

## Health Literacy Among Rural Communities: Issues of Accessibility to Information and Media Literacy

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### ABSTRACT

Health literacy is a very important concept linked to the wellbeing of a nation. A healthy nation is a progressive nation when they can make informed decisions about their health. The concept means one's cognitive and social ability to gain access, to understand and use health information to make wise decisions to maintain and promote good health on oneself (Nutbeam, 1998). The level of health literacy among rural population in Malaysia is found to be 2.3 percent, lower than urban population according to the 2015 National Health & Morbidity Survey by the Institute for Public Health Malaysia (2015). Hence, a study was undertaken in Sabah to further investigate health literacy rate among rural communities there. Drawing data collected from both survey and semi-structured interviews, rural communities' health literacy is found to be problematic because it is hampered by problems of accessibility to health information and lack of literacy in searching for health information through the new media. Health information is only accessible through non-media communications like health talks where 70 percent respondents found public health talks to be most useful. On the other hand, findings from semi-structured interviews with 42 informants from four districts in Sabah found that the concept of health literacy as being individually-construct is problematic and needs to be seen from a broader context of socio-economic factor, living conditions of the individuals as well as the quality of health information disseminated in the media.

**Keywords:** *Health literacy, rural communities, cultural capital, accessibility, health information.*

### INTRODUCTION

The concept of 'health literacy' is an increasingly important concept to be grasped, understood and practised by all level of societies as it can improve the quality of one's health status. There have been studies that found a link between low level of health literacy with the lack of preventive measures against diseases (Mancuso & Rincon, 2006; White et al., 2008).

Malaysia, through its Health Ministry, acknowledges the importance of health literacy as stated in the ministry's Strategic Plan 2016-2020. The ministry focuses the promotion of health literacy on school children as it believes that health education should start at an early age as it will lead to positive behaviour towards one's own health (*Unit Perancangan Dasar dan Pelan Kesihatan*, 2016). Programmes such as My BFF@school, program *Tunas Doktor Muda* at pre-school and Inisiatif IMFREE (*Program Bebas Tembakau*) at primary school level are among the various early health education programmes initiated by the ministry in collaboration with the Malaysian Education Ministry.

Health education is important and one needs to have the literacy to understand and grasped the need to know about diseases and ways to prevent it, in order to maintain good health in oneself. Having the knowledge and making use of it, helps one lead to a healthy lifestyle.

Under its strategic plan, the Health Ministry also recognises the need to empower individuals and communities to make informed decision over their health and its issues with the help of its Centre for Promotion of Community Health (*Pusat Promosi Kesihatan Komuniti*)

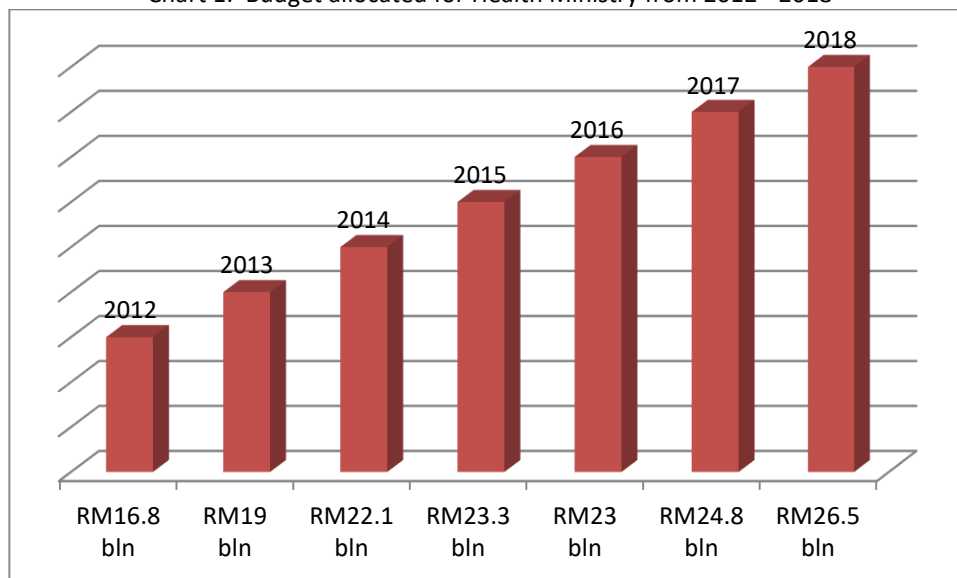
(Unit Perancangan Dasar dan Pelan Kesihatan, 2016). By educating the public about the practices of healthy lifestyles, the ministry believed that it will prevent and protect one from diseases.

