Not very often</i> 4. Tidak pernah / <i>No, not at all</i>
MC5010h	Saya berasa sedih atau serabut <i>I have felt sad or miserable</i>	<ol style="list-style-type: none"> 1. Ya, kebanyakan masa / <i>Yes, most of the time</i> 2. Ya, agak kerap / <i>Yes, quite often</i> 3. Jarang-jarang sekali / <i>Not very often</i> 4. Tidak pernah / <i>No, not at all</i>
MC5010i	Saya berasa sangat sedih sehingga saya menangis <i>I have been so unhappy that I have been crying</i>	<ol style="list-style-type: none"> 1. Ya, kebanyakan masa / <i>Yes, most of the time</i> 2. Ya, agak kerap / <i>Yes, quite often</i> 3. Hanya sekali sekala / <i>Only occasionally</i> 4. Tidak pernah / <i>No, never</i>
MC5010j	Pernah terlintas di fikiran saya keinginan untuk mencederakan diri sendiri <i>The thought of harming myself has occurred to me</i>	<ol style="list-style-type: none"> 1. Ya, kebanyakan masa / <i>Yes, most of the time</i> 2. Ya, agak kerap / <i>Yes, quite often</i> 3. Amat jarang sekali / <i>Hardly ever</i> 4. Tidak pernah / <i>Never</i>

TAMAT MODUL MC

E. PUBLICITY MATERIALS



NHMS 2022: MCH BANNER



NHMS 2022: MCH BROCHURE



NHMS 2022: MCH OFFICIAL CAR STICKER



NHMS 2022: MCH BUNTING



NHMS 2022: MCH OFFICIAL POSTER



NHMS 2022: MCH OFFICIAL POSTER FOR LISTING PHASE



NHMS 2022: MCH INTERVIEW POSTER FOR JOHOR



NHMS 2022: MCH INTERVIEW POSTER FOR KEDAH



NHMS 2022: MCH INTERVIEW POSTER FOR PERLIS

F. PROMOTION AND MEDIA COVERAGE BY THE PRINCIPAL INVESTIGATOR



INTERVIEW WITH LOCAL TV STATIONS



INTERVIEW WITH LOCAL RADIO STATION

G. NHMS 2022: MCH LAUNCHING CEREMONY



LAUNCHING CEREMONY FOR PENINSULAR MALAYSIA AT
CRYSTAL CROWN HOTEL, PETALING JAYA, SELANGOR



LAUNCHING CEREMONY FOR BORNEO AT SKY HOTEL, KOTA
KINABALU, SABAH

MODULE HH: HOUSEHOLD SOCIODEMOGRAPHY

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
bp.id	BP ID	String		
tk.id	TK ID	String		
hh.id	household id	String		
ind.id	individual id	String		
ethnic.grp	household ethnic group	Numeric	1=Malay 2=Chinese 3=Indian 4=Other Bumiputera 5=Others	RECODE HH1006 INTO ethnic.grp: '1' -> 1 '2' -> 2 '3' -> 3 Value between '4' to '6' -> 4 '7' -> 5 '8' -> 4
citizen.grp	household citizenship	Numeric	1=Malaysian 2=Permanent resident 3=Non-citizen	RECODE HH1007 INTO citizen.grp: '1' -> 1 '2' -> 2 '3' -> 2
marital.status	marital status HH	Numeric	1=Single 2=Married or cohabiting 3=Separated or divorcee or widow	RECODE HH1008 INTO marital.status: '1' -> 1 '2' -> 2 Value between '3' to '5' -> 3 '6' -> 2
education.level	household education level	Numeric	1=never attended school 2=primary school 3=secondary school 4=tertiary education 5=others	RECODE HH1009 INTO education.level: '1' -> 1 Value between '2' to '3' -> 2 Value between '4' to '5' -> 3 Value between '6' to '9' -> 4 '10' -> 1
working.status	household working status	Numeric	1=employer 2=government employee 3=semi-gov employee 4=private employee 5=self-employed 6=unpaid worker 7=unpaid family worker 8=other	RECODE HH1010 INTO working.status: '1' -> 1 '2' -> 2 '3' -> 3 '4' -> 4 '5' -> 5 '6' -> 6 '7' -> 7 '8' -> 8
hh.income	household income continuous data	Numeric		RECODE HH1011 INTO hh.income

MODULE HH: WATER AND SANITATION

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
drinking.source	source of drinking water	Numeric	1=treated 2=untreated	RECODE HH2001 INTO drinking.source: '1' -> 1 '2' -> 2
dispose.method	main method disposing household garbage	Numeric	1=collected by local authority 2=burried outside 3=open burning 4=thrown anywhere 5=reduce recycle reuse 6=others	RECODE HH2003 INTO dispose.method: '1' -> 1 '2' -> 2 '3' -> 3 '4' -> 4 '5' -> 5 '6' -> 6

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
dispose_2gp	disposing garbage_2gp	Numeric	1=Sanitary 2=Unsanitary	RECODE dispose.method -> dispose_2gp: 1 -> 1 5 -> 1 ELSE -> 2
hh.toilet	type of toilet used	Numeric	1=sanitary toilet 2=unsanitary toilet 3=no facility	RECODE HH2004 INTO hh.toilet: '1' -> 1 '2' -> 2 '3' -> 3

MODULE MC: SOCIODEMOGRAPHY

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
ind.id.mc	individual id	String		
age.mc	age mother continuous	Numeric (continuous)		age.mc = DOI.mc (date of interview) - MCSD04 (date of birth) in year
mc.age.grp1	age group for mother	Numeric	1=15-19 2=20-24 3=25-29 4=30-34 5=35-39 6=40-44 7=45-49 8=50-54 9=55-59	RECODE age.mc INTO mc.age.grp1: Value less than 20 = 1 Value between 20 to 24 = 2 Value between 25 to 29 = 3 Value between 30 to 34 = 4 Value between 35 to 39 = 5 Value between 40 to 44 = 6 Value between 45 to 49 = 7 Value between 50 to 54 = 8 Value between 55 to 59 = 9
mc.ethnic.grp	mother's ethnic group	Numeric	1=Malay 2=Chinese 3=Indian 4=Other Bumiputera 5=Others	RECODE MCSD06 INTO mc.ethnic.grp: '1' -> 1 '2' -> 2 '3' -> 3 Value between '4' to '6' -> 4 '7' -> 5 '8' -> 4
mc.citizen.grp1	mothers citizenship new	Numeric	1=Malaysian 2=Permanent resident or non-citizen	RECODE MCSD07 INTO mc.citizen.grp1: '1' -> 1 '2' -> 2 '3' -> 2
mc.marital.status1	marital status mother	Numeric	1=Single or separated or divorcee or widow 2=Married or cohabiting	RECODE MCSD08 INTO mc.marital.status1: '1' -> 1 '2' -> 2 Value between '3' to '5' -> 1 '6' -> 2
mc.education.level1	mother education level	Numeric	1=no formal education 2=primary school 3=secondary school 4=tertiary education	RECODE MCSD09 INTO mc.education.level1: '1' -> 1 Value between '2' to '3' -> 2 Value between '4' to '5' -> 3 Value between '6' to '9' -> 4 '10' -> 1
mc.working.status1	mother working status	Numeric	1=government or semi gov employee 2=private employee 3=employer or self-employed 4=unpaid worker or housewife or not working or student	RECODE MCSD10 INTO mc.working.status1: '1' -> 3 '2' -> 1 '3' -> 1 '4' -> 2 '5' -> 3 '6' -> 4 '7' -> 4 '8' -> 4

