JOURNAL OF
CONTEMPORARY ISSUES IN
MEDIA AND
COMMUNICATION

Health Communication Practice among Rural Communities In Sabah, Malaysia: Issues of Literacy, Accessibility and Availability and Communication Approach

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Abstract
This paper seeks to highlight the need to improve the communication approaches taken by the Ministry of Health, Malaysia, to uplift the health literacy rate among rural communities. The World Health Organization (WHO) defines health literacy as the cognitive and social ability of people to gain access to health information to make informed decisions concerning their health. However, a study on health literacy conducted in four districts in Sabah, namely Nabawan, Ranau, Beaufort, and Kota Belud, found that several factors hampered the access of the rural communities to health information, hence, contributing to their lack of awareness about health and healthcare. Based on in-depth interviews with 42 informants from the four districts, the study found that the rural communities faced various factors, such as poverty, media literacy, and limited media access, which prevented them from obtaining health information and achieving health literacy.

Their only source of health information was through consultations with doctors whenever they or their family members were sick. The informants said that they found public health talks to be most helpful for them to learn about diseases because these were interactive, and also aided those who were illiterate and had no television sets in their homes. They expressed the hope that more talks would be given regularly about chronic diseases, which many of them were already suffering from. This study suggests that Health Departments intensify their outreach through health education programmes based on interpersonal communication, rather than through the use of social media, to increase the health literacy rate among rural communities.

Keywords
health literacy; rural; Sabah; doctor-patient communication; health communication

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Introduction

The issue of the low level of health literacy among rural communities is indeed a cause for concern. Aljassim & Ostini (2020), in their systematic review of health literacy among urban and rural populations, concluded that rural populations generally have lower levels of health literacy. Several studies have found a link between a low health literacy rate and a poor health status (Xia Li et al., 2013; Das et al., 2017). One major problem is their status as low-income communities. Being poor is associated with various health issues as it inhibits their accessibility to health information, ranging from the prevention to the treatment of diseases. In Malaysia, low-income rural communities are confronted with the issue of food insecurity (Ihab et al., 2012). Their

inability to afford a home with proper sanitation also makes them susceptible to intestinal parasitic infections (Ngui et al., 2011). Poverty and illiteracy have also been reported to contribute to the lack of knowledge and a negative attitude towards tuberculosis among rural people in the district of Kudat, Sabah (Koay, 2004). Evidence of a low level of health literacy among rural communities can be traced to their low awareness of health checks (Harris et al., 2019).

Thus, rural communities must have a high level of health literacy as a means to empower themselves concerning their healthcare. This is because the lack of knowledge due to a lack of access to and affordability of health information, especially through mediated means like the media and Internet, is among the major factors as to why urban communities fare better in terms of their health status compared to rural communities (Wang et.al, 2020). Yet, how can this be made possible for the rural communities? The focus of this study was on four districts in Sabah – Nabawan, Ranau, Kota Belud, and Beaufort.

Background of Study

There have been numerous studies that provided clear evidence of health literacy issues among rural communities. Health knowledge is one area of health literacy that is found problematic among rural communities. It was found that most of the respondents not only did not know about the causes of diseases but also lacked knowledge or had a low level of knowledge about diseases, including the risk factors. Hence, this problem is a deep one, indeed.

A study by Norrafizah et al. (2016) tested the health literacy rate of rural Malaysians by using the Newest Vital Sign (NVS), a rapid literacy assessment tool, on villagers located in four areas under the Federal Land Development Authority (FELDA) scheme in Pahang. Their findings revealed that only seven out of the 34 respondents had ‘Adequate’ literacy, the highest level of health literacy, while 17 or the majority had ‘Possibly Limited’ literacy, i.e., medium-level health literacy. This study further confirmed the findings of the NHMS in 2015 concerning the low health literacy rate among rural communities, which also means that rural communities may demonstrate limited knowledge about hygiene, nutrition, and anything else related to healthy lifestyles and the prevention of diseases.

E-ISSN: 2289-1528

Lack of knowledge of diseases is also evident in a study by Neni et al. (2010) on rural communities on the east coast of Peninsular Malaysia. This study found that their respondents had inaccurate knowledge about epilepsy. Similarly, a study on rural communities in Kuala Pilah also found that the rural communities there had a remarkably low level of knowledge and understanding about diabetes mellitus (Minhat & Hamedon, 2014).

Elsewhere, rural communities residing in Hulu Langat, Malaysia, were found to have had a low level of knowledge concerning leptospirosis, where 69.1 percent out of 444 respondents were not aware that it was a disease spread through rat urine (Nozmi et al., 2018).