Health literacy is associated to a variety of issues that the lack of it may cause huge burden to the country in terms of dealing, managing and providing health treatment. It also determines the mortality rate of an individual and community. According to Dodson, Good and Osborne (2015), low level of health literacy is strongly linked to several problems such as increased hospital admission and readmission, poor medication adherence, higher prevalence of health risk factors and increased healthcare costs. It is for this reason, health literacy is very important to any country and the population because high level of health literacy means number of healthy population will increase.

#### HEALTH LITERACY, ITS LINK TO HEALTH MANAGEMENT IN MALAYSIA

In Malaysia, government expenditure on health continue to increase from 2.9 percent Gross Domestic Output from 1997 to 4.5 percent in 2013 (Unit Perancangan Dasar dan Pelan Kesihatan, 2016).

Chart 1: Budget allocated for Health Ministry from 2012 - 2018



(adapted from sources: [www.treasury.gov.my](http://www.treasury.gov.my))

Healthcare, management and delivery receives great attention from the government in its annual national budget as is shown on Table 1. It increases yearly and in last year's budget, the Health Ministry receives an increment of RM1.7 billion.

In terms of health problems in Malaysia, it is reported that Malaysia is said to have the highest rate of non-communicable diseases (NCD) among Asean countries (Unit Perancangan Dasar dan Kesihatan, 2016). Non-communicable diseases like diabetic for those aged 30 years old and above, shows a steady increase in cases from 1996 to 2015 where the number of cases rose from 8.3 percent (1996) to 22.5 percent (2015) (Unit Perancangan Dasar dan Kesihatan, 2016).

The National Health and Morbidity Survey (NHMS) 2015 reports Malaysians to have suffered three major diseases of which this comes under cardiovascular diseases. Hypercholesterolemia (high cholesterol) is the highest in which 9.6 million people or 47.7 percent of adults above 18 years and above suffers from high cholesterol. This is followed by

hypertension. About 30.3 percent adults above 18 years old, are reported to have suffered from hypertension. This number involves 6.1 million Malaysians based on the 2015 survey data. The third major disease is found to be diabetes mellitus or diabetic. It is recorded that 8.3 percent are known diabetes while 9.2 percent are previously undiagnosed with diabetes. Making this a total of 17.5 percent or 3.5 million Malaysians aged 18 years and above are already suffering from diabetes (Institut for Public Health, 2015).

Also, if one were to looked at the Malaysian Burden of Disease and Injury Study 2009-2014 report, Cardiovascular and Circulatory Diseases, Malignant Neoplasms, Respiratory Infections, Unintentional Injuries and Respiratory Diseases are said to be the top five leading cause of death in Malaysia (Institute for Public Health, 2017).

In other words, non-communicable diseases such as diabetic and hypertension are still the diseases in Malaysia and is associated to life-styles. It involves one's behaviour in how he or she lead their life which affects their health. And one's lifestyles is associated with their level of knowledge and awareness about health and health risk as well as their motivation to look after their health in preventing themselves from diseases.

All these reflects on Malaysians' level of health literacy. Health literacy was included in the 2015 National Health and Morbidity Survey (NHMS 2015) by the Institute of Public Health, Malaysia which shows the ministry's acknowledgment of the importance of health literacy in among the public. Surveys shows that the level of those having adequate literacy, which is the highest level of health literacy, is indeed low at 6.6 percent. Urban population shows a higher level of adequate literacy – 7.8 percent as compared to rural population – 2.3 percent (Institute for Public Health, 2015). However, the survey did not share much information on how the prevalence of health literacy was investigated.