MODULE MC1: ANTENATAL CARE

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
no_ANC_visit	ANC_visit	Numeric		Denominator: Mother aged 15–59 with last child less than 2 years old
ANC_visits_CAT_new	ANC_visits_CAT_new	Numeric	1=No ANC 2=3 and below 3=4 and above	RECODE MC1009 INTO ANC_visits_CAT_new: '0' -> 1 Value between '1' to '3' -> 2 '4' -> 3
Booking_Period_new	Booking_Period_new	Numeric	1=1st trimester 2=2nd trimester 3=3rd trimester	Denominator: Mother aged 15–59 with last child less than 2 years old AND received Antenatal Check-up (MC1002 = Yes) RECODE MC1008 INTO Booking_Period_new: 0-12 -> 1 13-28 -> 2 '29 and above -> 3
ANC_facility_UPDATED	ANC facility	Numeric	1=Public 2=Private	Denominator: Mother aged 15–59 with last child less than 2 years old AND received Antenatal check-up (MC1002 = Yes) RECODE MC1005a.iii INTO ANC facility UPDATED 1 -> 1 2 -> 2 ELSE -> missing
atleastONE_ANC_visit	at least one ANC visits	Numeric	1=No ANC 2=At least one	Denominator: Mother aged 15–59 with last child less than 2 years old RECODE no_ANC_visit INTO atleastONE_ANC_visit: 0 -> 1 1 and above -> 2
atleastEIGHT_ANC_visit	at least eight ANC visits	Numeric	1=No ANC 2=Inadequate 3=At least eight	Denominator: Mother aged 15–59 with last child less than 2 years old RECODE no_ANC_visit INTO atleastEIGHT_ANC_visit: 0 -> 1 Value between 1 to 7 -> 2 8 and above -> 2
current_ teenage_pregnancy.new	current teenage pregnancy	Numeric	0=Others 1=Teenage pregnancy	Denominator: Mother aged 15–59 with last child less than 2 years old RECODE age.mc INTO mother_current_age.new: 15 – 20 -> 1 (teenager) 21 and above -> 2 (Adult)
				RECODE MC1001 INTO history_ teenage_pregnancy: 10 – 19 -> 1 20 and above -> 2
				COMPUTE current_ teenage_pregnancy.new = 1; IF mother_current_age.new = 1 AND history_ teenage_pregnancy = 1

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
NEW_history_ teenage_ pregnancy.v1	new history of teenage pregnancy	Numeric	0=Others 1=Adults mother with history of teenage pregnancy	Denominator: Mother aged 21-59 with last child less than 2 years old history_teenage_pregnancy = 1
NEW_ANC_MCO	new ANC MCO categories	Numeric	1>No 2=Yes, due to mothers related reasons 3=Yes, rescheduled by healthcare providers	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE MC1010 INTO NEW_ANC_MCO: '1' -> 1 '2' -> 2 '3' -> 3 '4' -> 2

MODULE MC2: PREGNANCY COMORBIDITY

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
hypertension	Hypertension in pregnancy	Numerical	0=No 1=Yes	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE MC2002a INTO hypertension: '1' -> 1 '2' -> 0
GDM	Gestational Diabetes Mellitus	Numerical	0=No 1=Yes	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE MC2002b INTO GDM: '1' -> 1 '2' -> 0
anaemia	Anaemia in pregnancy	Numerical	0=No 1=Yes	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE MC2002c INTO anemia: '1' -> 1 '2' -> 0
placenta_previa	Placenta previa	Numerical	0=No 1=Yes	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE MC2002d INTO placenta_previa: '1' -> 1 '2' -> 0

MODULE MC3: PRE-PREGNANCY CARE

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
Prepreg_comorbid	pre pregnancy comorbidity	Numeric	0=No 1=Yes	Denominator: Mother aged 15–59 with last child less than 2 years old COMPUTE Prepreg_comorbid = 1 IF; MC3001a OR MC3002b OR MC3002c OR MC3002d OR MC3002e OR MC3002f OR MC3002g = 1(YES)
received_advise	received_advise	Numeric	1=Yes 2=No	Denominator: Mother aged 15–59 with last child less than 2 years old AND Prepreg_comorbid = 1(YES) RECODE MC3002a INTO Mode_Delivery_new: '1' -> 1 '2' -> 2
delay_pregnancy	delay_preg	Numeric	1=Yes 2=No	Denominator: Mother aged 15–59 with last child less than 2 years old AND Prepreg_comorbid = 1(YES) RECODE MC3002b INTO Mode_Delivery_new: '1' -> 1 '2' -> 2
advice_contraception	advice_contraception	Numeric	1=Yes 2=No	Denominator: Mother aged 15–59 with last child less than 2 years old AND Prepreg_comorbid = 1(YES) RECODE MC3002c INTO Mode_Delivery_new: '1' -> 1 '2' -> 2

MODULE MC4: INTRAPARTUM CARE

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
mode.delivery.3cat	mode of delivery 3 categories	Numerical	1=Normal or breech 2=Instrumental 3=c-sec	Denominator: Mother aged 15–59 with last child less than 2 years old RECODE MC4004 INTO mode_delivery.3cat: '1' -> 1 '2' -> 1 '3' -> 2 '4' -> 2 '5' -> 3
deliveryfacility.new	delivery facility	Numerical	1=public 2=private 3=home/others	Denominator: Mother aged 15–59 with last child less than 2 years old RECODE MC4001 INTO deliveryfacility.new: '1' -> 1 '2' -> 2 '3' -> 3 '4' -> 3
Safe_delivery_new	Safe_delivery_new	Numerical	1=Safe delivery 2=Unsafe delivery	Denominator: Mother aged 15–59 with last child less than 2 years old RECODE MC4005 INTO Safe_delivery_new: '1' -> 1 Value between '2' to '8' -> 2

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
Birth_Attendant_new	Birth_Attendant_new	Numerical	1=Health staff 2=Traditional birth attendant 3>No birth attendant 4=Others	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE MC4005 INTO Safe_delivery_new: '1' -> 1 '2' -> 2 Value between '3' to '7' -> 4 '8' -> 3

MODULE MC5: POSTNATAL CARE

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
MC5001_new	Birth Notification (time)	Numeric	1=within 24 hours 2=after 24 hours 3=no notification	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE MC5001 INTO MC5001_new: '1' -> 1 '2' -> 2 '3' -> 3
MC5002_new	Postnatal Home Visit Within 24H of notification	Numeric	1=Yes 2=No	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE MC5002 INTO MC5002_new: '1' -> 1 '2' -> 2
visit	Received Schedule Home Visit	Numeric	1=Received all 3 scheduled home visits 2=Received 2 out of 3 scheduled home visits 3=Received 1 out of 3 scheduled home visits 4=No postnatal home visit	Denominator: Mother aged 15-59 with last child less than 2 years old COMPUTE visit; = 1; IF ALL of 'MC5003a' AND 'MC5003b' AND 'MC5003c' EQUAL TO 1(YES) = 2; IF Any TWO of 'MC5003a' OR 'MC5003b' OR 'MC5003c' EQUAL TO 1(YES) = 3; IF Any ONE of 'MC5003a' OR 'MC5003b' OR 'MC5003c' EQUAL TO 1(YES) = 4; IF NONE of 'MC5003a' OR 'MC5003b' OR 'MC5003c' EQUAL TO 1(YES)
MC5004_new	Attended Clinics For Postnatal Care At One-Month Postpartum	Numeric	1=Yes 2=No	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE MC5004 INTO MC5004_new: '1' -> 1 '2' -> 2 '3' -> SYSMIS
MC5005_grouping	Miss or delayed postnatal clinic appt due to Covid 19	Numeric	1=Yes 0=No	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE QUESTION MC5005 INTO MC5005_grouping: '1' -> 0 '2' AND ABOVE -> 1
MC5006_new	Practiced Post-natal Care	Numeric	1=Yes 2=No	Denominator: Mother aged 15-59 with last child less than 2 years old RECODE QUESTION MC5006 INTO MC5006_new: '1' -> 1 '2' -> 2

