Advances in Humanities and Contemporary Studies Vol. 2 No. 1 (2021) 137-148

AHCS

Homepage: http://publisher.uthm.edu.my/periodicals/index.php/ahcs
e-ISSN : 2773-4781

The Role of Tribe Headman in Kg. Semelor, Malaysia in Disseminating Tuberculosis Knowledge Amongst the Temiar Indigenous Community

Khairiah Salwa Mokhtar[1], Nurulhasanah Abdul Rahman[2]*

[1] Department of Political Science, School of Distance Education, Universiti Sains Malaysia, 11800 USM, Penang, MALAYSIA

[2] Department of Political Science, School of Distance Education, Universiti Sains Malaysia, 11800 USM, Penang, MALAYSIA

*hasanah.rahman89@yahoo.com

DOI: https://doi.org/10.30880/ahcs.2021.02.01.015
Received 09 April 2021; Accepted 06 May 2021; Available online 25 June 2021

Abstract: Despite the increasing prevalence of Tuberculosis (TB) infection in Malaysia, data documenting Indigenous people (i.e. Orang Asli) afflicted by the disease remains scarce. Geography-wise, Orang Asli in Malaysia traditionally live in forest land or remotely, often faces many impediments on access to natural resources, basic infrastructure, and healthcare services. Consequently, the role played by Tok Batin as the Tribe Headman is crucial as a mediator between the government and community, as Orang Asli highly respect their leader and is dependent upon leadership decisions. Here, 11 participants were interviewed using purposive sampling, whereby the transcripts were then subjected to categorisation via thematic analysis. Accordingly, four themes emerged related to the general belief of the Temiar community, understanding TB disease, reliance on the Tribe Headman, and acceptance of modern medication. Addressing Orang Asli and infectious diseases' issues were significant towards maximising their health outcomes and improving the national TB control in Malaysia.

Keywords: Indigenous, Orang Asli, Public Health, Tuberculosis (TB), Malaysia, Tribe Headman (Tok Batin), Temiar, Infectious Disease

1. Introduction

Linguistically, Orang Asli is a term in the Malay language that translates into 'native people' or 'original people'. Throughout time, the health needs of Indigenous communities in Malaysia, henceforth termed as Orang Asli, are marginally overlooked and considered under-researched within published literature. In general, the Indigenous community is well-associated with their behaviours of being very shy, reserved, and non-responsive to outsiders due to trust issues [1] [2]. Their past

*Corresponding author: hasanah.rahman89@yahoo.com

experiences with marginalisation, historical colonisation, and disempowerment from the authorities have resulted in the emergence of distrust, intergenerational grief, and trauma [1].

In terms of public health, Amery (2017) has noted the presence of communication gaps among the population with health professionals, thus affecting their health outcomes [3]. Back in the 1950s, one of the most significant medical surveys was conducted to target several Orang Asli tribes. The findings underlined TB as the primary health problem among the respondents, recording incidence rates that were twice the number for national average cases documented from 1951 to 1971. Likewise, extant literature on Indigenous people has agreed that this population experiences a greater illness burden than the non-Indigenous community.

With that being said, statistics for TB patients cannot be produced conclusively given the scarcity of resources related to Orang Asli, in particular, as well as their knowledge of infectious diseases. Therefore, the present study seeks to explore the role of Tribe Headman or Tok Batin in disseminating health-associated information, particularly those related to awareness on TB among Orang Asli of Kg Semelor, Malaysia.

1.1 Health background of Orang Asli

In engaging with communication with Orang Asli, one must note that they are the most marginalised and impoverished community in Malaysian society. This led to their preference for living in isolation and far in remote areas, with the belief that their land has been retracted and reflected in their disinterest to mingle with the mainstream [4] [5].

Besides, the issues of depressed economic situation, settlement displacement, numerous logging activities, highway constructions, and township development have collectively altered the traditional lifestyle practiced by Orang Asli. For example, losing their source of food that is previously accessed directly from the forests has predominantly led to malnutrition issues, which extends to other diseases, particularly those of infectious nature such as TB and Malaria.