Hence, there is a need to enhance health literacy among Malaysians as it incurs high medical costs for treatment for the government and a burden to patients as well as family members who are caring for those who suffers these health issues.

As rural population show a lower number of those possessing adequate literacy for health, means that there is a greater possibility that the number of those having health issues are higher. The NHMS 2015 findings also stated that Sabah are among the states that records prevalent rate of 0.9 percent for Likely Limited level of health literacy, which is level one (Institute for Public Health, 2015). Which means that Sabah's level of health literacy, is quite low.

While the findings from NHMS 2015 is important, it does not yield much information about level of health literacy in Sabah. More so, since rural population records a much lower prevalent rate for health literacy, does this involve rural population in Sabah, as well?

Therefore, a research work has been conducted to investigate (a) how accessible is health information to rural communities in Sabah and (b) why is their level of health literacy low?

#### HEALTH LITERACY – AN UNDERSTANDING OF THE CONCEPT

To begin with, health literacy is a contested term. According to World Health Organization (WHO), health literacy is defined as “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” (Nutbeam, 1998, p. 351).

It is an outcome derived from health promotion where effective health promotion results in high level of health literacy for the targetted group (Nutbeam, 2000). The assumption is effective health promotion will bring about an improved knowledge among the people about health. Thus, where there is an understanding about health in terms self-health care and prevention, it will bring about a change in attitude towards their health.

However, the definition by WHO was seen as too simplistic. In this respect, Kickbusch (2001) views health literacy in terms of empowerment involving those who are marginalized who have no power or choices to decide which medical treatment to choose from. It is not merely about being able to have access to health information and understand it, but also whether the people are able to afford to live life healthily.

Kickbusch et al. (2005, p. 8) then reconceptualised health literacy to be "... the ability to make sound health decisions in the context of everyday life – at home, in the community, at the workplace, in the health care system, the market place and the political arena. It is a critical empowerment strategy to increase people's control over their health, their ability to seek out information and their ability to take responsibility,".

Zarcoodas et al. (2005, p. 196-197) also redefined health literacy "as the wide range of skills, and competencies that people develop to seek out, comprehend, evaluate and use health information and concepts to make informed choices, reduce health risks and increase quality of life". While Zarcoodas et al.'s definition is similar to WHO (1998) in a sense that they see it more as an individual being able to use health information to make decision about their health, Zarcoodas et al., however, claimed that their definition of health literacy leads to a multi-dimensional model. They further expanded the model by adding four domain of literacy – fundamental literacy, science literacy, civic literacy and cultural literacy, to make the concept more dynamic.

Another effort to redefine the concept of health literacy was by Paasche-Orlow and Wolf (2007). They broadened the discussion of health literacy by proposing a causal framework to it. What is problematic is how most scholars redefine and reconceptualised the concept of health literacy as an individual construct (Nutbeam, 2000; Zarcadoolas et al. 2005; Speros, 2005; Manganello, 2008).

Even commendable work by Jordan et al. (2009) who attempted to define health literacy from patients' perspective, their focus was more on their literacy skill, capacity to process and retain information as well as competency in looking for health information. Meaning that it is a simple and direct relation between one's literacy and their health.

Although Paasche-Orlow and Wolf (2007) model recognises external factors socio-demographic factor such as race/ethnicity, education and age as well as other factors like occupation, employment, income, social support, culture and language, the problem is that the question of geographical locality and level of development in a particular locality is not taken into account. In developing countries where the level of development whether it is infrastructure, economic or social is uneven compare to those in the developed countries, the concept or model of health literacy proposed by most scholars, seemed inadequate.

Even though there are scholars who attempted to define health literacy based on developing countries experience, their theoretical standpoint does not depart from WHO definition (Mohammad Reza Hamzah et al., 2016)

The more crucial question is, one needs to address beforehand the constraints that community faces that hinders them from being health literate. And how these constraints actually hinder them from being so. This paper supports the perspective that health literacy is about empowerment but more than that, to empower the people, one must acknowledge

what are the constraints that hinders them from being empowered. Only then, will any health education programmes will be effective. Additionally, it does not believe that health literacy as being individually-construct.