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
MC5009_new	screening Q- having depression?	Numeric	1=Yes 2>No	Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks RECODE MC5009 INTO MC5009_new. '1' -> 1 '2' -> 1 '-9' -> 1
mc5010a.score	score of able to laugh	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE MC5010a INTO mc5010a.score: '1' -> 0 '2' -> 1 '3' -> 2 '4' -> 3
mc5010b.score	score of looked forward with enjoyment	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE MC5010b INTO mc5010b.score: '1' -> 0 '2' -> 1 '3' -> 2 '4' -> 3
mc5010c.score	score of blame myself	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE MC5010c INTO mc5010c.score: '1' -> 3 '2' -> 2 '3' -> 1 '4' -> 0
mc5010d.score	score of anxious	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE MC5010d INTO mc5010d.score: '1' -> 0 '2' -> 1 '3' -> 2 '4' -> 3
mc5010e.score	score of scare	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE MC5010e INTO mc5010e.score: '1' -> 3 '2' -> 2 '3' -> 1 '4' -> 0
mc5010f.score	score too many problems	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE MC5010f INTO mc5010f.score: '1' -> 3 '2' -> 2 '3' -> 1 '4' -> 0

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
mc5010g.score	score of unhappy	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE MC5010g INTO mc5010g. score: '1' -> 3 '2' -> 2 '3' -> 1 '4' -> 0
mc5010h.score	score of sad	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE MC5010h INTO mc5010h. score: '1' -> 3 '2' -> 2 '3' -> 1 '4' -> 0
mc5010i.score	score of crying when unhappy	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE MC5010i INTO mc5010i. score: '1' -> 3 '2' -> 2 '3' -> 1 '4' -> 0
mc5010j.score	score of harm myself	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE MC5010a INTO mc5010a. score: '1' -> 3 '2' -> 2 '3' -> 1 '4' -> 0
total.depression	total score of depression	Numeric		Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' SUM from mc5010a.score to mc5010j.score
depression	depression yes no	Numeric	0=Not depressed 1=Depressed	Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE total.depression INTO depression: Score less than 12 -> 0 Score 12 and above -> 1
Suicidal_Ideation	Suicidal ideation	Numeric	0=Not having suicidal ideation 1=Have suicidal ideation	Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks AND MC5009 = '2' OR '-9' RECODE mc5010j.score INTO Suicidal_Ideation: Score 0 -> 0 Score 1 and above -> 1

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
Depression_suicidal_ideation	Have either depression or suicidal ideation	Numeric	0=Did not have any 1=Have either depression or suicidal ideation	Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks COMPUTE Overall.PND = 1, IF; depression = 1 OR Suicidal_Ideation = 1
Overall.PND	known case plus positive EPDS	Numeric	0=No 1=Yes	Denominator: Mother aged 15-59 with last child aged 6 to 16 weeks COMPUTE Overall.PND = 1, IF; Depression_suicidal_ideation = 1 OR MC5009_new = 1

MODULE WR: SOCIODEMOGRAPHY

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
ind.id.wr	individual id	String		
age.wr	age for wr data	Numeric		age.wr = DOI.wr (date of interview) - WRSD04 (date of birth) in year
wr.age.grp	age group for WR	Numeric	1=15-19 2=20-24 3=25-29 4=30-34 5=35-39 6=40-44 7=45-49	RECODE age.wr INTO wr.age.grp: Value less than 20 -> 1 Value between 20 to 24 -> 2 Value between 25 to 29 -> 3 Value between 30 to 34 -> 4 Value between 35 to 39 -> 5 Value between 40 to 44 -> 6 Value between 45 to 49 -> 7
wrethnic.grp	WR ethnic group	Numeric	1=Malay 2=Chinese 3=Indian 4=Other Bumiputera 5=Others	RECODE WRSD06 INTO wrethnic.grp: '1' -> 1 '2' -> 2 '3' -> 3 Value between '4' to '6' -> 4 '7' -> 5 '8' -> 4
wrcitizen.grp1	WR citizenship	Numeric	1=Malaysian 2=Permanent resident or non-citizen	RECODE WRSD07 INTO wrcitizen.grp1: '1' -> 1 '2' -> 2 '3' -> 2
wrmarital.status	marital status WR	Numeric	1=Single 2=Married or cohabiting 3=Separated or divorcee or widow	RECODE WRSD08 INTO wrmarital.status: '1' -> 1 '2' -> 2 Value between '3' to '5' -> 3 '6' -> 2
wreducation.level	WR education level	Numeric	1=no formal education 2=primary school 3=secondary school 4=tertiary education	RECODE WRSD09 INTO wreducation.level: '1' -> 1 Value between '2' to '3' -> 2 Value between '4' to '5' -> 3 Value between '6' to '9' -> 4 '10' -> 1
wrworking.status	WR working status	Numeric	1=government or semi gov employee 2=private employee 3=employer or self-employed 4=unpaid worker or housewife or not working or student	RECODE WRSD10 INTO wrworking.status: '1' -> 3 '2' -> 1 '3' -> 1 '4' -> 2 '5' -> 3 Value '6' and above -> 4

MODULE WR1: CONTRACEPTION

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
method_cotra	method of contraception	Numeric	1=Modern 2=Traditional 3=Combination 4=Non-user	<p>Denominator: Women reproductive aged 15-49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>RECODE method_cotra; = 1, IF WRCP07 only answer 1 to 11 = 2, IF WRCP07 only answer 12 to 15 = 3, IF WRCP07 answer combination 1 AND 2 = 4, IF WRCP07 answer -6 OR 16</p>
CPR_new	contraceptive prevalence rate	Numeric	1=Using any contraception 2=Not using	<p>Denominator: Women reproductive aged 15-49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>RECODE method_cotra INTO CPR_new; Value between 1 to 3 -> 1 4 -> 2</p>
Unmet_need_for_spacing_A		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15-49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>COMPUTE Unmet_need_for_spacing_A = 1; IF: WRCP01 = 1 (Currently pregnant) AND WRCP05 = 1 (Want to have baby later)</p>
Unmet_need_for_spacing_B		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15-49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>COMPUTE Unmet_need_for_spacing_B = 1; IF: WR1003a = 1 (Have live birth past 2 years) AND WR1003c = 1 (want to have baby later on) AND WRCP01 = 2 (Currently not pregnant) AND WRCP12 = 6 (Last menstrual period start before last pregnancy))</p>
Unmet_need_for_spacing_C		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15-49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>Women who are not pregnant and not postpartum amenorrheic and are fecund and say they want to wait two or more years for their next birth</p> <p>COMPUTE Unmet_need_for_spacing_C = 1; IF: WRCP09 = 2 (Years) AND WRCP09b >= 2 (more and equal to 2)</p>