To bridge this gap, the Malaysian government has continuously formulated extensive efforts to bring fair and accessible health care to the Orang Asli community, with an added emphasis on individual responsibility and social participation towards improving their quality of life.

Therefore, the inclusion of Tribe Headman or Tok Batin is deemed highly necessary and potentially minimising the social gap and health disparities among them. This can be rooted in their willingness to only listen and abide by the rules, commands, or instructions from their Tok Batin in most cases, following their distrust towards non-Orang Asli society. Similarly, the community has entrusted the entirety of their faith upon the leadership's decisions and actions for their wellbeing.

1.2 The role of Tribe Headman

To date, the importance of the Tribe Headman amongst the Indigenous community is undeniable and highly influential; they typically act as the mediator between the community and the government [4] [5]. Despite their critical role in strengthening such partnerships, however, a scarcity of studies focused on the level of involvement with regard to health policy implementation can be observed, especially in relation to TB [6]. This is compounded by their location in remote forest areas similar to Indigenous communities from other countries, rendering the health status of Orang Asli to severely lag behind the overall Malaysian population [7] [8].

Moreover, the unique way of living, beliefs, and culture held by Orang Asli has often led to their alienation from the mainstream process of policy-making in this country. Due to the social disengagement practice they uphold from the non-Orang Asli community, Tok Batin plays a crucial role in translating the national agenda within their community. Furthermore, the Orang Asli community continues to experience poor health and remains deemed as the least-educated community

in the country [9] [10], further highlighting the importance of Tok Batin engagement to facilitate effective community-level policy implementation [4] [11] [12].

The remote living locations are also a reason behind them being left out from the advanced progression of technology compared to other Malaysians. Therefore, this population is highly dependent upon their Tok Batin's function as a mediator and an agent of change for the entire community. To the researchers' knowledge, the current study is henceforth among the pioneering works that sought to explore the role played by Tok Batin in educating Orang Asli and evaluate their awareness of TB in Malaysia.

2. Methodology

The current exploratory study aimed to explore TB knowledge among the Temiar community and identify the role of Tok Batin in communicating the importance of modern medication and seeking healthcare services. It was thus conducted among the specific community, which is a sub-ethnic group of Orang Asli living in Kg Semelor, Malaysia. The settlement location can be found at the border of two states in Malaysia, namely Perak and Kelantan. It was selected based on past documented cases of TB infection among the villagers and established rapport with Tok Batin. In Malaysia's context, the wellbeing and development of Orang Asli are governed by the Department of Orang Asli Development (JAKOA) under the Ministry of Rural Development Malaysia.

A team of five researchers from Universiti Sains Malaysia (USM) teamed up with five locals (i.e. Orang Asli) and worked closely with the government as represented by JAKOA and Ministry of Health (MOH), as well as Emkay Foundation as the non-government organisation (NGO) representative prior to the fieldwork visit. The locals acted as the translator/interpreter since the Temiar community spoke their own language otherwise known as the Aslian language [13]. However, these Orang Asli could understand basic Malay language, but with very minimal vocabulary.

In particular, Kg Semelor is among the special projects carried out by Emkay Foundation since the year 2000; till date (2021), the foundation representatives have spent 20 years in collaboration with various agencies to bring access for modern medication and proper health care to the Temiar community. A few attempts to penetrate the community have been made previously but they had refused to cooperate. This was rooted in their belief that the 'outsiders' were taking advantage of their resources for personal gain. Therefore, the researchers were briefed extensively on the best way to approach the Temiar community by representatives from JAKOA and Emkay Foundation. The researchers were explained about the general beliefs of Temiar, thereby ensuring that the researchers respected their way of living and gained their trust.

2.1 Sampling

Kg Semelor has a population of 167 people coming from 41 households [13] [14], wherein 38 and 45 people out of the total number were children and aged 80 years and above, respectively. This resulted in a sampling frame of 84 samples hailing from 20 households. It was advisable to include one participant from each household in line with the recommendation in public health research [15]; the sample size was deemed sufficient for hard-to-reach population.