Low levels of education and low household income among rural communities have also influenced rural communities' risk perception of getting cardiovascular diseases. Studies by Nazar Mohd Zabadi et.al (2017) found that this is to be so among those who are diagnosed as hypertensive cases who believe that they are not at risk of cardiovascular diseases.

In addition, not only were they unaware of the causes of hypertension, but they also did not know how to lead a healthy life, while those who were already suffering from hypertension often defaulted on their follow-up treatment.

In Sabah, a 1993 study by Gan and Chan on the problem of hypertension among the Bajau and Kadazan ethnic groups in rural Sabah reported that out of 648 respondents, over 50 percent of them were not aware of the risk factors that might lead to high blood pressure.

Other diseases such as chronic kidney diseases show a 53 percent prevalent rate in rural areas of Sabah due to lifestyle factors (Nor Ain, Malehah & Shamsul Bahari, 2020). Aside from low knowledge about non-communicable diseases, such a problem is also found among communicable diseases like tuberculosis. Studies have found that the problem is due to a lack of knowledge about this disease and its factors (Koay, 2004;)

To sum up, both non-communicable and communicable diseases that largely affect rural communities in Sabah are due to lack of knowledge and awareness on prevention as well as most of the communities are not aware of their health status.

Health literacy is a compelling issue in Sabah. The 2015 National Health and Morbidity Survey (NHMS) conducted by the Institute of Public Health Malaysia (IPH) confirmed this along with studies conducted by various scholars. The survey found that the prevalent health literacy rate recorded among rural populations was 2.3 percent, and in terms of the states in Malaysia, Sabah was among those with a health literacy rate that was 'Likely Limited'. In other words, Sabah is among the states with the lowest health literacy rate (Institute for Public Health, 2015).

By 2019, the prevalent rate for 'Limited Health Literacy' for Sabah was recorded at 43.2 percent, a considerably high rate for the lowest level of health literacy (Institute for Public Health, 2019). Lack of knowledge about diseases and healthcare is found to have attributed to the high number of rural communities suffering from hypertension, cardiovascular diseases, and other diseases in Sabah. Additionally, such a study is imperative because diseases such as Tuberculosis remain a high burden of disease for Sabah compared to other states in Malaysia (Goroh, et.al, 2020). Rural communities have misconceptions about the disease and it has been acknowledged this has to be addressed by improving their health literacy (Rundi, 2010).

Most crucially, low health literacy among others is associated with an increased number of hospital admissions and readmissions, poor adherence to medication, and a higher prevalence of health risk which all poses a burden to the government and the individuals in the long run (Dodson, Good & Osbourne, 2015).

Scholars have often proposed that the way to enhance health education programmes is to help raise the level of knowledge among rural communities. However, it is not easy for rural communities including those coastal communities to attain a high health literacy rate because they are often confronted with various other problems, such as poverty and low education (Azzeri et.al, 2020).

This means that they have no money to go to school, which would thereby make them poorly educated or illiterate. In this condition, they have problems understanding health information which prevents them from knowing how to take care of themselves (Azzeri et.al 2020). Hence, the key to an improved health status is empowerment through health literacy. Yet, the issue of empowering them through health literacy is multi-faceted. Previous and contemporary studies have tried to address this issue through the use of the Knowledge, Attitude, and Practice (KAP) model in public health. However, these findings were only able to present a pattern, without exploring the context and living conditions of rural communities. For a meaningful change in attitudes and practices, further understanding of the social, economic, and political contexts of rural communities is needed. Before proceeding further, an analysis of the conceptual meaning of health literacy would be useful.

Health Literacy – An Analysis of the Concept

Health literacy is defined as the possession of “the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health.” (WHO, 1998: 10)

This definition suggests that the achievement of health literacy is an individual effort and is individually constructed. However, Nutbeam (2009: 303) opined that health literacy is a literacy that needs to be understood in terms of “content and context specifics” because it means more than just functional literacy.

Berkman et al. (2010: 16) defined health literacy as “the degree to which individuals can obtain, process, understand and communicate about health-related information needed to make informed health decisions”.

The use of the word “communicate” in their definition of health literacy also suggests that being able to talk about health-associated information is part of being literate in the context of health. Sørensen et al. (2012), after reviewing the different definitions of health literacy given by various scholars, attempted to provide a broader and more comprehensive definition that encapsulates all

the various definitions.