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
Unmet_need_for_spacing_D		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>Women who are not pregnant and not postpartum amenorrheic and are fecund and unsure whether they want another child</p> <p>COMPUTE Unmet_need_for_spacing_D = 1; IF: WRCP08 = -7 (TT)</p>
Unmet_needs_spacing		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>COMPUTE Unmet_needs_spacing = 1; IF: WRCP02 = 2 (Not using any contraception method) AND (Unmet_need_for_spacing_A = 1 OR Unmet_need_for_spacing_B = 1 OR Unmet_need_for_spacing_C = 1 OR Unmet_need_for_spacing_D = 1)</p>
Unmet_need_limitng_A		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>Women are not pregnant and not postpartum amenorrheic and are fecund and say they do not want any more children</p> <p>COMPUTE Unmet_need_limitng_A = 1; IF: WRCP01 = 2 (currently not pregnant) AND WRCP08 = 2 OR 3</p>
Unmet_need_limitng_B		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>Women are currently pregnant and say they do not want any more children</p> <p>COMPUTE Unmet_need_limitng_B = 1; IF: WRCP01 = 1 (currently pregnant) AND WRCP05 = 2 (did not want any more children)</p>

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
Unmet_need_limitng_C		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>Women are postpartum amenorrheic and say that they didn't want the birth</p> <p>COMPUTE Unmet_need_limitng_C = 1; IF: WR1003a = 1 (have a live birth in past 2 years) AND WRCP01 = 2 (currently not pregnant) AND WR1003b = 2 (did not want to get pregnant at that time)</p>
Unmet_need_limitng_Total		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>COMPUTE Unmet_needs_limitng_Total = 1; IF: WRCP02 = 2 (Not using any contraception method) AND (Unmet_need_limitng_A = 1 OR Unmet_need_limitng_B = 1 OR Unmet_need_limitng_C = 1)</p>
Unmet_need_FamilyPlanning_Total		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>COMPUTE Unmet_need_FamilyPlanning_Total = 1; IF: Unmet_needs_spacing = 1 OR Unmet_needs_limitng_Total = 1</p>
Infecund_1		Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>COMPUTE Infecund_1 = 1; IF: WRCP12c => 6 (at least six months) OR WRCP12 = 5 (in menopause/ has had hysterectomy) OR WRCP12 = 6 (before last pregnancy) OR WRCP12 = 7 (never menstruated)</p>

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
Infecund_2		Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner) COMPUTE Infecund_2 = 1; IF: WRCP11 = 2 (menopausal) OR WRCP11 = 3 (never menstruated/ has had hysterectomy) OR WRCP11 = 4 (has been trying to get pregnant for 2 years and more but no result) OR WRCP11 = 5 (postpartum amenorrheic)
Infecund_3		Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner) COMPUTE Infecund_3 = 1; IF: WRCP08 = 4 (cannot get pregnant) OR WRCP09 = 4 (cannot get pregnant)
Infecund_4		Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner) she has not had a birth in the preceding 5 years [Date of interview – D.O.B of last child (WR1003) >5 years], never used contraception (WRCP03=4) and is currently married/in union and was continuously married/in union during the last 5 years [(WR1001=1 or WR1002=1 or 2) and (Date of interview – Date of first marriage >5 years WR1001a(ii)) or WR1002a >5 years]. The module only allows computation of period since first marriage/ period living together with current partner.
Infecund_total		Numeric	0=No 1=Yes	COMPUTE Infecund_4 = 1; IF: WRCP03 = 4 (never used contraception and currently pregnant) AND period_LCB >= 5 & Period_ married >= 5. Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner) COMPUTE Infecund_total = 1; IF: WRCP01 = 2 (Currently pregnant) AND (Infecund_1 = 1 OR Infecund_2 = 1 OR Infecund_3 = 1 OR Infecund_4 = 1)

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
DPFS_nominator	Demand for Family Planning Satisfied by modern method	Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner) AND who express a demand for family planning (CPR_new = 1 + Unmet_need_FamilyPlanning_Total = 1)</p> <p>RECODE method_contra INTO DPFS_nominator: 1 -> 1 3 -> 1 ELSE -> 0</p>
Planned_preg	Planned pregnancy	Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>COMPUTE Planned_preg = 1; IF, WR1003a = 1 AND (WR1003b = 1 OR (WRCP01 = 1 AND WRCP04 = 1))</p>
Unplanned_preg	Unplanned pregnancy	Numeric	0=No 1=Yes	<p>Denominator: Women reproductive aged 15–49 years old AND WR1001 = 1 (Married) OR WR1002 = 1 OR 2 (Living with Partner)</p> <p>COMPUTE Unplanned_preg = 1; IF, WR1003a = 1 AND (WR1003b = 2 OR (WRCP01 = 1 AND WRCP04 = 2)) OR WR1003c = 1 OR WR1003c = 2 OR WRCP05 = 1 OR WRCP05 = 2)</p>

MODULE WR2: MISCARRIAGE AND ABORTION

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
WR201_new	miscarriage	Numeric	1=Yes 2>No	<p>Denominator: Women reproductive aged 15–49 years old</p> <p>RECODE WR201 INTO WR201_new: '1' -> 1 '2' -> 2 ELSE -> SYSMIS</p>
WR202_new	abortion	Numeric	1=Yes 2>No	<p>Denominator: Women reproductive aged 15–49 years old</p> <p>RECODE WR202 INTO WR202_new: '1' -> 1 '2' -> 2 ELSE -> SYSMIS</p>

MODULE WR3: INTIMATE PARTNER VIOLENCE

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
psychological_violence	Lifetime psychological violence	Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND ever been married or living with a partner COMPUTE psychological_violence = 1; IF, WR308 = '1' OR WR309 = '1' OR WR310 = '1' OR WR311 = '1'
physical_violence	Lifetime physical violence	Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND ever been married or living with a partner COMPUTE physical_violence = 1; IF, WR312 = '1' OR WR313 = '1' OR WR314 = '1' OR WR315 = '1' OR WR316 = '1' OR WR317 = '1'
sexual_violence	Lifetime sexual violence	Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND ever been married or living with a partner COMPUTE sexual_violence = 1; IF, WR318 = '1' OR WR319 = '1' OR WR320 = '1'
control_beaviour	Experience controlling behaviour from their partner	Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND ever been married or living with a partner COMPUTE control_beaviour = 1; IF, WR301 = '1' OR WR302 = '1' OR WR303 = '1' OR WR304 = '1' OR WR305 = '1' OR WR306 = '1' OR WR307 = '1'
lifetime_IPV_new	Lifetime intimate partner violence (without controlling behaviour)	Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND ever been married or living with a partner COMPUTE lifetime_IPV_new = 1; IF, psychological_violence = 1(Yes) OR physical_violence = 1(Yes) OR sexual_violence = 1(Yes)

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
psy_violence_past	Past year psychological violence	Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND ever been married or living with a partner COMPUTE psy_violence_past = 1; IF, WR308a = '1' OR WR309a = '1' OR WR310a = '1' OR WR311a = '1'
phy_violence_past	Past year physical violence	Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND ever been married or living with a partner COMPUTE phy_violence_past = 1; IF, WR312a = '1' OR WR313a = '1' OR WR314a = '1' OR WR315a = '1' OR WR316a = '1' OR WR317a = '1'
sex_violence_past	Past year sexual violence	Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND ever been married or living with a partner COMPUTE sex_violence_past = 1; IF, WR318a = '1' OR WR319a = '1' OR WR320a = '1'
pastyear_IPV_SDG	Past year intimate partner violence (SDG Indicator)	Numeric	0=No 1=Yes	Denominator: Women reproductive aged 15–49 years old AND ever been married or living with a partner COMPUTE pastyear_IPV_SDG = 1; IF, psy_violence_past = 1(Yes) OR phy_violence_past = 1(Yes) OR sex_violence_past = 1(Yes)