For this study, the inclusion criteria adhered to denoted prioritising families that fulfilled the following: (1) infected with TB; (2) regarded as suspected TB patients, and (3) able to understand basic Malay language. Accordingly, purposive sampling was employed as the sampling technique chosen due to its status as the most effective technique for studying a cultural domain, especially those involving Indigenous groups.

2.2 Research instrument

Since the Temiar community was mostly illiterate, the research instrument was prepared in the form of unstructured interview questions. Their formulation was rooted in referencing past studies involving Indigenous community [5], which were mostly qualitative in nature to ensure robust knowledge in a natural setting. This undoubtedly justified the under-studied and poorly understood nature of the Temiar population.

For the record, the villagers would oftentimes deal with health practitioners during community events only, whereas the presence of 'outsiders' generally yields minimal communication: they are more comfortable of responding via body language, signs, and gestures (e.g. smiling, nodding) only. Therefore, the researchers were prepared for the possibility of minimal answers compared to expectation. To overcome this situation, the researchers were involved in various community events in the location before conducting the study interviews, which was solely to familiarise themselves with the Orang Asli population.

Regardless, the findings from this study would serve as the foundation of future reference in the domain of public health, especially related to TB among Indigenous communities in Malaysia. Therefore, exploring the perspectives of Orang Asli on TB in this study was further underpinned by respecting their views as a marginalised community. Instead of merely depending on verbal answers, body language and facial expressions displayed by respondents were equally important.

To answer the research questions formulated in this study pertaining to the level of TB knowledge among the Temiar community and the extent to which modern medication was accepted, short and easy-to-understand questions were prepared in line with the cultural sensitivity engagement. A summary of the questions asked is included in Table 1.

Table 1: Example of interview questions

No.	Questions
1.	**Awareness of infectious disease** Example? Is TB part of infectious disease?
2.	**TB knowledge** Have heard of TB? From where/who? Symptoms of TB?
3.	**Health-seeking behaviour** If fall sick, who to consult? What kind of treatment received? If sick, prefer to stay in house or hospital?
4.	**Experience with TB** Is TB infectious? How? How to avoid TB? Can TB be cured? How?
5.	**Attitude towards TB patients** If someone infected with TB, will you visit? Do we need to inform others if infected? How to deal with TB patients?
6.	**Health education** Prefer health practitioners to come or go to hospital? Why? Prefer posters, discussions, slideshows, or talks? Why?

2.3 Ethical considerations

Prior to the fieldwork, an approval from Ministry of Health Malaysia (Code: NMRR-11-658-9825) was obtained to study the marginalised group of Malaysians, particularly the Indigenous people, and their access to health services related to TB in the country. All respondents who agreed for study participation provided verbal consents with the help of local translators and Tok Batin. Furthermore, respondent confidentiality was well-maintained through the use of specific codes such

as P01, P02, and P03 as opposed to real names and personal details. Their participation was solely on a voluntary basis and they were given a token of appreciation for their contributions.

3. Results and Discussion

In total, 20 interviews were conducted in this study, whereby seven participants were out of reach (i.e. not in the village at the time of data collection) and two participants were excluded. Their exclusion was made based on their reluctance, non-responsiveness, and excessive pauses or long silence when answering the interview questions.

3.1 Demographic profile

The demographic profile of research participants is summarised in Table 2. Out of 11 participants, 54.5%, 81.8%, and 45.5% of them were male, married, and aged between 41-50 years. As smoking was a risk factor of TB, all participants were asked regarding their smoking status, wherein evidently all male participants were identified as smokers (54.5%). In terms of education level, most of the respondents received no formal education (72.7%). In line with the privacy guidelines, the participants were coded as P1, P2, P3 ... until P11 to protect their identities.

