

THE CONCEPTUAL FRAMEWORK: ESTABLISHING HEALTH LITERACY MODULE FOR INDIGENOUS PEOPLE IN MALAYSIA

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Abstract

This paper proposed a conceptual model on developing a new Health Literacy Module for Indigenous People in Malaysia. This proposed model could be used as a reference for researchers to develop new strategies to overcome health issues on Indigenous People. The proposed model incorporated three (3) phases which are (i) Phase 1: To determine the Knowledge, Attitude & Practice (KAP) on parasitic infections among Indigenous People, (ii) Phase 2: To develop self-useful kit for Indigenous People according to the needs in Phase 1, (iii) Phase 3: To develop a health literacy module of parasitic infections as a referral for Indigenous People. This research will have a significant contribution to provide an in-depth knowledge on identification of health care problems related to parasitic infections towards the development of health literacy module for Indigenous People. Authors will propose new or adapted or/and adopted tools/products/guidelines to be established based on the findings of this research. The findings are aimed to improve quality of life for Indigenous People in Malaysia.

Keywords: *Conceptual Model, Indigenous People, Health Literacy Module, Parasitic Infections*

Introduction

The practice in the current health system emphasizes on primary health care approach to deliver information in a comprehensive manner to cover a wider population (1). However, a qualitative study on 20 Indigenous People (aborigine) in Perak revealed that they did not receive any special medical treatment or free check-ups or other healthcare benefits in hospitals which led to the disappointment and dissatisfaction among them especially those related to infectious diseases which are very common in their community (2). As Indigenous People they should receive special attention but they have been neglected. They also complained they had no proper transportation to travel to the nearest medical centre or clinics. Besides, they were not aware of medical facilities, health problems and healthcare system and many of them ended up

with no immunisation to prevent certain infectious and communicable diseases (2).

This scenario is disheartening especially due to the fact that the Indigenous People are still persistently lagging behind in health status and they are the minority group that are highly susceptible to many diseases. Given the above scenario, the proposed study will be conducted with the aim to determine knowledge, attitude and practices (KAP) among Indigenous People of Pahang on parasitic infections. Quantitative data and information regarding Indigenous People in Pahang on KAP towards identification of problems of parasitic infections will be used as a reference to develop potential health literacy module for health care providers and the population. The proposed study will also contribute to development of a

customized personal anti-parasite kit which could be used for the benefit of the Indigenous People.

Challenges faced by Indigenous People in Malaysia

A recent study documented that obstacles to health promotion for Indigenous People in Malaysia are the insensitivity toward the cultural differences and hygiene among healthcare providers, communication barriers between healthcare workers and patients of Indigenous People, difficult to access health services, no culturally specific health promotional materials, no involvement in healthcare services by indigenous healthcare workers, no community based programs and inadequacy of Indigenous People's health data collection (3). These obstacles have led to a big gap to health promotion in terms of health outcome and equalities between Indigenous People and the rest of the population especially related to personal cleanliness and hygiene. The study suggested that the understanding and knowledge of the cultural differences among Indigenous People is necessary to ensure the success of the programme in health promotion (3).

Currently, there is no special health policy towards the Indigenous People which has been documented in Malaysia. A recent study suggested that Malaysian policy makers need to develop a programme to assist primary care providers in treating Indigenous People based on the high number of parasitic infections and communicable diseases faced by the aboriginal community (4). Local outbreaks related to parasitic infections will lead to a high mortality rate among the Indigenous People due to internal and external factors such as distance, time to reach clinic and getting help, inadequate food intake and traditional beliefs. Thus, a health policy should include nutritional intake, health literacy, control and prevention of worms and other parasitic infections including malaria (4). It is hoped that by implementing health care policy towards the indigenous people, the gap between indigenous people's healthcare and other ethnic groups in Malaysia will be narrowed.

There is insufficient effort to organise health care delivery services in terms of health literacy module to Indigenous People due to language and cultural barriers, lack of knowledge and distance. Given the current health situation among Indigenous People, this study aimed to evaluate the knowledge, attitudes and practices (KAP) among the Indigenous People in Pahang on parasitic infection problems towards the development of a health literacy module. The benefits of this study are to provide an in-depth knowledge of the identification of health care problems related to parasitic infections towards the development of health literacy module for Indigenous People. The findings could assist in educating and proposing a health policy that is suitable for Indigenous People especially in Pahang.

Policy related to the Indigenous People in Malaysia

The Indigenous People is managed under the Ministry of Rural and Regional Development and referring to the Indigenous People Development Strategic Plan (2011-2015), it has been documented that there are plans to improve health and the quality of life of Indigenous People with specific strategies. Overall, the life span of the Indigenous People is less than 60 years due to the fact that they carry a larger burden of diseases including communicable and non-communicable diseases. For communicable diseases, serious infections such as tuberculosis, malaria, parasitic infections and leprosy are commonly reported. Meanwhile, for non-communicable diseases, poor mental health, chronic stress, anxiety and malnutrition commonly affected the Indigenous People. In addition, infant and maternal mortality rates of these aborigines are also higher than the national average (5). Besides, health information to the Indigenous People is not always available due to obstacles in language, distance and location of villages (3).