Health literacy is defined as people's knowledge, motivation, and personal competency to gain access, understand, appraise, and apply health information to help them make informed decisions about their health (Sørensen et al. (2012)

One important point is that a person's level of health literacy is also linked to the level of education. However, this link has raised concerns among developed and developing countries (Kickbusch, 2001). Those with lower incomes have a lower level of health literacy because most of them are illiterate, where they are unable to read and understand materials on health education. Therefore, a person's level of health literacy is linked to the context of his or her socio-demographic background. Thus, health literacy needs to be understood in terms of both its context and content. Parker (2000) pointed out that those with low health literacy may correlate with errors in taking their medicine. Most importantly, people who have a limited ability to read, are often too ashamed to seek further explanations from their doctors about their condition because of the social stigma attached to them as illiterates . This poses a problem to rural communities as they now go to hospitals and clinics for their health problem (Naing et.al, 2020).

However, most healthcare providers are too busy to further explain to their patients their condition and often hope that brochures or any educational reading materials on health would help patients better understand their condition (Parker, 2000). This means that health literacy is also about effective, two-way communication between patients and healthcare providers, where doctors impart medical advice and have open discussions with their patients.

Rudd's (2015) point of view on health literacy bridges the perspectives of both patients and healthcare providers and institutions. She suggested that health literacy should include the literacy skills of individuals and patients as well as the communication skills of healthcare professionals because meaningful exchanges, such as these enhance a person's understanding of health and its issues.

What is evident in the definitions of health literacy is that it is an issue of the practice of communication. A meaningful form of literacy comprises not merely the ability to read and understand prescriptions, but also the ability to have a two-way flow of communication between patients and healthcare professionals, which will ultimately lead to informed decisions about the health issues involved.

Secondly, health literacy is not absent of context and is not an individual construct, but more inclined to be multi-factorial.

Background Information of the Four Districts – Ranau, Nabawan, Kota Belud and Beaufort

Sabah is situated in the eastern part of Malaysia and has an area of 73,620 sq. km. It is divided into 27 districts with a total population of 3.9 million (Jabatan Perangkaan Malaysia, Negeri Sabah: 2020). A large part of the state is comprised of rural areas.

Geographically, the four districts in this study are located in different parts of Sabah. Kota Belud is on the west coast, Ranau lies on the northwest coast, while Beaufort and Nabawan are in the interior, although Nabawan lies further south (Jabatan Perangkaan Malaysia, 2020).

Nabawan has long been identified as a district with a high poverty rate (Abdul Kadir, Imang & Atang, 2018). In addition, according to the State and Administrative District's 2019 Household Income and Basic Amenities Survey Report, Nabawan recorded an absolute poverty of 35.6 percent, followed by Kota Belud with 34 percent, Ranau with 26.8 percent, and Beaufort with 21 percent (Jabatan Perangkaan Malaysia, 2020).

In terms of relative poverty, the district of Ranau showed a downtrend, where the percentage of relative poverty in 2019 was 21.3 percent compared to 26.6 percent in 2016 (Jabatan Perangkaan Malaysia, 2020).

The rate of relative poverty in Nabawan was 4.2 percent in 2016 but leaped to 12.7 percent in 2019. Meanwhile, Kota Belud recorded a relative poverty of 31.2 percent in 2016 compared to

31.1 percent in 2019. The district of Beaufort showed a decline in relative poverty from 23.3 percent in 2016 to 19.1 percent in 2019 (Jabatan Perangkaan Malaysia, 2020). This means that rural areas in Sabah have a high rate of both absolute and relative poverty. Aside from having high poverty rates of over 20 percent, these districts were chosen for this study because they have poor basic facilities like good roads, and healthcare facilities are not within reach.

As health literacy is associated with access to health information, it was essential to look into the overall situation of Internet subscriptions and the type of media and communication tools possessed by the rural communities in these districts . While other factors can contribute to health literacy, there is also a need to consider the internet subscription pattern in the selected district in this study to see if rural communities in this study are facing issues of accessibility to getting health information online or otherwise.

Table 1: Percentage of household Internet subscriptions based on districts

	Year		
District	2014	2016	2019
Beaufort	26.70%	54.80%	70.60%
Ranau	22.50%	53.40%	71.90%
Kota Belud	18.40%	46.70%	68.90%
Nabawan	14.80%	45.80%	71.10%

(Source: My Local Stats Sabah 2019. Ranau; My Local Stats Sabah 2019. Nabawan, My Local Stats Sabah 2019, Kota Belud, My Local Stats Sabah 2019, Beaufort – Jabatan Perangkaan Malaysia, 2020)

A close look at the trend of household Internet subscriptions in the four selected districts revealed that there was a huge leap from 2014 to 2016 and 2019. All the districts, except for Kota Belud, recorded a high percentage of over 70 percent of households with Internet subscriptions, as shown in Table 1. As for Nabawan, its Internet subscriptions were less than 20 percent in 2014 but rose to 45.8 percent in 2016, and were over 70 percent in 2019.