Table 2: Demographic profile of participants

		Frequency	%
Gender	Male	6	54.5
	Female	5	45.5
Marital Status	Single	1	9.10
	Married	9	81.8
	Divorced/Widower	1	9.10
Age	Below 30	-	-
	31-40	3	27.3
	41-50	5	45.5
	51 and above	3	27.3
Smoking	Yes	6	54.5
	No	5	45.5
Highest education level	Primary school	3	27.3
	No formal education	8	72.7
	Total Participants	**11**	**100**

3.2 Results

This section presents findings related to respondent awareness of infectious disease and TB knowledge. In general, most of the informants did not know about infectious disease (n=8), whereas those who knew responded and identified Malaria, long cough, flu, and fever as examples of such diseases. When TB was mentioned, they shook their heads, thus signifying their lack of familiarity with the term. Then, the researcher explained that it could be described as long and dry cough, following which a majority of the informants (n=10) agreed and changed their answers, denoting their knowledge about long and dry cough and mere unfamiliarity with the term TB.

Next, they were asked whether they had heard about TB disease, whereby five out of 11 informants mentioned that they had so. This came from the villagers (n=2), Pak Samad (n=2), and health programme in their village (n=1). Following this, probing was done regarding informant knowledge about TB symptoms and causes, wherein some (n=5) noted that they would report to Pak Samad if they found any fellow villagers were losing weight and having fever for more than a week.

This had happened previously a few times and the Tok Batin would bring the 'sick' person to the nearest clinic/hospital. Later, a team of doctors and nurses would come and check the whole family.

P1 explained:

> *"I knew about infectious disease such as Malaria and long cough but I do not know about TB. If I am not mistaken, TB is long cough caused by smoking. Among the TB symptoms are lose weight, no appetite, and fever. You can avoid and cure TB if you take care your health and stop smoking".*

P2 responded:

> *"I did not know about infectious disease but I know TB is dry cough. Pak Samad told us that dry cough is very bad but we can heal if we take medication from the town doctors. Every day he goes around the village with his motorcycle and check on us. Anyone seemed as not well, he will call his doctor friends".*

Since the introduction of health programmes by the government in the Temiar settlement of Kg Semelor, the villagers were more open to accept modern medication and healthcare. Out of 11 participants, nine were willing to consult a doctor if they were sick, whereas the remaining two participants still believed in traditional herbs and treatment.

P3 noted that:

> *"We happy that Pak Samad let the doctors came. The doctors very nice. If we get sick, we want doctor to treat. We don't like the herbs. It is too bitter. Sometimes I vomit. Even sometimes the herbs works for me. But if serious, they will put in a ward. I like to stay there. I can rest. No mosquitoes".*

P4 admitted:

> *"If I am feeling not well, I will inform Pak Samad and he will bring us to the town clinic. After that, I will get better fast. Last time, I felt sick but stay at home. My fever was longer and I felt the pain. The herbs is okay but takes time to be healthy. Now, I will see doctor if I am sick. Faster".*

Since a majority of the respondents would choose to consult a doctor when they fall ill, they were receptive towards consuming medication and following doctor's instructions. They are willing to stay in the ward and control their diet or food intake. Overall, they are willing to get treatment required in the hospital due to wanting to get better.

At this point forward, the questions asked were primarily related to TB. After an elaboration on the general information of the disease, most of the informants (n=9) agreed that they knew about long cough, it was infectious in nature (n=3), but could be cured (n=5). In other words, they knew about TB as the disease but were unfamiliar with the term. However, it was worrisome that a majority (n=8) did not know that TB was highly infectious and could spread through the air as the patients coughed, sneezed, and talked. In contrast, six of the respondents were confident that it could be avoided and cured if the patients would follow the doctor's recommendation.