Rather, it believes that people must have the power and means in order to gain access to health information and make informed decision about their health and loved ones. In this respect, access is determined by geographical factor and level of economic, physical and social development in a particular location where the people are situated in.

Taking a case of rural communities in the state of Sabah, Malaysia where the poverty rate is the highest in Malaysia and level of development is lower than most states in the country, this study decides to embark on an investigation to find out how are the social conditions in terms of accessibility to information and knowledge about health that rural communities are experiencing in their everyday lives. The issue of accessibility means power to the community, without it, they have no means to become health literate. In order for them to be able to access and understand any kind of health information, this paper argued they must have the accessibility to information in order to empower them.

#### METHODOLOGY

At the outset, this is a sociological study of communities and health literacy. In order, to get an overall pattern of health information seeking habit among rural communities, this study uses survey method while semi-structured interview was employed to gain an insight of the constraints that they faced in accessing and understanding health information. Four districts were selected in Sabah, which represents rural communities from various ethnicities, religion, gender and age. The four districts were Nabawan, Kota Belud, Beaufort and Ranau.

Sampling for quantitative data was done through purposive sampling for two types of villages. One, that is situated more than 30 kilometres from town and distant from district health clinics. The other are those near to town and health clinics. The reason for these two criteria is to see if distant plays a role in determining accessibility of health services and active utilization of health services when they need it.

Table 1: Details of districts and villages selected in the survey

No	Name of Village	Districts	Total
1	Kg Paginatan	Ranau	92
	Kg Maringkian		
	Kg Matupang		
	Kg Sagindai Lama		
	Kg Tampios		
2	Kg Sarang	Kota Belud	93
	Kg Taburan		
	Kg Pantai Emas		
	Kg Peladok		
	Kg Kiau		
3	Kg Batu 61	Beaufort	85
	Kg Batu 58		
	Kg Suasa		
	Kg Bangkalalak		

	Kg Kurian		
	Kg Batu 60		
	Kg Lubok Weston		
	Kg Kota Klias		
4	Kg Salarom Taka	Nabawan	
	Kg Salarom Baru		
	Kg Bahagia		101
	Kg Melampoi		
	Kg Kabangkawong		
	Kg Tetagas		
	<b>Total</b>		<b>371</b>

Based on researchers' experience during their pilot study conducted in one of the villages, it is found that due to the low level of education among the respondents, some questions set in the questionnaire had to be rephrase in which the focus cannot be on a specific disease. One reason for this is, respondents are not aware of those diseases as they never read or heard about it. For example, unlike past studies which tested respondents' literacy on certain diseases, this study found that such type of tests is unsuitable for rural communities in Sabah as their level of education is very low. Some respondents are illiterate as well. Hence, questions that falls within the scope of health literacy but more general such as what respondents know about hygiene, nutrition, eating habits, active lifestyle and health checks had to be asked instead.

For qualitative method, a total of 42 informants was interviewed through a snowball sampling method in the four districts. Interview was conducted in Malay, and questions pertaining to health, had to be asked in simple, layman Malay to give informants the confident to share their views. In terms of socio-demography, informants interviewed worked as farmer, housewife and some depend on financial support from their children.

Table 2: Information on the number of informants interviewed

No	District	Gender	Age
1	Ranau	15 Female + 4 male	29-77 years old
2	Nabawan	11 Female + 1 male	22-45 years old
3	Kota Belud	6 Female + 1 male	33-80 years old
4	Beaufort	3 Female + 1 male	24-60 years old

When asked of their average earnings, they said that due to the low price of rubber in the market, they can only make RM200-300. It is difficult to say, how much they can make in a month, so to supplement, they have to plant vegetables to sell at the market in their respective town. Interviews were conducted for one and a half hour. Interview were then transcribed and analyzed thematically, according to Braun & Clarke (2006) 's Thematic Analysis procedure.

## FINDINGS

Based on the data collected from both interview and survey method, there is an issue with the definition of health literacy with the respondents in this study. Before, one can gain access and understand health information, the severity of the problem of poverty must be addressed first. Poverty leads to several problems. One, all of the informants interviewed, stopped

schooling at Form Two due to poverty. And had to continue doing odd jobs in their village to live until they marry. Their low socio-economic status continues up to the present moment. Being poor and lowly-educated means, they have not much knowledge of many things, let alone, health, aside from how to survive daily.

