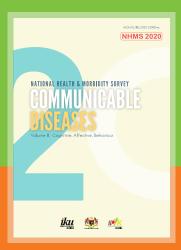
NHMS 2020



This research highlight is based on NHMS 2020: Communicable Diseases: Cognitive, Affective & Behaviour. Volume II

Who is this publication for?

- Ministry of Health
- Department of Veterinary Services (DVS)- Ministry of Agriculture and Food Industries (MAFI)
- Local Authority

Purpose of this summary

To share the main findings of Zoonosis Module NHMS 2020 and to recommend appropriate strategies to improve management of dog bites in human and public attitude and awareness on the issue.



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The Institute for Health Behavioural Research provides evidence to policy makers and health managers at every level, to enable them to make evidence-based decision making on health matters.

RESEARCH HIGHLIGHT

NATIONAL HEALTH AND MORBIDITY SURVEY 2020 — ZOONOSIS

DOG BITE INJURIES: INTENTION VS PRACTICE OF GOOD HEALTH SEEKING BEHAVIOUR

ISSUE

- Dog bites or scratches are common injuries and often ignored, unreported and untreated [1]. If left unattended is potential for rabies infection exposure especially in endemic areas [2].
- A severe dog bite or scratch can result in disfiguring injuries, severe infection, permanent disability or fatality [3].
- In Malaysia from 2017 to 2020, 71,045 dog & other animal bites cases were reported [4]. Meanwhile, during the same period, a total of 31 human rabies cases were reported including 29 deaths [5].
- Good health seeking behaviour is critical in the prevention and control of ***zoonotic disease particularly rabies amongst humans [6,7].

GOOD HEALTH SEEKING BEHAVIOUR

Refers to acting on the 3 immediate action;











1. Wash wound using running water and soap for AT LEAST 15 minutes AND

Apply antiseptic, ointment or wound dressing AND 3. Seek treatment immediately at clinic or hospital when bitten or scratched by dogs.

(Based on the Interim Guideline for human rabies prevention & control in Malaysia, Disease Control Division, Ministry of Health Malaysia)

*** Zoonotic disease is any disease or infection that is naturally transmissible from vertebrate animals to humans (6,7)

KEY MESSAGES





Actually APPLY good health seeking behaviour AFTER getting bitten/scratched by dogs.

IMPLICATION

Poor health seeking behaviour can lead to:

- severe infection and possible death or disability
- increased risk of transmission of zoonotic related diseases between animal and humans

KEY CONSIDERATIONS

Ministry of Health Malaysia (MOH)

Ensure the provision of health promotion materials and activities for the community via collaborations with Department of Veterinary Services (DVS) and local authority

- How preparation of campaign materials that can be disseminated via various channels or during
 activities
- Which channel print media (brochures, poster), electronic and social media (videos, animations, Instagram posts, Facebook posts, TV, radio)
- When during community campaign activities and primetime viewing

Collaboration with DVS and local authority in management of rabies outbreak

- How dog bites and/or rabies case among human notified to DVS and local authority for early response, and initiating prevention and control activities
- Which channel verbal then follow by reports (paper/online)
- When periodic meeting or when there is outbreak

Department of Veterinary Services (DVS)-Ministry of Agriculture and Food Industries (MAFI)

Collaboration with local authority

- · Control of unrestrained and free-roaming stray dogs populations
- Dissemination & regulation of stray animals

Collaborate with MOH and local authority in the conduct of health promotional activities to the community; general or focused outbreak area

- Setting up strategies to educate control of stray animals, rabies vaccinations via interactive activities
- Educational programs to inculcate good health seeking behaviour:
 - Emergency first aid after getting bitten
 - Seek immediate treatment at a health care facility
 - To comply and complete rabies vaccination

METHODS

We used data from the National Health & Morbidity Survey (NHMS) 2020 to focus on communicable diseases. The NHMS 2020 was a nationwide community-based cross-sectional study design using a multistage stratified random sampling method. The survey included respondents living in non-institutionalized living quarters from 113 enumeration blocks in Malaysia. Data were analysed in account for complex survey analysis to obtain population estimates. Adults aged 13 years and above were sampled in this survey. This survey was administered via a Self-Administered Questionnaire (SAQ) using a validated CAB-IHBR-Zoonoses-A-01 instrument tool consisting of Cognitive (knowledge regarding dog-associated disease on rabies and Animal Welfare Act 2015), Attitude (perception regarding the risk factors of contracting dog related diseases) and Behaviour (practices on immediate action after/if bitten by a dog, dog ownership and responsibility. The NHMS 2020 official report has further details on the methodology used.