P10 confidently responded that:

> *"Don't worry if you get TB. Doctors will help. You stay in the hospital for long time then TB is gone. Stop smoking and get a lot of rest. Just don't forget to take your medicine. Many people Pak Samad bring 'sick' to hospital but they come back healthy. Last time, we lost our family and friends because of long cough. It's very sad. But it was very long time ago".*

Throughout the interview, it was inspiring to learn that the Temiar community was extremely self-less and caring in nature. The villagers would not hesitate to visit their family and friends infected with the disease, but they were aware that they could not visit the TB patients as Pak Samad would bring the ill individuals to the hospital.

P5 affirmed that:

> *"Why we need to be ashamed if we get TB? It will go away. Tell other people so we can help them. We want everyone to be healthy. If you sick, go to hospital. Don't stay at home. We can visit the patient but they are not at home".*

Furthermore, four questions were asked related to attitude towards TB, namely: (1) "Do you know any TB patients?"; (2) "Will you visit the patients?"; (3) "If infected with TB, should we inform other people?"; and (4) "Why we should inform or not inform others?". Out of 11 participants, only three showed positive attitude towards TB, while others mostly replied that they had no idea.

P6 commented:

> *"I knew some villagers who are TB patients. I have no problem to visit them but cannot do so because the patients are in the hospital ward. Very far. If I have TB disease, I will tell everyone because why should I be ashamed? I want to get better and do not want others to get sick".*

P8 agreed and mentioned that:

> *"Yes. I have some friends who infected with TB. They have long cough and seemed very sick. Their body became very weak and it is very sad to see them like that. I want to visit them but they are in the town clinic".*

P9 informed that:

> *"Actually, I tried to visit them but the doctor said cannot. I need to wait until the patients are better, then I can visit them. If you have TB, you have to tell people. We live in same village; other people need to know if we are sick. If not, they will get sick too. It is not good. We take care ourselves. Others can take care too".*

In terms of health education, these villagers preferred for the practitioners to come into their village and offer consultations. Besides, most of the respondents (n=7) preferred posters with graphics and direct consultation with the doctors concurrently.

P6 explained that:

> *"I like when the doctors come. They play the 'moving pictures' and show posters. I don't like the folded papers (pamphlets)".*

At the same time, P8 and P9 answered:

> *"Every time doctors come, the Emkay (Foundation) will cook very nice. They cook chicken for us. Doctors will explain about health and after that, all of us can eat. We feel very happy. We know others take care of us".*

P10 and P11 were among the elderly villagers in the community. They explained that:

> *"These villagers are very lucky because Samad (Tok Batin) still young. Can take care of them. Samad don't have family (after divorced). The whole people in this village are his family. His children with his wife in other village. That is why he really loves the villagers".*

A majority of the participants (8 out of 11 participants) showed positive acceptance of health professionals into their village.

P1 asserted that:

> *"I am happy if the doctor came into our village. I can bring the kids for check-ups. I prefer if the doctor (himself) gives talk and explain to me because I know he is good. I like when the staff (health workers) explained about TB using big pictures, posters, and show video. It is easier to understand about TB disease".*

On the same note, P2 agreed that:

> *"If the doctor came, I ask many questions. I like when they (the health workers) came, they checked our body but I prefer to talk to the doctor in person than attending the program in the community hall. It is hard to understand if they give talk (briefing about TB disease) but easy to understand if they show pictures and video to me".*

3.3 Discussions

In recognition of TB prevalence among Indigenous people, this study sought to explore the level of TB knowledge among Temiar community and the role played by the Tribe Headman in communicating the importance of modern medication and healthcare services. Accordingly, the qualitative analysis underlined the informants' answers as raw data and regarded as quotations. Here, each quotation was analysed and specific codes were identified to functionalise the aforementioned raw data. During the final stage, different themes were developed to interpret similar codes and represent patterns that emerged from the data. Henceforth, some of the themes identified: (1) General belief of Temiar community, (2) Understanding TB disease, (3) Reliance on the Tribe Headman, and (4) Acceptance of modern medication.

3.4 General belief of Temiar community

In the past, the tendency of Temiar community to remain in the village when infected with TB was evident, thereby causing a greater spread of infection to others. In fact, they refused or even claimed to be unaware of TB infection, unwilling to seek treatment and were eventually regarded as untreated TB cases. This led to the higher rates of fatality. However, the number of TB infection in the current years has been declining compared to past years.