Lack of knowledge means they do not have any knowledge about nutrition, active lifestyle and anything concerning about diseases and healthcare. Poverty also means rural communities lived in media-poor environment. In the four districts where this study has undertaken, television is the only media that are available to them. They no longer use the radio because it lacks visual information while newspapers is only available in town.

Internet access is only through their hand phone but as one respondent said, it all depends on their financial status. If there is not enough money in hand, they are not able to afford the monthly data plan for internet access.

Inadequate infrastructural facilities like lack of water supply, electricity in some villages as well as bad roads made travelling to their villages a gruelling, one to two hours' drive. The lack of basic amenities led rural communities in Sabah, to be socially-excluded from all access to education, economic opportunities and also better health services.

#### *a. Socio-demographic Profile of Respondents*

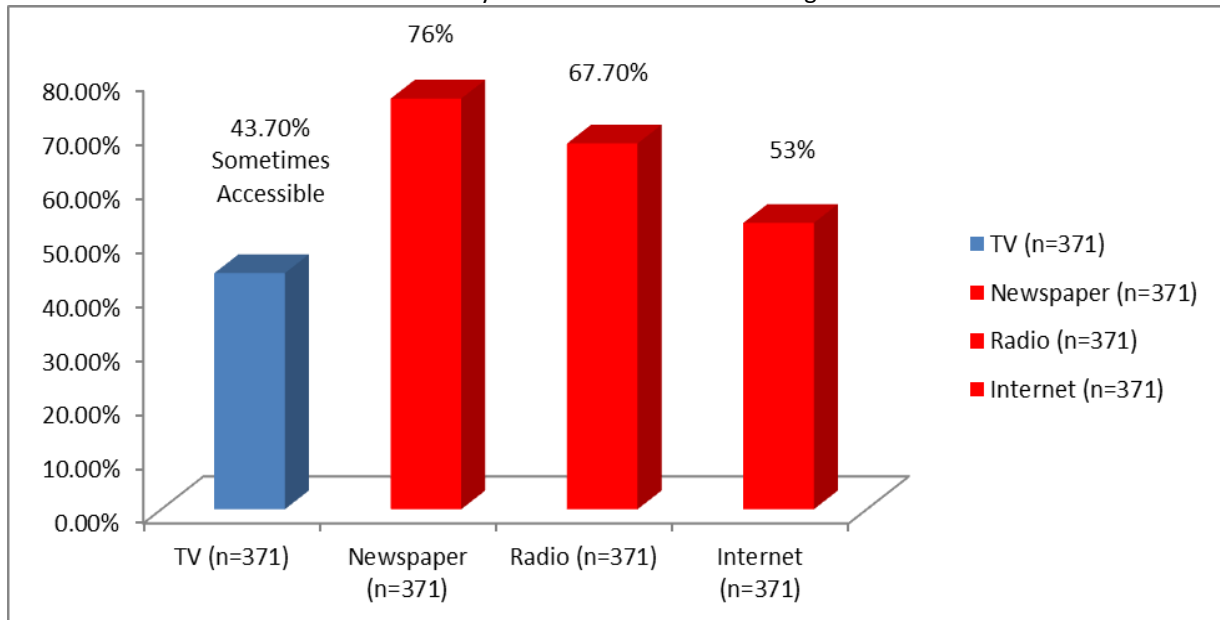
Table 3: Full details of the socio-demographic profile of respondents (N=371)

	<b>Category</b>	<b>N</b>	<b>Percentage</b>
Gender	Male	146	39.4
	Female	225	60.6
Age	< 19 yrs old	13	3.5
	20-29	52	14
	30-39	83	22.4
	40-49	101	27.2
	50-59	78	21
	> 60 yrs old	44	11.9
Level of education	Primary School	115	31
	Lower Secondary (SRP/PMR)	95	25.6
	SPM (Malaysian Cert of Educ)	95	25.6
	No Formal Education	35	9.4
	STPM (M'sian Higher Educ.Cert)	18	4.9
	Diploma	5	1.3
	University	5	1.3
	Vocational/Technical cert.	3	0.8
Income Level	< RM300	93	25.1
	RM301-399	56	15.1
	RM400-499	50	13.5
	RM500-599	57	15.4
	RM600-699	24	6.5
	>RM700	90	24.3
Religion	Muslim	136	36.7
	Christian	230	62
	No religion	4	1.1