This may indicate that the population sees the need to be connected as well as the intense efforts

by the government, through the 1 Malaysia Internet Centre (PI1M), to ensure that the people in the interior are not disconnected from mainstream development programmes (PI1M).

Table 2: Percentage of household subscriptions to the Pay TV Channel in the four districts

	Year		
District	2014	2016	2019
Beaufort	81.40%	75.10%	76.20%
Ranau	70.70%	57.90%	62.60%
Kota Belud	64.50%	60.10%	83.10%
Nabawan	47.50%	44.80%	30.20%

(Source: My Local Stats Sabah 2019. Ranau; My Local Stats Sabah 2019. Nabawan, My Local Stats Sabah 2019, Kota Belud, My Local Stats Sabah 2019, Beaufort – Jabatan Perangkaan Malaysia, 2020)

The access of rural communities to information was determined in terms of the percentage of ownership for Pay TV channels, where Table 2 shows that the district of Kota Belud recorded a much higher percentage (80 percent) of subscriptions for Pay TV channels, such as Astro than folks in the other three districts in 2019. However, Nabawan recorded a much lower percentage of Pay TV subscriptions from 2014 to 2019.

Table 3: Percentage of households owning handphones in the four districts

	Year		
District	2014	2016	2019
Beaufort	98.10%	97.30%	99.30%
Ranau	97.10%	96.20%	98.30%
Kota Belud	96.70%	87.50%	94.40%
Nabawan	94.80%	93.70%	97.20%

(Source: My Local Stats Sabah 2019. Ranau; My Local Stats Sabah 2019. Nabawan, My Local Stats Sabah 2019 Kota Belud, My Local Stats Sabah 2019. Beaufort – Jabatan Perangkaan Malaysia, 2020)

Handphone ownership was indeed high in all four districts as it is an important tool for communication and for getting connected. Smartphone ownership was recorded at over 80 percent

(indicated in Table 1). This data is significant because limited access to health information defeats the definition of health literacy as communities need to have the tools to gain access to health information.

Overall, the communities living in the four districts were not entirely disconnected, and they did have access to information. However, it was necessary to further explore the other factors behind the low health literacy rate in rural areas in Sabah.

Methodology

The objective of this study is to further understand why health literacy among rural communities in Sabah is low. As health literacy is achieved through health communication and education, two research questions were raised.

1. What are the factors that may hinder rural communities from having the capacity to obtain, process, and understand health information?
2. Which communication tools are helping them understand health information better and which are not?

Thus, to answer these questions, this study employed a qualitative method of semi-structured interviews based on a snowball sampling procedure that involved 42 individuals from Ranau, Nabawan, Kota Belud, and Beaufort. Informants were recruited via snowball sampling method from 15 villages. The use of a qualitative approach to this study is apt because it seeks to understand what are the factors that hinder rural communities from attaining adequate health literacy, which communications tools are helpful, and the challenges they face in educating themselves about health.

Criteria for selecting informants are those aged 20 and above, earning less than RM1,000 a month, with and without health problems, and living in remote areas far from the nearest town and health facilities. Informants who participated in the interview must be voluntary.

The fact that there are more women than men in this study is because the head of the family tends to delegate the task of being interviewed to the wife when being approached by the researcher. Moreover, 42 informants that are being interviewed are those who are willing to be interviewed while most are unwilling.

The full profiles of the informants are shown in Table 4 below. The ages of the informants ranged from 20 to 80 years across ethnicity and gender.

Table 4: Profiles of the 42 informants interviewed from all four districts

No	Gender	Age	Location	District
1	Female	47	Kg Paginatan	Ranau
2	Male	77	Kg Paginatan	Ranau
3	Male	33	Kg Paginatan	Ranau
4	Female	38	Kg Paginatan	Ranau
5	Female	41	Kg Paginatan	Ranau
6	Female	44	Kg Paginatan	Ranau
7	Female	65	Kg Paginatan	Ranau
8	Female	55	Kg Tampios	Ranau
9	Female	58	Kg Tampios	Ranau
10	Female	34	Kg Tampios	Ranau
11	Male	29	Kg Maringkian	Ranau
12	Female	41	Kg Maringkian	Ranau
13	Female	72	Kg Maringkian	Ranau
14	Female	44	Kg Matupang	Ranau
15	Female	41	Kg Matupang	Ranau
16	Female	63	Kg Matupang	Ranau
17	Female	60	Kg Sagindai Lama	Ranau
18	Female	45	Kg Sagindai Lama	Ranau
19	Male	77	Kg Sagindai Lama	Ranau
20	Female	32	Kg Salarom Taka	Nabawan
21	Male	42	Kg Salarom Baru	Nabawan
22	Female	45	Kg Bahagia	Nabawan
23	Female	31	Kg Bahagia	Nabawan
24	Female	25	Kg Kabangkawang	Nabawan
25	Female	43	Kg Kabangkawang	Nabawan
26	Female	28	Kg Kabangkawang	Nabawan
27	Female	22	Kg Tatagas	Nabawan