Besides, it should be noted that statistics on TB incidence among Indigenous people in Malaysia is limited, wherein even JAKOA would be unable to produce a confirmed number of prevalence. This is attributable to registration issues, among others. Not all Indigenous people own a birth certificate or an Identification Card (IC). This is further compounded by the fact that their geographically-isolated location and very minimal contact with non-Orang Asli population have led to them perceiving that applying for Malaysian IC is unnecessary.

Fundamentally, the Temiar community in Kg Semelor is considered as poor (i.e. 7 households) and hard-core poor (i.e. 34 households), with earnings less than RM500 (USD $120) per month. Even though 65.9% of them were regarded as Muslim, 31.8% disclosed their belief in animism or spiritual presence in all natural objects, such as trees, rocks, rivers, mountains, and animals, among other. Furthermore, a majority of the villagers do not possess formal education, thus explaining their illiteracy and poor command in Malay, the national language.

Instead, they would converse in their tribe-specific language, namely the Aslian language, whereby attending the national school might result in certain communication barrier. Besides, another

issue that further deters Orang Asli's access to education is the village location, which is situated in a remote area. It is located more than 11 kilometres from the main road and only accessible using four-wheel drive (4WD) vehicles.

3.5 Understanding TB disease

In understanding TB knowledge among Temiar community, this study revealed two significant sources, namely informal and formal sources. The first, namely the informal sources, would mostly travel via word-of-mouth of fellow Temiar villagers in Kg Semelor and their reliance on the past experiences of family members or relative infected with TB. This information would be not entirely correct medically, but the Temiar people had passed their understanding of the disease from generation to generation accordingly. Besides, some would not verbally admit the fact that they still believed in supernatural causes and regarded TB as part of a curse. In fact, one of the misconceptions about TB held among Temiar people was related to smoking, whereby they assumed that it was the cause and quitting the act could cure the disease.

In contrast, TB knowledge dissemination in recent years occurred via reliable sources, namely health practitioners and government agencies, resulting in the Temiar people's better understanding of the disease in an accurate and systematic manner. For instance, they understood that persistent cough over a long period could lead to death without any proper treatment, while symptoms such as weight loss, high fever, and fatigue were major signs indicative of the disease. It should be noted that the term TB was not recognised by the Temiar people; instead, they understood its concept via association with long and dry cough. Due to TB cases among the community is the highest among other Indigenous groups, 'cough' is deemed as the most common health concern in the community.

Alternatively, the need to recruit health workers of Indigenous roots is of utmost importance, which is evident from cases in which people of the Temiar community refuse to seek treatment due to worries of unfair treatment. They are compelled to rely on their Tok Batin for accompaniment to the hospital as a result of their inability to comprehend Malay language or medical terms, and feeling secluded from non-Orang Asli people in the hospital ward.

Pak Samad specifically indicated that anytime his people are warded due to any illnesses, he would be in the hospital as well to ensure that every document was completed and they felt safe there. His role included explaining the updated circumstances and reassuring that he would be back from time to time to visit them. This reflects the Tribe Headman's assurances as critical in motivating the Temiar community to accept and undergo treatment since any fear of unknown elements or medical procedures are eliminated.

Moreover, the act of compassion showed by the community by simply treating fellow TB patients equally in Kg Semelor should be applauded. They would accept the fact that their family members, relatives, or neighbours are infected with TB and extend emotional support to the affected families, as well as willing to visit the TB patients and offer practical assistance.

3.6 Reliance on the Tribe Headman

The role played by Pak Samad as the Tok Batin dramatically changed the way Temiar community accepted 'outsiders' over time, particularly health professionals and researchers. Historically, experiencing persistent cough for more than three weeks will cause Orang Asli to opt for traditional healing and herbal medication, which ultimately lead to fatality and more cases of TB. However, proper education, training, and exposure to the modern healthcare allow Tok Batin to capably convey information to their people more effectively. For instance, Pak Samad successfully disseminated

important TB information to his people, which was reflected in better health outcomes such as high TB awareness and less TB infection.