Based on the socio-demographic profile of the respondents in the four districts, 31 percent or 115 out of 371 respondents received primary education and 35 respondents received no formal education. A total of 25 percent earning less than RM300 a month.

*b. Media Consumption Pattern Among Rural Communities in Seeking Health Information*

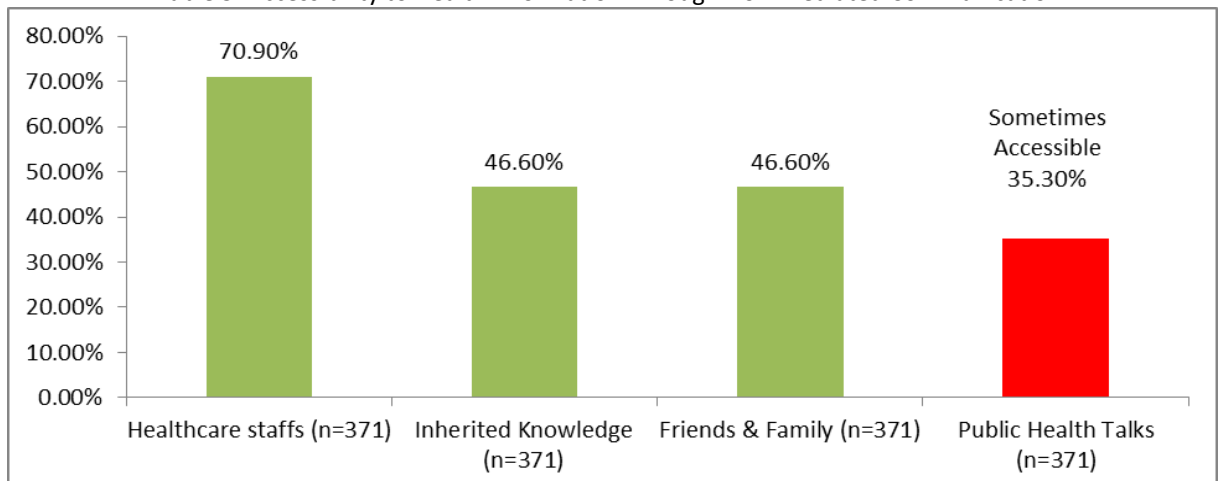
Table 4: Accessibility to Health Information Through the Media



Accessibility to health information through the media is found to range from sometimes accessible to inaccessible. In this respect, the newspaper is the most inaccessible to the respondent in terms of health information followed by radio (67.7%) and internet (53%).

Television is recorded to be sometimes accessible but the percentage is quite low. Inaccessible here means in terms of the lack of availability of health information due to the lack of consistency of the media in producing health information in the form of news and features. Thus making it, difficult for rural communities to enhance their knowledge on health through the radio, newspaper and internet.