Health issue among Indigenous People

The issues of health inequality among the indigenous population is not limited to Indigenous People in Malaysia (6) but also in other countries including Africa (7), Australia (7, 8), Canada (7, 8), New Zealand (6, 7), the Pacific Island (7) and the United States of America (7, 8). In April 2004, an outbreak of acute diarrheal illness occurred among the Indigenous People in the Cameron Highlands, Pahang State, Peninsular Malaysia, where rotavirus was later implicated as the cause. In the course of the epidemic investigation, stool samples were collected and examined for infectious agents including parasites. Soil transmitted helminthes (STH), namely *Ascaris lumbricoides* (25.7%), *Trichuris trichiura* (31.1%) and hookworm (8.1%), and intestinal protozoa, which included *Giardia lamblia* (17.6%), *Entamoeba histolytica/E. dispar* (9.4%), *Blastocystis hominis* (8.1%) and *Cryptosporidium parvum* (2.7%), were detected. About 44 (59.5%) were infected with at least one parasite, 24 (32.4%), 12 (16.2%) and 8 (10.8%) had single, double and triple parasitic infections, respectively (9).

In the context of healthcare for Indigenous People, the word health covers cultural well-being, physical, mental and spiritual of individuals in the communities (3). A qualitative study done on 25 people from Jakun sub-tribe in Rompin, Pahang on education and awareness of modern healthcare found that most Jakun people preferred modern healthcare than traditional healing to improve their health conditions. The findings showed that the Indigenous People who received proper education were more ready and open to social change in adapting modern healthcare services. Hence, education level is important to increase knowledge on modern healthcare services (10). A different

study found that for health factor, only 4.4% (n=252) Asli Jakun sub-tribe went to hospitals for treatment of diseases or illness. It clearly showed that education level does play a role in health factor (11).

Methods

Research Conceptual Framework

This concept research will be conducted in 3 continuous phases using mix methods and approaches to obtain the information needed (Figure 1):

This study is divided into 3 Phases in order to develop the health literacy module of parasitic infections for Indigenous People in Malaysia.

Phase 1 study will be conducted by disseminating validated questionnaires to determine the Knowledge, Attitude & Practice (KAP) on parasitic infections among the targeted community of Indigenous People in Malaysia. The sampling method will be randomized convenience sampling. Validation process for questionnaires will be performed by considering multifactorial such as language, culture and others.