REFERENCES

- 1. O'Neil, J. (2018). Zoonotic infections from common household pets. The Journal for Nurse Practitioners, 14(5), 363-370.
- 2. Wright, N., Subedi, D., Pantha, S., Acharya, K. P., & Nel, L. H. (2021). The Role of Waste Management in Control of Rabies: A Neglected Issue. Viruses, 13(2), 225. doi:10.3390/v13020225
- 3. Number of Cases and Death of Rabies Cases in Malaysia 2017 2020. Zoonosis Prevention Sector, Disease Control Division, Ministry of Health Malaysia
- 4. Bahagian Kawalan Penyakit, KKM. Bilangan Kes Gigitan Anjing & Haiwan Lain di Malaysia Tahun 2016-2020. (Unpublished)
- 5. Pusat Informatik Kesihatan, KKM. Laporan Tahunan Bahagian Kawalan Penyakit 2021: Number of Cases & Death of Rabies Cases in Malaysia 2017-2020. (Unpublished)
- 6.Tulloch, J. S., Owczarczak-Garstecka, S. C., Fleming, K. M., Vivancos, R., & Westgarth, C. (2021). English hospital episode data analysis (1998–2018) reveal that the rise in dog bite hospital admissions is driven by adult cases. Scientific reports, 11(1), 1-12
- 7. Kisaka S, Makumbi FE, Majalija S, Bangirana A, Thumbi SM (2020) Epidemiology and preclinical management of dog bites among humans in Wakiso and Kampala districts, Uganda: Implications for prevention of dog bites and rabies. PLoS ONE 15(9): e0239090. https://doi.org/10.1371/journal.pone.0239090

8. Interim Guideline For Human Rabies Prevention & Control in Malaysia. Disease Control Division. Ministry of Health Malaysia https://www2.moh.gov.my/moh/resources/Penerbitan/Interim_Guideline_for_Prevention_and_Control_of_Human_Rabies_in_Malaysia.pdf
9. WHO 2021. Zoonoses Fact Sheet. [online] available at https://www.who.int/news-room/fact-sheets/detail/zoonoses. Retrieved 11 March

ACKNOWLEDGEMENTS

The authors would like to thank the Director General of Health Malaysia for permission to publish this research highlight.

This document has been peer reviewed by:

Dr. Rohani Jahis (MOH) and Dr Rozanah Asmah Abd Samad (DVS).

The authors would also like to thank;

NHMS 2020 RH Panel:

Dr. Noor Ani Ahmad, Dr. Manimaran Krishnan and Dr. Low Lee Lan.

Analysis of Data:

Analysis of Data

En Mohamad Fuad Mohamad Anuar and En Zamtira Seman.

This summary should be cited as:

Teresa Yong Sui Mien, Albeny Joslyn Panting, Komathi Perialathan, Dr Mohammad Zabri Johari, Masitah Ahmad, Nurashma Juatan, Nor Haryati Ahmad Sanusi (2020). Research Highlight: **Dog Bite Injuries: Intention vs Practice of Good Health Seeking Behaviour.** The National Health and Morbidity Survey 2020: Communicable Diseases. Institute for Health Behavioural Research.

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Disclaimer

The views, interpretation, implications, conclusions and recommendations are those of the author alone and do not necessarily represent the opinions of the investigators participating in the project nor the views or policy of the Ministry of Health, Malaysia.

This research highlight is part of a collection from the NHMS 2020:

- 1) Are you at risk of Hepatitis B?
- 2) Hepatitis B: A healthy carrier among us!
- 3) Stigma towards people living with HIV
- 4) Poor HIV knowledge among youth
- 5) Ignoring TB-like symptoms in Malaysia
- 6) Antibiotic resistance: How doctors and pharmacist could help?
- 7) Are Malaysians forgetting about Malaria?
- 8) Search destroy the facts
- 9) Dog ownership in Malaysia: Licensing & vaccination practices
- 10) Dog bite injuries: Intention vs practise of good health seeking behaviour

Project reference number:

NMRR-19-867-47973

Funded by:



MINISTRY OF HEALTH MALAYSIA