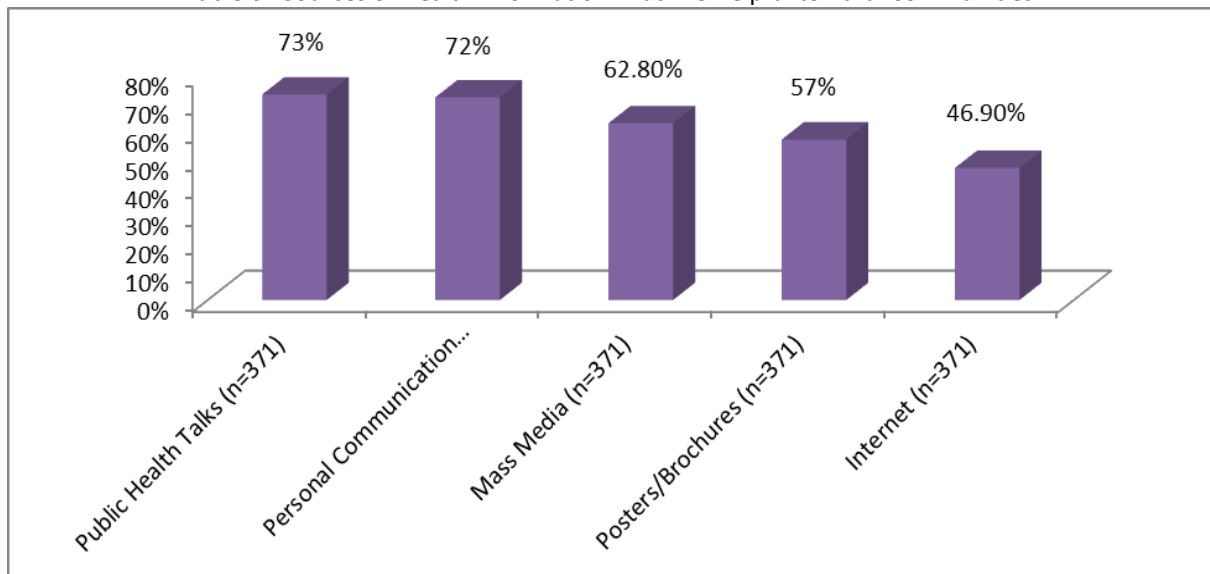
Table 5: Accessibility to Health Information Through Non-Mediated Communication





If one were to compare the accessibility of health information between mass media and non-mediated communication, it is evident that accessibility through face-to-face communication is higher. Communication with healthcare staffs through appointments and reviews mean they can get a lot of health information through doctor-patient communication. However, other forms of non-mediated communication that are informative such as public health talks are found to be irregular. A total of 35.5 percent respondents found public health talks to be sometimes accessible. Means, it is accessible only when there is a talk being organized in their village.

Table 6: Sources of Health Information That Are Helpful to Rural Communities



It appears that rural communities found face-to-face communication to be the most helpful sources of health information compare to the media particularly the internet. Public health talks are much preferred by rural respondents because it is interactive and it enables them to asked various question directly to the health authorities. A total of 73 percent of 371 respondents, find it most helpful. However, such communication is irregular.

What this means is that, rural communities are concerned about their health but the source of health information that is helpful is less accessible for them. Based on the quantitative data of rural communities' media consumption and availability pattern, it is found that rural communities all have television in their homes. A total of 320 or 86.3 percent out of 371 respondents state that they own a television compare to new media at 57.4 percent.

Findings in Table 4 points that newspaper, radio and internet were less accessible in getting health information. Only television is rated as "sometimes accessible" which means rural communities are unable to get consistent source of health information.

Accessibility refers to the availability of health information that is needed and useful to rural respondent. The only source of health information that are accessible to them are through face-to-face non-mediated communication such an appointment with healthcare staffs like the doctor, inherited knowledge that passed down from their grandmother to mother unto them. Health information on how to heal certain ailments also comes from friends and family.

Public health talks by the Health Department, while it is useful to them is sometimes accessible to them as those talks are irregular. Rural communities also found face-to-face communications to be most helpful to them in gaining knowledge about diseases, health care and prevention such as public health talks compare to the media. Their less preference for the internet as their source of health information is similar to the rural communities in Sarawak based on Rohaya et al. (2013) findings.

In other words, the media is less effective as a tool to educate the rural people about health as compare to face-to-face communication. That may explain why, their usage for the media as a source for health information is less frequent or none at all. They require communications that are interactive compare to a one-way flow of information. To gain more insights why this is so, a semi-structured interview was conducted.

### *c. Qualitative Data: Lack of Cultural-Health Capital*

Lack of cultural-health capital has been identified as the main theme that emerged in the interview data with the 42 informants. This theme derived when informants are found to be lacking of awareness and understanding about health, lack of media literacy to understand information in the media, lack of knowledge of how to use the media for information all due to lack of access to any form of health information to arm themselves with knowledge of any kind including health.