28	Female	35	Kg Tatagas	Nabawan
29	Female	26	Kg Tatagas	Nabawan
30	Female	37	Kg Malampoi	Nabawan
31	Female	30	Kg Malampoi	Nabawan
32	Female	45	Kg Bt 61,	Beaufort
33	Male	48	Kg Bt 61	Beaufort
34	Female	24	Kg Kurian	Beaufort
35	Female	60	Kg Kurian	Beaufort
36	Female	58	Kg Sarang	Kota Belud
37	Female	36	Kg Sarang	Kota Belud
38	Male	66	Kg Taburan	Kota Belud
39	Female	60	Kg Taburan	Kota Belud
40	Female	33	Kg Pantai Emas	Kota Belud
41	Female	80	Kg Pantai Emas	Kota Belud
42	Female	34	Kg Pantai Emas	Kota Belud

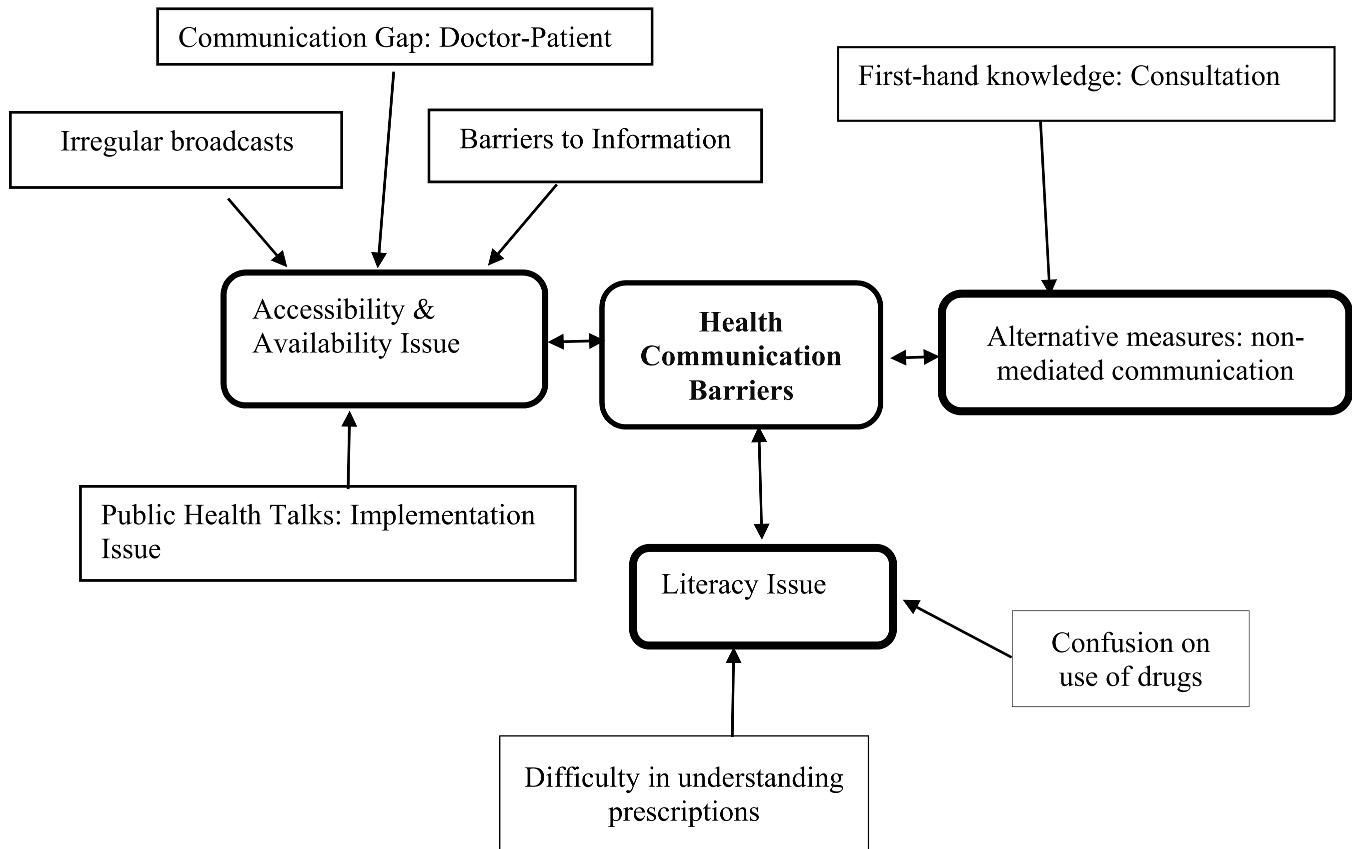
To gain access to the respective villages in these districts, the researchers contacted the respective District Offices, which then directed them to the village heads to gain permission to approach the homes of the villagers. The researchers had to explain what the research entailed and what was required from the informants. The interviews, which lasted for an hour, were conducted in Malay in their homes and were then transcribed and analysed thematically, according to Braun and Clarke (2006).