MODULE CH: SOCIODEMOGRAPHY

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
age.ch	umur anak	Numeric		Age.ch = DOL.ch (date of interview) - CHSD04 (date of birth children) in month
age.cat	kategori umur anak	Numeric	1=less than 6 months 2=6-11 months 3=12-23 months 4=24-35 months 5=36-47 months 6=48-59 months	RECODE age.ch INTO age.cat: Value less than 6 = 1 Value between 6 to 11 = 2 Value between 12 to 23 = 3 Value between 24 to 35 = 4 Value between 36 to 47 = 5 Value between 48 to 59 = 6
ch.gender	child sex	Numeric	1=Boy 2=Girl	RECODE CHSD03 INTO ch.gender: '1' -> 1 '2' -> 2

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
ch.ethnic.grp	children ethnic group	Numeric	1=Malay 2=Chinese 3=Indian 4=Other Bumiputera 5=Others	RECODE CHSD06 INTO ch.ethnic. grp: '1' -> 1 '2' -> 2 '3' -> 3 Value between '4' to '6' -> 4 '7' -> 5 '8' -> 4
ch.citizen.grp1	children citizenship	Numeric	1=Malaysian 2=Permanent resident or non-citizen	RECODE CHSD07 INTO ch.citizen. grp1: '1' -> 1 '2' -> 2 '3' -> 2

MODULE CH1: INFANT AND YOUNG CHILD FEEDING PRACTICE

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
CH1001_new	Early initiaiton of breastfeeding	Numeric	1=Within 1 hour after birth 2=1-24 hours after birth 3=After 1 day after birth 4=Never	Denominator: Child aged 0-23 months RECODE QUESTION CH1001 INTO CH1001_new: '1' -> 1 '2' -> 2 '3' -> 3 '4' -> 4
CH1002_new	Ever Breastfed	Numeric	1=YES 2=NO	Denominator: Child aged 0-23 months RECODE QUESTION CH1002 INTO CH1002_new: '1' -> 1 '2' -> 2
CH1003_new	Continued breastfeeding at 1 year	Numeric	1=Yes 2=No	Denominator: Child aged 12-23 months RECODE QUESTION CH1003 INTO CH1003_new: '1' -> 1 '2' -> 2
TMMINonBF_new	Minimum Milk Feeding Frequency for Non Breastfed children	Numeric	1=Yes 2=No	Denominator: Child aged 6-23 months AND CH1003_new = 2 (NO) COMPUTE TotalMinMilkIntakeNonBF = SUM (CH1006ia + CH1006ja) RECODE TotalMinMilkIntakeNonBF INTO TMMINonBF_new: Total less 2 -> 2 2 and more -> 1

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
MMF	Minimum Meal Frequency	Numeric	1=Yes 2=No	<p>Denominator: Child aged 6-23 months</p> <p>CH1003_new = 1 (Breastfed children) who consumed solid, semi-solid or soft foods the minimum number of times or more during the previous day; OR</p> <p>CH1003_new = 2 (Non-breastfed) who consumed at least four solid, semi-solid or soft food feeds or milk feeds during the previous day, with at least one of the four being a solid, semi-solid or soft food feed.</p>
MDD_Cat	Minimum Dietary Diversity	Numeric	1=Yes 2=No	<p>Denominator: Child aged 6-23 months</p> <p>Children 6-23 months of age who consumed foods and beverages from \geq five food</p>
MAD	minimum acceptable diet	Numeric	1=Achieved 2=No	<p>Denominator: Child aged 6-23 months</p> <p>Consumed a minimum acceptable diet during the previous day. The minimum acceptable diet is defined as: for breastfed children = receiving at least the minimum dietary diversity and minimum meal frequency for their age during the previous day. for non-breastfed children = receiving at least the minimum dietary diversity and minimum meal frequency for their age during the previous day as well as at least two milk feeds.</p>
CH1005_new	Bottle Feeding	Numeric	1=Yes 2=No	<p>Denominator: Child aged 0-23 months</p> <p>RECODE QUESTION CH1005 INTO CH1005_new: '1' -> 1 '2' -> 0</p>

MODULE CH2: ORAL HEALTH

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
perception_oralhealth	Perception on important of looking after children oral health	Numeric	1=Not important 2=Important -7=Don't know	<p>Denominator: Child aged 0-59 months</p> <p>RECODE CH2001 INTO perception_oralhealth: '-7' -> -7 '1' -> 1 '2' -> 2 '3' -> 2</p>

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
freq_cleanchildgum	Frequency of cleaning childs gum	Numeric	1=Every time after feeding 2=Once a day 3=Twice a day 4=Never	Denominator: Child aged 0-59 months AND CH2002 = 2 (NO) RECODE CH2003 INTO freq_cleanchildgum: '1' -> 1 '2' -> 2 '3' -> 3 '4' -> 4
freq_brushteeth	Frequency of brushing childs teeth or supervising childs toothbrushing	Numeric	1=Once a day 2=Twice a day 3=More than two times a day 4=Once in a few days 5=Never	Denominator: Child aged 0-59 months AND CH2002 = 1 (YES) RECODE CH2004 INTO freq_brushteeth: '1' -> 1 '2' -> 2 '3' -> 3 '4' -> 4 '5' -> 5
use_toothbrush	Child use tooth brush while brushing their teeth	Numeric	1=Yes 2=No	Denominator: Child aged 0-59 months AND CH2002 = 1 (YES) RECODE CH2005 INTO use_toothbrush: '1' -> 1 '2' -> 2
ownership_toothbrush	Ownership of toothbrush	Numeric	1=Her or his own 2=Sharing with other family members -7=Don't know	Denominator: Child aged 0-59 months AND CH2002 = 1 (YES) AND use_toothbrush = 1 (YES) RECODE CH2006 INTO ownership_toothbrush: '1' -> 1 '2' -> 2 '-7' -> -7
treatment_dentalclinic	Experienced been examined or treated at dental clinic	Numeric	1=Yes 2=No 3=Don't know	Denominator: Child aged 0-59 months AND CH2002 = 1 (YES) RECODE CH2007 INTO treatment_dentalclinic: '1' -> 1 '2' -> 2 '-7' -> -7
last_dentaltreatment	Last time childs teeth had been examined or treated	Numeric	-7=Don't know 1=Less than one year ago 2=1 or 2 years ago 3=More than 2 years ago 4=Never	Denominator: Child aged 0-59 months AND CH2002 = 1 (YES) AND treatment_dentalclinic = 1 (YES) RECODE CH2009 INTO last_dentaltreatment: '1' -> 1 '2' -> 2 '3' -> 3 '4' -> 4 '-7' -> -7
place_dental_treatment	Place receiving examination or treatment childs teeth?	Numeric	1=Government clinic 2=Private dental clinic 3=Other	Denominator: Child aged 0-59 months AND CH2002 = 1 (YES) AND treatment_dentalclinic = 1 (YES) RECODE CH2009 INTO place_dental_treatment: '1' -> 1 '2' -> 2 '3' -> 3