In terms of TB infection, the community realised the importance of early detection and health check-ups against the disease. Any villagers that had persistent cough longer than a week would be reported to Pak Samad for TB screening. Besides, Emkay Foundation representative also noted the lesser number of people infected by the disease nowadays.

Besides, regular training from medical experts on self-preventive healthcare has allowed Pak Samad to take responsibility in conveying the information to his people, which is corroborated by exceptionally clean settlement despite its location in the thick of the forest. It is rare to see dry leaves on the ground and Temiar houses are neat and spotless. Besides, his training with MOH on self-hygiene caused Pak Samad to be very particular about cleanliness and cough etiquettes. Anyone caught coughing without covering their mouth in front of other people are scolded; they have been extensively taught by health practitioners to cover their mouths and stay in the house until they are in a good shape.

3.7 Acceptance of modern medication

Despite Orang Asli are naturally quite reserved and past studies have affirmed their non-compliance to modern world and refusal to accept 'outsiders' [5], this study has shown the contrast for the community in Kg. Semelor. These people have embraced the change and accepted other people into the village as long as the 'outsiders' respect their culture.

Temiar people's acceptance of modern healthcare and exposure to health practitioners has changed their health status tremendously. For example, the elderly people noted the higher quality of life for Temiar people in Kg Semelor compared to those in other villages. In fact, the past generations have been recorded to suffer many diseases and health complications merely due to ill-informed situation.

This contrasts the study by Wong et al. (2019), which has noted Orang Asli's preference for traditional ointment or medicines when they fall sick rather than going to the clinics [5]. However, the current study revealed the willingness for Temiar people to visit government hospitals or clinics for medical check-ups and acknowledgement for modern healthcare services and effectiveness. The community understands that modern medication can heal their illness and they may trust the doctors for treatment.

4. Conclusion

In brief, findings obtained from this study provided valuable insights for future research and various stakeholders, such as health professionals and policymakers. For example, health professionals should understand the nature of Orang Asli and incorporate a more personalised approach to educate and promote behavioural change among them. This is reflected in the clear improvement of disease awareness in the Temiar people from the use of visuals and direct communication between them and health professionals, proving the effectiveness in communicating health-related information.

Furthermore, it is advisable for future studies to integrate the perspective of Orang Asli into new TB management framework, which can be accomplished by conducting more public health research works among the community. In fact, the current study provides a platform for anthropologists and researchers to compare the level of TB knowledge across different Orang Asli tribes in Malaysia.

Similarly, it complements past research that has asserted that the Temiar community is no longer averse to modern healthcare.

To this end, policymakers are highly recommended to improve the current policies available, especially in relation with health policies, and formulate specific programmes targeted to the community. Their openness to accept health professionals and researchers into their community is the undeniable key indicator proving their readiness for change. Moreover, some of the Tok Batin notable contributions included transforming the community's acceptance for 'outsiders' into Kg Semelor. Due to their exposure to 'outsiders' or non-Orang Asli, they are aware about the health, social, and political disparities that are affecting the Indigenous people.

Therefore, their passion for change to the community is undeniable and they want them all to stand tall next to their fellow Malaysians. In brief, Malaysian aspirations to end TB pandemic by the year 2035, has brought together researchers from diverse fields to uncover strategies requiring actions and at the same time, preserving the authentic culture of Malaysian Indigenous people.

Acknowledgement

This research was funded by the Ministry of Higher Education (MOHE) via the Long-term Research Grant Scheme (LRGS - 203.PJJAUH.67212003), Industrial Grant by Yayasan Emkay, and USM Fellowship Scheme 2019.