Findings

The outcomes of the analysed interviews led to one major theme – Health Communication Barriers based on three subthemes – Accessibility and Availability Issues, Alternative Measures, and Literacy Issues. The three subthemes pointed to the multiple communication issues or problems affecting the health literacy of rural society.

These themes were identified as the views were repeatedly expressed by the informants. They pointed an issue pertaining to health literacy and communication. Overall, poor communication was at the root of the barriers to the enhancement of health literacy. The informants from all four districts shared a common problem concerning how public health talks were being held. This was then captured in this thematic conceptual map for better visualisation of the findings.

Figure 1: Thematic map of the 42 Informants in the four districts



Accessibility & Availability Issue

This theme refers to the problems faced by the rural informants in gaining access to health information and the availability of such information. It means that they were unable to obtain health information directly face-to-face, and this situation was made worse by the problem of the availability of such information in the media. This theme leads to five subthemes – public health talks: implementation issues, irregular broadcasts, communication gap: doctor-patient, and barriers to information.

Public Health Talks: Implementation Issue

This subtheme also refers to how dissatisfied the informants were that public health talks by the state health authorities were being held only once a year or whenever an outbreak occurred. They expressed their dissatisfaction as they said they were keen to know about other diseases, and how to prevent themselves from getting them.

"When it comes to talks, it's only once a year that they are held in Nabawan. Talks are very helpful. If one were to depend on the TV, some homes do not have a TV, so they cannot get that information." (Female Informant 1/32 years-old/Kg Salarom Taka, Nabawan)

"If possible, please don't have talks once a year. If possible, make it frequent because we want to know more about high blood, women's diseases, childcare, and hygiene, for example." (Female Informant 2/24 years-old/Kg Kurian, Beaufort)

Based on what they shared here, it is evident, that they have the motivation to know more about serious diseases but the lack of frequent public health talks prevents them from acquiring more knowledge about diseases.

Irregular broadcast

Another problem of availability for the rural informants was the irregular broadcast of health shows. They complained that such shows were not readily available on television.

"We seldom get health information. Sometimes, there is no health information. There is, but it is rarely broadcasted." (Female informant 3/44 years old/Kg Maringkian, Ranau)

"The TV seldom has programmes about health. There is the radio, but it's not regular. There are programmes, but not every day." (Female informant 4/45 years-old/Kg Batu 61, Beaufort)

Public health talks by the Health Department are crucial as they solve the problem of illiteracy.

The people had to rely on such talks because some of them had never had any formal education and hence, they could not read or understand brochures or posters (Rudd, 2015). In addition, as the Internet coverage was limited in districts like Nabawan, public health talks were even more crucial for teaching them about health.

"For those who are in the kampong and do not have sources of media, there is a need to have (health) talks." (Female informant 5/43 years-old/Kg Kabangkawang, Nabawan)

Another reason why health talks are helpful is that they enable people to ask about whatever they do not understand (Shaw et al., 2008).

"Talks are very helpful because we can ask questions. Discussions with the doctor are also very helpful." (Female Informant 6/45 years old/Kg Sagindai, Ranau)

They were also very keen to learn of ways to look after themselves, but they relied on health workshops and talks to help them with disease prevention and healthy living.

Communication Gap: Doctor-Patient

One major issue that was often raised by the informants was the quality of the doctor-patient communication in helping patients understand their health issue. Quality doctor-patient communication is important and has been identified as an essential source of health literacy for patients (Holmes et.al, 2007).

A communication gap exists here ranging from doctors not explaining to the patients or their families the cause of their illness, lack of proficiency to communicate in Malay, and the frequent use of medical jargon when talking to the informants.