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
reason_notreatment	Reason for not going to dental clinic	Numeric	1=Child is too young to get treatment 2=The dental clinic is too far 3=Child is afraid of dental treatment 4=I think dental treatment for milk teeth is not important 5=Covid pandemic problem 6=I think my child has no dental problem 7=Other	Denominator: Child aged 0-59 months AND CH2002 = 1(YES) AND treatment_dentalclinic = 2 (YES) RECODE CH2008 INTO reason_notreatment: '1' -> 1 '2' -> 2 '3' -> 3 '4' -> 4 '5' -> 5 '6' -> 6 '7' -> 7
first_dentalcheckup	In your opinion, at what age your child should be brought for her or is first dental check-up?	Numeric	1=Less than 1 year old 2=1-3 years old 3=More than 3 years old 4=When starts schooling 5=When having toothache -7=Don't know	Denominator: Child aged 0-59 months RECODE CH2011 INTO first_dentalcheckup: '1' -> 1 '2' -> 2 '3' -> 3 '4' -> 4 '5' -> 5 '-7' -> -7

MODULE CH3: CHILD MORBIDITIES

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
CH3005a_new	seek advice or treatment	Numeric	1=Yes 2=No	Denominator: Child aged 0-59 months AND (CH3004a = '1' OR CH3004b = '1' OR CH3004c = '1') RECODE CH3005a INTO CH3005a_new: '1' -> 1 '2' -> 2 ELSE - SYSMIS
CH3005b_1		Numeric		Splitting multiple answer question spssinc trans result=CH3005b_1 to CH3005b_3 type=2/formula 're.split(", *", CH3005b)'.
CH3005b_2		Numeric		ALTER TYPE CH3005b_1 to CH3005b_3 (f2). Splitting multiple answer question spssinc trans result=CH3005b_1 to CH3005b_3 type=2/formula 're.split(", *", CH3005b)'.
				ALTER TYPE CH3005b_1 to CH3005b_3 (f2).

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
CH3005b_3		Numeric		Splitting multiple answer question spssinc trans result=CH3005b_1 to CH3005b_3 type=2/formula 're. split(" ", *, CH3005b)'.
Public	advice or treatment from government health facility	Numeric	0=No 1=Yes	ALTER TYPE CH3005b_1 to CH3005b_3 (f2). Denominator: Child aged 0-59 months AND seek advice/ treatment (CH3005 = '1') COMPUTE Public = 1, IF CH3005b_1 = 1
Private	advice or treatment from private health facility	Numeric	0=No 1=Yes	Denominator: Child aged 0-59 months AND seek advice/ treatment (CH3005 = '1') COMPUTE Private = 1, IF CH3005b_1 = 2 OR CH3005b_2 = 2
Other_source	advice or treatment from other sources	Numeric	1=No 2=Yes	Denominator: Child aged 0-59 months AND seek advice/ treatment (CH3005 = '1') COMPUTE Other_source = 1, IF; CH3005b_1 = 4 OR CH3005b_2 = 4 OR CH3005b_3 = 4 OR CH3005b_1 = 3 OR CH3005b_2 = 3
CH3005c_new	admission to hospital	Numeric	1=Yes 2=No	Denominator: Child aged 0-59 months AND (CH3004a = '1' OR CH3004b = '1' OR CH3004c = '1') RECODE CH3005c INTO CH3005c_new: '1'-1 '2'-2 ELSE - SYSMIS
CH3006_new	given antibiotic to treat ARI symptoms	Numeric	1=Yes 2=No	Denominator: Child aged 0-59 months AND (CH3004a = '1' OR CH3004b = '1' OR CH3004c = '1') RECODE CH3006 INTO CH3006_new: '1'-1 '2'-2 ELSE - SYSMIS
Mgm_diarrhoea	management of diarrhoea	Numeric	0=No 1=ORS 2=Antibiotics 3=ORS and Antibiotics	Denominator: Child aged 0-59 months AND had diarrhoea in the last 2 weeks (CH3001 = '1') COMPUTE Mgm_diarrhoea; = 1, IF CH3002 = '1' = 2, IF CH3003 = '1' = 3, IF CH3002 = '1' AND CH3003 = '1' = 0, IF CH3002 = '2' AND CH3003 = '2'
ARI	Acute respiratory infection	Numeric	0=No 1=Yes	Denominator: Child aged 0-59 months COMPUTE ARI = 1, IF; CH3004b = '1' AND CH3004c = '1'

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
ARI_AND_Diarhoea	both ARI and Diarrhoea	Numeric	0=No 1=Yes	Denominator: Child aged 0-59 months COMPUTE ARI_AND_Diarrhoea = 1, IF; ARI = 1 AND CH3001 = '1'
ARI_OR_Diarhoea	either ARI or Diarrhoea	Numeric	0=No 1=Yes	Denominator: Child aged 0-59 months COMPUTE ARI_OR_Diarrhoea = 1, IF; ARI = 1 OR CH3001 = '1'

MODULE CH4: CHILD DISCIPLINE

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
CD_NV	Non Violent Discipline	Numeric	0=No 1=Yes	Denominator: Child aged 12-59 months and live in this house (CH4001 = '1') COMPUTE CD_NV = 1, IF; (CH4001a = '1' OR CH4001b = '1' OR CH4001e = '1') AND (CH4001c = '2' AND CH4001d = '2' AND CH4001f = '2' AND CH4001g = '2' AND CH4001h = '2' AND CH4001i = '2' AND CH4001j = '2')
CD_PA	Psychological Aggression	Numeric	0=No 1=Yes	Denominator: Child aged 12-59 months and live in this house (CH4001 = '1') COMPUTE CD_PA = 1, IF; CH4001d = '1' OR CH4001h = '1'
CD_PP	Physical Punishment	Numeric	0=No 1=Yes	Denominator: Child aged 12-59 months and live in this house (CH4001 = '1') COMPUTE CD_PP = 1, IF; CH4001c = '1' OR CH4001f = '1' OR CH4001g = '1' OR CH4001i = '1' OR CH4001j = '1'
CD_SPP	Severe Physical Punishment	Numeric	0=No 1=Yes	Denominator: Child aged 12-59 months and live in this house (CH4001 = '1') COMPUTE CD_SPP = 1, IF; CH4001i = '1'
CD_VD	Violent Discipline	Numeric	0=No 1=Yes	Denominator: Child aged 12-59 months and live in this house (CH4001 = 1) COMPUTE CD_VD = 1, IF; CH4001c = '1' OR CH4001d = '1' OR CH4001f = '1' OR CH4001g = '1' OR CH4001h = '1' OR CH4001i = '1' OR CH4001j = '1'

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
CD_Belief	Believe Physical Discipline Needed	Numeric	0=No 1=Yes	Denominator: Child aged 12-59 months and live in this house (CH4001 =1) COMPUTE CD_VD = 1, IF; CH4002 = '1'