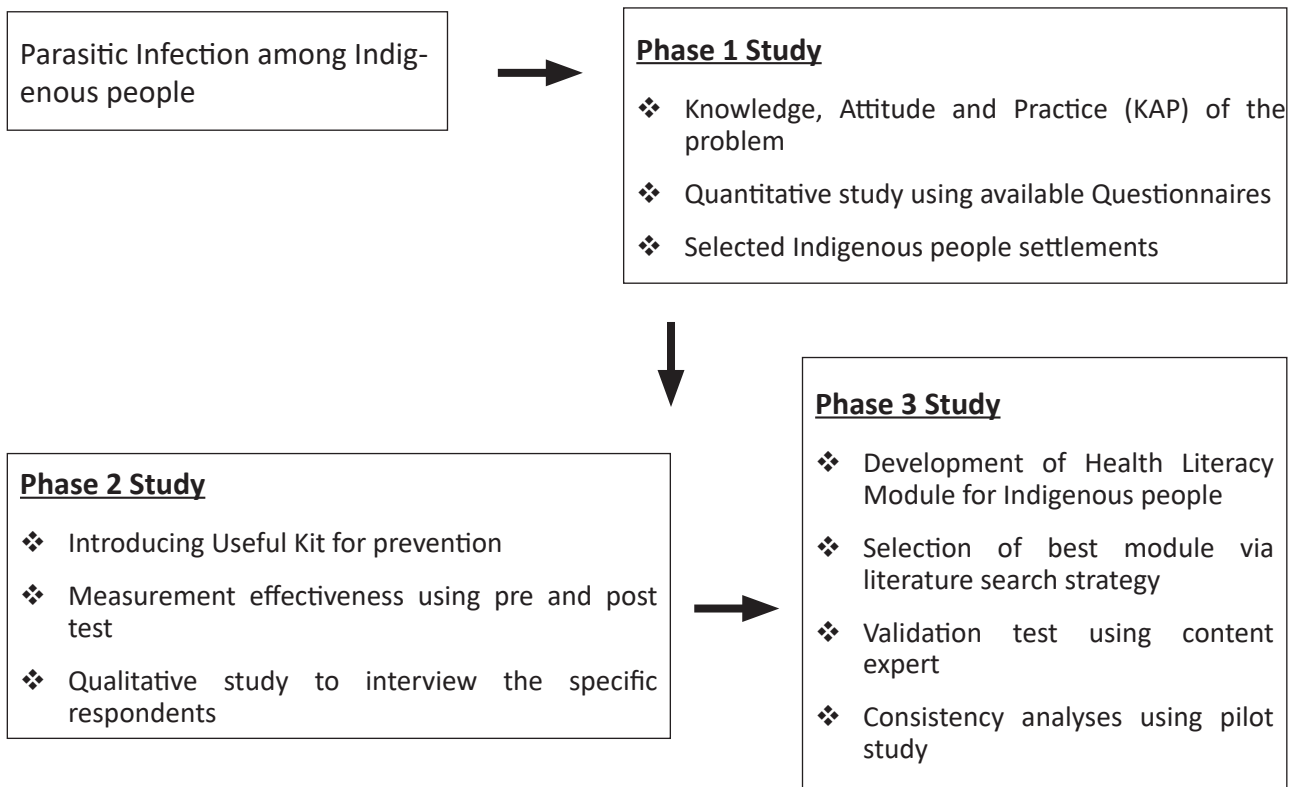


Figure 1: Research Conceptual Framework

Phase 2 study will be based on the findings in Phase 1. The Indigenous community will be introduced to a proposed self-useful kit. Assessments on pre and post tests on the effectiveness of the kit will be conducted at a certain period of time. Finally, qualitative study will be done to interview specific subjects like Head of Tribes (Tok Batin) or relevant people among the Indigenous People of each settlement to explore their perception regarding the developed kit. Proposed items on anti-parasitic self-useful kit will be introduced based on KAP findings.

Phase 3 study will be done to develop health literacy module of parasitic infections to be used as a referral for Indigenous People in Malaysia. The literature search strategy will be used to select the best module available around the globe. The chosen module will be new or adopting or/and adapting with the latest findings in Phase

1 and 2 of studies. A pilot study will be carried out to test the findings.

The study shall obtain the ethical approval from relevant authorized bodies. The elements of trustworthiness shall be emphasized during the study. The use of key informants or facilitators such as a middle man or “gate keeper” who know or are close to the community shall be established.

Conclusion

Health providers can help to improve the Indigenous People’s health literacy skills by taking steps to ensure that the information provided is appropriate, understood and easy to use. The health literacy module will be available for Indigenous People as a guidance towards better personal cleanliness and hygiene, particularly in dealing

with parasitic infections. It is hope that Indigenous People will be more enthusiastic in improving their quality of life and lifestyle. The proposed model framework can be used as a reference by other researchers in order to obtain or develop any module related to Indigenous People.

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Competing interests

The authors declare that they have no competing interests.

References

1. Noh KM, Jaafar S. Health in all policies: The primary health care approach in Malaysia. 50-years experience in addressing social determinants of health through Intersectoral Action for Health. 2011. Draft background paper commissioned by the World Health Organization for the World Conference on Social Determinants of Health Rio de Janeiro Brazil 19-21 October 2011. Retrieved from: https://www.who.int/sdhconference/resources/draft_background_paper7_malaysia.pdf. Accessed Nov 21, 2019.
2. Michael E, Chuen EM. Education and Health Awareness among Indigenous People: A Study in Perak, Malaysia. *ARPN J Sci Tech*. 2012;2:745-9.
3. Aniza I, Norhayati M. Barriers to health promotion for indigenous communities: Lessons for Malaysia. *MJPHM*. 2016;16(1):6-14.
4. Phua KL. The Health of Malaysia's "Indigenous People" Peoples: A Review of The Scientific Evidence on Nutritional Outcome, Parasite Infestations, And Discussion on Implications for Clinical Practice. *MJPHM*. 2015;15(1):83-90.
5. Nicholas C, Baer A. Health care for the Orang Asli: Consequences of paternalism and colonialism. In H. L. Chee & S. Barraclough, (Eds.), *Health care in Malaysia: The dynamics of provision, financing and access*. Oxford: Routledge. 2007.
6. Phua KL. Does the granting of legal privileges as an indigenous people help to reduce health disparities? Evidence from New Zealand and Malaysia. *Pac Health Dialog*. 2009;15(2):117-27.
7. Harris SB, Tompkins JW, TeHiwi B. Call to action: A new path for improving diabetes care for Indigenous peoples, a global review. *Diabetes Res Clin Pract*. 2017;123:120-33.
8. Gracey M, King M. Indigenous health part 1: determinants and disease patterns. *The Lancet*. 2009;374(9683):65-75.
9. Hakim SL, Gan CC, Malkit K, Azian MN, Chong CK, Shaari N, *et al*. Parasitic infections among Indigenous People (aborigine) in the Cameron Highlands, Malaysia. *Southeast Asian J Trop Med Public Health*. 2007;38(3):415-9.
10. Yew VWW, Sia MK, Lam KC, Sarmila MS, Selvadurai S. Education and awareness of modern health care amongst aboriginal people: The case of the Jakuns of Peninsular Malaysia. *GMJSS*. 2015;11(13):79-85.
11. Kamil NFM, Nasir A, Rashid NKA. Factors that contribute to sustainable livelihood of the Indigenous People communities. *JSSM*. 2011;6(2):285-91.