Doctor-patient communication is vital for enhancing their health literacy as doctors serve as their trusted source of health information. This symbiotic relationship will provide patients with a

greater understanding of their condition, among other things (Street Jr et al., 2008). The main problem that was raised by the informants is how doctors often do not explain the cause of their illness and their loved ones. Thus, leaving them often in the dark about their medical condition and their families.

"(The) doctor always checks my body and gives receipts for medicine. Never give reasons (for my illness). If (I) asked about diet, the doctor always said 'refer to the dietitian'," (Female Informant 7/45 years old/Kg Bt 61, Beaufort)

Informants also observed that doctors failed to explain the cause of their illness, is because of their heavy workload. One male informant related his experience of how when his wife was very ill, the doctors in Nabawan did not tell him the cause of her illness. It was not until she was transferred to the Keningau District Hospital that this informant found out what had happened to his wife.

"Maybe, to me, he (doctor) was running out of time, so he did not explain what was the cause of the illness. Only when (we were) at Keningau Hospital, where my wife was warded, then the doctor explain what was my wife's problem. Then, I understood." (Male informant 1/42 years old/Kg Salarom Baru, Nabawan)

The lack of explanation of the causes of their illness is a sore issue here among the informants as they do not grasp what they are suffering hence a two-way communication between the doctor would be useful to them.

Literacy Issue

Literacy issue is coded as the second theme because informants admit their inability to understand simple drug prescription instructions which can be detrimental to their treatment. This problem is found to be a challenge among rural communities and healthcare.

Rural communities are said to have often faced grave challenges in understanding prescriptions and what the drugs are for (Abu Alreesh & Alburikan, 2019; Safeer & Kennan, 2005). This second

theme saw two subthemes – difficulty in understanding prescriptions and confusion about the use of drugs.

Difficulty in understanding prescriptions

Ideally, someone who is health literate is one whose skills are more than just being able to read and understand prescriptions. However, in this study, some informants can barely understand prescriptions and instructions on how to take their medicines.

One female informant related how she had trouble understanding the prescription because it was written using the pharmaceutical name of the drugs.

"Always, what is written uses the name of the drug. Kampong people do not know this drug is for what, that drug is for what." (Female Informant 1/32 years-old/Kg Salarom Taka, Nabawan)

She faced a similar problem when collecting her grandmother's medicines for her heart.

"Whenever I have to take my grandmother's medicine, there is just too much medicine. I always ask (them) to explain, what is this drug for." (Female Informant 1/32 years-old/Kg Salarom Taka, Nabawan)

Confusion on the use of drugs

She suggested that drug labels should be accompanied by a layman's translation of what the drug is for, both for her and her grandmother's convenience.

"I feel, there should be an explanation about these drugs because they always write in 'medicine language', which kampong folks do not know." (Female Informant 1/32 years-old/Kg Salarom Taka, Nabawan)

What these findings show is that there are informants in this study who have not even reached

basic/functional health literacy. They can read prescriptions, but they fail to understand what are the drugs for.

This is an issue of literacy that may affect their adherence to taking their medicine . Given that the informants here are lowly educated, they find it a challenge to understand how to take their medicines and what those drugs are for especially when it involves more than one drug that needs to be taken.

This is because they are overwhelmed by the various names of the drugs that they are not familiar with, and their use, and therefore, a translation of what the drugs are for, is helpful for them. The lack of the use of layman's terms in labelling the drugs themselves is a health communication barrier to rural communities who are trying to recover from their health issues.

Alternative Measures: Non-Mediated Communication

As the rural informants faced various barriers to their understanding of healthcare, they often depended on consultations with doctors and nurses to help them understand their condition during their monthly reviews. This form of communication is coded as non-mediated communication.

The fact that informants in this study share their problems of availability and accessibility in getting reliable and regular health information from the mass media, their only hope is through non-mediated communication via consultations with doctors.

First-hand knowledge: Consultation

Despite their many experiences of unpleasant encounters with doctors, they still believed in modern medicine. Hence, they often asked their doctors questions about their condition or that of their family members. This process of communication, known as "oral exchange", is said to have an impact on the health outcomes of patients (Nouri & Rudd, 2015).

"The doctor told me to follow the food pyramid (to avoid high blood) so I just follow what I saw

in the clinic," (Female Informant 8/22-years-old/Kg Tatagas, Nawaban)

Another male informant from Ranau, who had just undergone heart surgery in Queen Elizabeth Hospital, Kota Kinabalu shared that the doctor who attended to him gave him lengthy advice on how to take care of his current condition.