MODULE CH5: VACCINE HASITANCY

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
CH5001_score	CH5001_score	Numeric		RECODE CH5001 INTO CH5001_score: '1'->2 '2'->0
CH5002_score	CH5002_score	Numeric		RECODE CH5002 INTO CH5002_score: '1'->2 '2'->0
CH5003_score	CH5003_score	Numeric		RECODE CH5003 INTO CH5003_score: Value from '1' to '6' -> 2 Value from '7' to '8' -> 1 Value from '9' to '11' -> 0
CH5004_score	CH5004_score	Numeric		RECODE CH5004 INTO CH5004_score Value from '1' to '2' -> 0 '3' -> 1 Value from '4' to '5' -> 2
CH5005_score	CH5005_score	Numeric		RECODE CH5005 INTO CH5005_score Value from '1' to '2' -> 2 '3' -> 1 Value from '4' to '5' -> 0
CH5006_score	CH5006_score	Numeric		RECODE CH5006 INTO CH5006_score Value from '1' to '2' -> 0 '3' -> 1 Value from '4' to '5' -> 2
CH5007_score	CH5007_score	Numeric		RECODE CH5007 INTO CH5007_score Value from '1' to '2' -> 0 '3' -> 1 Value from '4' to '5' -> 2
CH5008_score	CH5008_score	Numeric		RECODE CH5008 INTO CH5008_score Value from '1' to '2' -> 2 '3' -> 1 Value from '4' to '5' -> 0
CH5009_score	CH5009_score	Numeric		RECODE CH5009 INTO CH5009_score Value from '1' to '2' -> 2 '3' -> 1 Value from '4' to '5' -> 0
CH5010_score	CH5010_score	Numeric		RECODE CH5010 INTO CH5010_score Value from '1' to '2' -> 2 '3' -> 1 Value from '4' to '5' -> 0
CH5011_score	CH5011_score	Numeric		RECODE CH5011 INTO CH5011_score '1'->0 '2'->2 '3'->1

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
CH50012_score	CH5012_score	Numeric		RECODE CH5012 INTO CH5012_score Value from '1' to '2' -> 2 '3' -> 1 Value from '4' to '5' -> 0
CH50013_score	CH5013_score	Numeric		RECODE CH5013 INTO CH5013_score Value from '1' to '2' -> 2 '3' -> 1 Value from '4' to '5' -> 0
CH50014_score	CH5014_score	Numeric		RECODE CH5014 INTO CH5014_score Value from '1' to '2' -> 2 '3' -> 1 Value from '4' to '5' -> 0
CH50015_score	CH5015_score	Numeric		RECODE CH5015 INTO CH5015_score Value from '1' to '6' -> 2 Value from '7' to '8' -> 1 Value from '9' to '11' -> 0
Total_score	Total_score	Numeric		COMPUTE Total_score = (CH5001_score + CH5002_score + CH5003_score + CH5004_score + CH5005_score + CH5006_score + CH5007_score + CH5008_score + CH5009_score + CH5010_score + CH5011_score + CH5012_score + CH5013_score + CH5014_score + CH5015_score) * 3.3.
Vaccine_hesitancy	Vaccine_hesitancy	Numeric	0=non-hesitant parents 1=hesitant parents	Denominator: Child aged 0-23 months Recode Total_score INTO Vaccine_hesitancy; Value less than 50 -> 0 Value 50 and higher -> 1

MODULE N1: NUTRITIONAL STATUS

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
PreTerm	Gestation week at birth	Numeric	0=Full term 1=Pre-term	Denominator: Children aged 0-59 months RECODE N1002 INTO PreTerm: Value less than 37 -> 1 Value 37 and above -> 0
LBW	Low Birth Weight	Numeric	0=No LBW 1=LBW	Denominator: Children aged 0-59 months AND N1001 = 1 (Book available) RECODE N1003 INTO LBW: Value less than 2.5 kg -> 1 Value 2.5 kg and above -> 0
Weight Perception	Parent weight perception	Numeric	0=Perceived underweight 1=Perceived normal 2=Perceived overweight	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) RECODE N1008 INTO WeightPerception: Value from '1' to '2' -> 0 '3' -> 0 Value from '4' to '5' -> 2

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
ActionTaken	Action Taken	Numeric	1=Put effort to reduce my child body weight 2=Put effort to increase my child body weight 3=Do nothing	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) RECODE N1009 INTO ActionTaken: '1' -> 1 '2' -> 2 '3' -> 3
Weight_Final	Body weight (kg) final	Numeric		Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) COMPUTE Weight_Final USING MEAN (N1010 AND N1011)
Height_Final	Body height (cm) final	Numeric		Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) COMPUTE Height_Final USING MEAN (N1013 AND N1014)
BMI_Final	BMI final	Numeric		Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) COMPUTE BMI_Final USING FORMULA; Weight_Final/((Height_Final / 100)^2)
Flag_WAZ	Flag_WAZ	Numeric	0=No 1=Yes	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) RECODE WAZ INTO Flag_WAZ: Value between -6 to 5 -> 0 Other values -> 1
WAZ_3CAT	WAZ_3CAT	Numeric	0=Underweight 1=Normal 2=Overweight	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) AND Flag_WAZ = 0 RECODE WAZ INTO WAZ_3CAT: Values less than -2.0 = 0 Value between -2.0 to 2.0 = 1 Value more than 2.0 = 2
Flag_HAZ	Flag_HAZ	Numeric	0=No 1=Yes	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) RECODE HAZ INTO Flag_HAZ: Value between -6 to 6 = 0 Other values = 1
HAZ_3CAT	HAZ_3CAT	Numeric	0=Stunting 1=Normal 2=Tall	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) AND Flag_HAZ = 0 RECODE HAZ INTO HAZ_3CAT: Values less than -2.0 = 0 Value between -2.0 to 2.0 = 1 Value more than 2.0 = 2
Flag_WHZ	Flag_WHZ	Numeric	0=No 1=Yes	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) RECODE WHZ INTO Flag_WHZ: Value between -5 to 5 = 0 Other values = 1

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
WHZ_4CAT	WHZ_4CAT	Numeric	0=Wasting 1=Normal 2=Overweight 3=Obese	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) AND Flag_WHZ = 0 RECODE WHZ INTO WHZ_4CAT: Values less than -2.0 = 0 Value between -2.0 to 2.0 = 1 Value between 2.01 to 3.0 = 2 Value more than 3.0 = 3
WHZ_3CAT	WHZ_3CAT	Numeric	0=Wasting 1=Normal 2=Overweight/ Obese	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) AND Flag_WHZ = 0 RECODE WHZ INTO WHZ_4CAT: Values less than -2.0 = 0 Value between -2.0 to 2.0 = 1 Value more than 2.0 = 2
Flag_BAZ	Flag_BAZ	Numeric	0=No 1=Yes	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) RECODE BAZ INTO Flag_BAZ: Value between -5 to 5 = 0 Other values = 1
BAZ_4CAT	BAZ_4CAT	Numeric	0=Wasting 1=Normal 2=Overweight 3=Obese	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) AND Flag_BAZ = 0 RECODE BAZ INTO BAZ_4CAT: Values less than -2.0 = 0 Value between -2.0 to 2.0 = 1 Value between 2.01 to 3.0 = 2 Value more than 3.0 = 3
BAZ_3CAT	BAZ_3CAT	Numeric	0=Wasting 1=Normal 2=Overweight/ Obese	Denominator: Children aged 0-59 months AND N1006 OR N1007 = '2' (NO) OR '-9' (EJ) AND Flag_BAZ = 0 RECODE BAZ INTO BAZ_4CAT: Values less than -2.0 = 0 Value between -2.0 to 2.0 = 1 Value more than 2.0 = 2