References

[1] Shahid, S., Durey, A., Bessarab, D., Aoun, S. M., & Thompson, S. C. (2013). Identifying barriers and improving communication between cancer service providers and Aboriginal patients and their families: the perspective of service providers. *BMC Health Services Research*, 13(1), 1-13. doi: 10.1186/1472-6963-13-460.

[2] Franck, L., Midford, R., Cahill, H., Buergelt, P. T., Robinson, G., Leckning, B., & Paton, D. (2020). Enhancing social and emotional wellbeing of Aboriginal boarding students: evaluation of a social and emotional learning pilot program. *International Journal of Environmental Research and Public Health*, 17(3), 1-16. doi: 10.3390/ijerph17030771.

[3] Amery, R. (2017). Recognising the communication gap in Indigenous health care. *Medical Journal of Australia,* 207(1), 13-15. doi: 10.5694/mja17.00042.

[4] Vermeer, B., Cornielje, M. T., Cornielje, H., Post, E. B., & Idah, M. A. (2015). Nigerian Realities: Can we ignore Traditional Leadership in developing successful CBR? *Disability, CBR & Inclusive Development*, 26(1), 50-62. doi: 10.5463/DCID.v26i1.390.

[5] Wong, Y. S., Allotey, P., & Reidpath, D. D. (2019). Why we run when the doctor comes: Orang Asli responses to health systems in transition in Malaysia. *Critical Public Health*, 29(2), 192-204. doi: 10.1080/09581596.2018.1438588.

[6] Mokhtar, K., & Rahman, N. A. (2017). Social determinants of tuberculosis contagion in Malaysia. *Annals of Tropical Medicine and Public Health*, 10(5), 1215-1215. doi: 10.4103/ATMPH.ATMPH_371_17.

[7] Rohin, M. A. K., Jusoh, A. F. W., Rahim, A., Zahary, M. N., Aziz, A. A., Him, N. A. S. N., ... & Harun, S. (2018). Nutritional Status of the Temiar Orang Asli Community in Kuala Betis, Gua Musang, Kelantan. *Pakistan Journal of Nutrition*, 17(7), 311-318. doi: 10.3923/pjn.2018.311.318.

[8] Abdullah, S. Z. S., & Saleh, R. M. (2019). Breastfeeding knowledge among Indigenous Temiar women: A qualitative study. *Malaysian Journal of Nutrition*, 25(1), 117-128. doi: 10.21315/km2020.38.s1.8.

[9] Phua, K. L. (2015). The health of Malaysia's 'Orang Asli' peoples: a review of the scientific evidence on nutritional outcome, parasite infestations, and discussion on implications for clinical practice. *Malaysian Journal of Public Health Medicine*, 15(1), 83-90.

[10] Ismail, R., Saputra, J., & Rosli, N. (2019). The impact of top-down policy changes on socioeconomic status of Orang Asli. *Opción*, 35(9), 1865-1879. doi: 10.17605/OSF.IO/T5UDX.

[11] Marashe, J. (2014). The African traditional religious landscape: An examination of the role of traditional leaders in the fight against HIV and AIDS in Chipinge, Zimbabwe. *Verbum et Ecclesia*, 35(1), 1-8. doi: 10.4102/ve.v35i1.871.

[12] Walsh, A., Matthews, A., Manda-Taylor, L., Brugha, R., Mwale, D., Phiri, T., & Byrne, E. (2018). The role of the traditional leader in implementing maternal, newborn and child health policy in Malawi. *Health Policy and Planning*, 33(8), 879-887. doi: 10.1093/heapol/czy059.

[13] Emkay Foundation. (2014). *The Life of the Indigenous peoples of Belum-Temengor: Pey ba'a.* Selangor, MY: Yayasan Emkay.

[14] JAKOA dataset. (2020). *Villagers biodata and JAKOA population*. [Unpublished dataset]. Dataset obtained from JAKOA Malaysia.

[15] Shaghaghi, A., Bhopal, R. S., & Sheikh, A. (2011). Approaches to recruiting 'hard-to-reach' populations into research: a review of the literature. *Health Promotion Perspectives*, 1(2), 86-94.