"The doctor advised (me) that I cannot eat saltfish. He said I cannot take salt. Before, I used to drink alcohol. It has been more than 20 years since I stopped smoking and drinking. It is all up to you." (Male Informant 2/77 years old/Kg Sagindai Lama, Ranau)

Some doctors, who have good interpersonal communication skills and are empathetic towards their rural patients, take the trouble to explain further to their patients. This was the experience of a female informant with the doctor who often attended to her.

"The doctor always gives an explanation. So, when I don't understand, I ask again. He always speaks slowly. If it is too fast, I definitely cannot understand." (Female Informant 8/22 years-old/Kg Tatagas, Nabawan)

Clearly, face-to-face and effective communication between doctors and patients is useful and helpful for rural patients because this is how they can ask the doctor about what they do not understand about their health problems and ways of dealing with them.

Owing to the fact that they do not have the seven key abilities of health literacy from a patient standpoint (Jordan et.al, 2010) here, a non-mediated communication approach such as doctor-patient communication is their alternative source of improving their health literacy.

Discussion

A sense of the context and lived experiences of these informants was obtained, based on what had been related by the 42 informants across gender, ethnicity, and age, which provided insights into

the issue of health literacy. It was apparent that they wanted to receive health education but were hampered by the problem of accessibility to health information as well as lacking the skills and knowledge in seeking health information.

Due to the fact that their health literacy was at the level of basic/functional literacy, they required slow, face-to-face communication with healthcare providers to learn about health. At this level, they could only understand prescription orders, but not beyond that.

The findings also showed that the health literacy of the rural communities was affected by other types of literacies, namely, media and digital literacy. Media literacy is equally important because health information is largely found on the Internet and television. It was evident that their lack of media literacy was the reason why they could not understand health-related television shows as they were unable to distinguish between authentic and false health information nor did they understand what such information meant. Media literacy, or what is known as media health literacy, is also linked to health literacy (Levin-Zamir & Bertschi, 2018). Few informants in this study used the Internet for health information due to their lack of digital literacy.

However, this was the exception for the younger female informants here. It appeared that elsewhere, women in their 20s-30s were active users of the Internet for health information (Ahadzadeh & Sharif, 2017).

Another problem of the rural communities was the inadequate supply of health information through the media and health talks. The limited number of health programmes through the broadcast media was a disadvantage for the rural communities, especially for those who were illiterate. Most of the informants lamented that such information was not regularly available on the air, and hence, they were at a loss as to where they could obtain knowledge about health.

Hence, they were heavily reliant on health talks and doctor-patient consultations for their source of health information. In this respect, it is vital for health departments to schedule regular health talks with broader topics on disease prevention and healthcare promotion to rural communities, as

this will bring long-term benefits for the communities and healthcare services. The presence of doctors giving health talks in health campaigns to communities is found to be most effective in improving rural communities' health literacy (Jongen et.al, 2019).

Going back to the definition of health literacy adopted by WHO (1998), these informants did not have the cognitive nor the social skills to locate health information in the media and news media because their level of education and lack of Internet access meant that they lacked the knowledge about how to use the Internet and where to look for health information.

However, they did not lack motivation. On the contrary, they were very motivated to learn about healthy living, but they required the assistance of non-mediated, low-cost communication approaches.

Table 5: Summary of findings

No	Key Findings
1	Health communication barriers to adequate health literacy are identified as accessibility and availability of health information such as irregular broadcasts of health information, infrequent outreach programmes – health talks
2	Literacy issues – informants unable to understand prescription labels and instructions
3	Rural communities heavily relied on a non-mediated communication approach – as consultation with doctors helps some informant understand their medical condition

Therefore, this study suggests that more aggressive, systematic outreach health communication programmes are required to help rural communities know about healthcare, including disease prevention and healthy lifestyles .

Conclusion

To conclude, health literacy is not only about having the motivation, access, and skills, but it is also an issue of communication approaches. As has been shown, rural communities lack media and digital literacy, and hence, they require more non-mediated communication approaches in health education instead of the use of various social media platforms and the mass media. While this may serve the urban population very well, the Malaysian Ministry of Health, however, needs to continue with more conventional and personalised communication approaches to ensure that the gap between the rural and urban communities is not widened in terms of health literacy.

Rural communities' health literacy is affected by poverty and lack of high education, which means that less sophisticated communication approaches such as face-to-face health talks communicating in simple, layman's language about health is more suitable in enhancing their consciousness in looking after their health better.

Acknowledgment

This study was funded by an internal grant from Universiti Malaysia Sabah (UMS) - Main Priority Research Scheme, with the code - SBK0369-2017-2020

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Biodata

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