MODULE N2: CHILD DEVELOPMENT

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
gross_motor_all	gross motor all 6-59 months	Numeric	1=Normal 2=Gross motor delay	<p>Denominator: Children aged 6-59 months</p> <p>Gross motor delay (based on age) 6-8 months: N2001a = '2' OR N2001b = '2' OR 9-11 months: N2002a = '2' OR 12-14 months: N2003a = '2' OR 15-17 months: N2004a = '2' OR 18-23 months: N2005a = '2' OR 24-35 months: N2006a = '2' OR 36-47 months: N2007a = '2' OR 48-59 months: N2008a = '2'</p>
fine_motor_all	fine motor all 6-59 months	Numeric	1=Normal 2=Fine motor delay	<p>Denominator: Children aged 6-59 months</p> <p>Fine motor delay (based on age) 6-8 months: N2001c = '2' OR 9-11 months: N2002b = '2' OR 12-14 months: N2003b = '2' OR 15-17 months: N2004b = '2' OR 18-23 months: N2005b = '2' OR 24-35 months: N2006b = '2' OR 36-47 months: N2007c = '2' OR 48-59 months: N2008b = '2' OR N2008c = '2'</p>
SpeechHearing_all	SpeechHearing all 6-59 months	Numeric	1=Normal 2=Speech Hearing delay	<p>Denominator: Children aged 6-59 months</p> <p>Speech or hearing delay (based on age) 6-8 months: N2001e = '2' OR 9-11 months: N2002d = '2' OR 12-14 months: N2003d = '2' OR 15-17 months: N2004c = '2' OR 18-23 months: N2005c = '2' OR 24-35 months: N2006d = '2' OR 36-47 months: N2007d = '2' OR 48-59 months: N2008e = '2'</p>
social_all	social all 6-59 months	Numeric	1=Normal 2=Social delay	<p>Denominator: Children aged 6-59 months</p> <p>Social skill delay (based on age) 6-8 months: N2001d = '2' OR 9-11 months: N2002c = '2' OR 12-14 months: N2003c = '2' OR 15-17 months: N2004d = '2' OR 18-23 months: N2005d = '2' OR 24-35 months: N2006c = '2' OR 36-47 months: N2007b = '2' OR N2007e = '2' OR 48-59 months: N2008d = '2' OR N2008f = '2'</p>
developmental_delay_all	developmental delay all 6-59 months	Numeric	1=Normal 2=Developmental delay	<p>Denominator: Children aged 6-59 months</p> <p>Gross motor delay = 2 OR fine motor delay = 2 OR speech/hearing delay = 2 OR social skill delay = 2</p>

MODULE N3: VACCINATION COVERAGE

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
N3001aiN	BCG	Numeric	1=Yes 2=Self-reported 3=No	Denominator: Children aged 12–23 months RECODE N3001ai INTO N3001aiN: '1' -> 1 '2' -> 2 '3' -> 3
Hepb1	Hep B Dose 1	Numeric	1=Yes verified 2=Self-reported 3=No	Denominator: Children aged 12–23 months COMPUTE Hepb1; = 1, IF (N3001bi = '1' AND N3001di = '1' OR '2' OR '3') OR (N3001bi = '3' AND N3001di = '1') = 2, IF (N3001bi = '2' AND N3001di = '1' OR '2' OR '3') OR (N3001bi = '3' AND N3001di = '2') = 3, IF N3001bi = '3' AND N3001di = '3'
Hepb2	Hep B Dose 2	Numeric	1=Yes verified 2=Self-reported 3=No	Denominator: Children aged 12–23 months COMPUTE Hepb2; = 1, IF (N3001ci = '1' AND N3001ei = '1' OR '2' OR '3') OR (N3001ci = '3' AND N3001ei = '1') = 2, IF (N3001ci = '2' AND N3001ei = '1' OR '2' OR '3') OR (N3001ci = '3' AND N3001ei = '2') = 3, IF (N3001ci = '4' AND N3001ei = '1' OR '2' OR '3') OR (N3001ci = '3' AND N3001ei = '3')
Hepb3	Hep B Dose 3	Numeric	1=Yes verified 2=Self-reported 3=No	Denominator: Children aged 12–23 months COMPUTE Hepb3; = 1, IF (N3001hi = '1' AND N3001gi = '1' OR '2' OR '3') OR (N3001hi = '3' AND N3001gi = '1') = 2, IF (N3001hi = '2' AND N3001gi = '1' OR '2' OR '3') OR (N3001hi = '3' AND N3001gi = '2') = 3, IF (N3001hi = '4' AND N3001gi = '1' OR '2' OR '3') OR (N3001hi = '3' AND N3001gi = '3')
HEPB3DOSE	HEP B	Numeric	1=verified complete 2=self-reported complete 3=incomplete 4=unvaccinated	Denominator: Children aged 12–23 months COMPUTE HEPB3DOSE; = 1, IF Hepb1 = 1 AND Hepb2 = 1 AND Hepb3 = 1 = 2, IF Hepb1 = 2 AND Hepb2 = 2 AND Hepb3 = 2 = 3, ELSE = 4, IF Hepb1 = 3 AND Hepb2 = 3 AND Hepb3 = 3
DTAP3DOSE	DTAP	Numeric	1=Complete Verified 2=Complete Self-reported 3=Incomplete 4=Unvaccinated DTAP	Denominator: Children aged 12–23 months COMPUTE DTAP3DOSE; = 1, IF N3001di = '1' AND N3001ei = '1' AND N3001gi = '1' = 2, IF N3001di = '2' AND N3001ei = '2' AND N3001gi = '2' = 3, ELSE = 4, IF N3001di = '3' AND N3001ei = '3' AND N3001gi = '3'

VARIABLE NAME	VARIABLE LABEL	MEASUREMENT UNIT	VALUE & LABEL	OPERATIONAL DEFINITION
Pnemoco2DOSE	Pneumococal	Numeric	1=Complete Verified 2=Complete Self reported 3=Incomplete 4=Unvaccinated P2	Denominator: Children aged 12-23 months COMPUTE Pnemoco2DOSE; = 1, IF N3001fi = '1' AND N3001ii = '1' = 2, IF N3001fi = '2' AND N3001ii = '2' = 3, ELSE = 4, IF N3001fi = '3' AND N3001ii = '3'
MMRC	MMR	Numeric	1=complete verified 2=complete self reported 3=incomplete 4=unvaccinated	Denominator: Children aged 12-23 months COMPUTE MMRC; = 1, IF N3001ji = '1' AND N3001ki = '1' = 2, IF N3001ji = '2' AND N3001ki = '2' = 3, ELSE = 4, IF N3001ji = '3' AND N3001ki = '3'
FULLVACCINE	Vaccine coverage	Numeric	1=complete verified 2=complete self reported 3=incomplete 4=unvaccinated	Denominator: Children aged 12-23 months COMPUTE FULLVACCINE; = 1, IF (N3001aiN = 1 AND HEPB3DOSE = 1 AND DTAP3DOSE = 1 AND Pnemoco2DOSE = 1 AND MMRC = 1) = 2, IF (N3001aiN = 2 AND HEPB3DOSE = 2 AND DTAP3DOSE = 2 AND Pnemoco2DOSE = 2 AND MMRC = 2) = 3, IF (N3001aiN = 3 AND HEPB3DOSE = 3 AND DTAP3DOSE = 3 AND Pnemoco2DOSE = 3 AND MMRC = 3) = 4, IF (N3001aiN = 4 AND HEPB3DOSE = 4 AND DTAP3DOSE = 4 AND Pnemoco2DOSE = 4 AND MMRC = 4)
COVIDMCHSER-VIES		Numeric	0=No 1=Yes	Denominator: Children aged 12-23 months RECODE N3002 INTO N3002new: '1' -> 0 Value between '2' to '4' -> 1
REASON		Numeric	1=Personal issues 2=Child was sick during TCA date 3=Refuse vaccination 4=Document issues 5=Financial difficulties 6=Fear vaccine side effects 7=Default TCA 8=Working parent 9=family issues 10>No time 11=appointment has been cancelled or rescheduled 12=afraid acquire COVID-19 from hospital/clinics	Denominator: Children aged 12-23 months



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