All these is stemmed from being poor where 31 percent of them received up to only standard six educations and earning RM300-400 a month. Being poor and living in an environment where there is limited economic activity and development, they have little exposure to health issues and access to informational resources about health that could educate them.

The idea for this theme derived from Bourdieu's cultural capital (1986). According to Abel (2008, p. 1), cultural capital can be defined as "people's symbolic and informational resources for action,". It also refers to one's way of carrying themselves (clothes, manners, way of communicating, values and norms) that is acquired through education and socialization process. And this differs from one to another based on their social class.

According to Bourdieu (1986, p. 47), cultural capital is convertible to economic capital and can be institutionalized such as academic qualification. The assumption is that, an individual from a higher class, will be able to have better access to greater knowledge because he is able to study up to a higher level. Unlike, those from a lower-class, who are unable to afford to study up to university, their access to knowledge will be restricted because they only studied up to elementary level.

With higher education and qualification, a person would be able to gain higher positions in the job sector compare to those with lower academic qualification. However, Bourdieu's notion of cultural capital soon found its way into to the study of health thus the concept of Cultural Health Capital (CHC) that is more patient-centred care was proposed by Shim (2010). Shim's definition of cultural health capital, refers to "as a specialized set of cultural skills, behaviours and interactional styles that are valued and leveraged as assets by both patients and providers in clinical encounters," (Dubbin et al., 2013, p. 114).

Cultural health capital as a concept, is useful because it was built to understand inequalities in health status and care. Therefore, this concept is most apt to be used as a theme, because the narratives of the rural informants' captures issues of social health inequalities. In this respect, narratives recorded by rural informants, evidently shows their lack of knowledge about self-healthcare, nutrition, health lifestyles and health maintenance

is due to their low level of education and income. More so, this situation presents major problem to them, as many confessed to not knowing how to use the internet to look for health information nor do they understand the meaning behind the messages disseminated.

So, their lack of cultural capital here also results in their lack of media literacy to understand any health information on the internet or any other media.

*i. Lack Information-Seeking Skills*

*“Saya tidak pernah cari informasi kesihatan sebab saya tidak pandai. Kalau cari di internet, saya tidak pandai,”* [I never search for health information because I don’t know how. I don’t know how to find it on the internet].

(Female Informant 1, 58 years-old Kg Tampios, Ranau)

*“Saya tidak ada TV, radio, internet sama suratkhobar. Saya tidak tahu apa-apa pasal internet. Tidak ada kawan yang tolong kasi tau apa-apa pasal kesihatan. Hanya hospital sahajalah,”* [I have no TV, radio, internet or newspaper. I do not know anything about internet. No friends to help me by telling me anything about health. Only the hospital].

(Female Informant 2, 34 years-old, Kg Tampios, Ranau)

*“Saya tidak tau channel mana yang ada ubat-ubat tu,”* [I don’t know which channel that has anything about medicine].

(Female Informant 3, 58 years-old, Kg Sarang, Kota Belud)

The three narratives above are based on an interview with informants in Kg Tampios, Ranau and Kg Sarang, Kota Belud which is 161 km and 100 km respectively from Kota Kinabalu. Villagers are mostly small-time farmer, planting palm oil and rubber. Their narratives show the consequence of being poor where it made them lack the basic skills to look for information, it made them unaware of how to use the media.

*ii. Lack Nutritional Knowledge*

Another case of lack of cultural-health capital is that, informants have no knowledge about healthy-eating habit. Without any source of information whether from the media or face-to-face communication, all rural informants that was interviewed appeared not to know that their lifestyles are the cause for their ailments. Their only source of information that they have is from the doctor when they were diagnosed with a health problem.

*“Saya punya gout ini sebab saya tidak makan sayur dan doktor ada cakap jangan selalu makan karabau (daging kerbau), ketam semua tu,”* [I got gout because I don’t eat vegetables and the doctor told me not to always eat beef, crab and all that].

(Male Informant 1, 66 years-old, Kg Taburan, Kota Belud)

*“Suami saya ada darah tinggi, jadi doktor nasihatkan jangan makan tu payau-payau (rusa),”* [My husband has high blood, so the doctor advised not to eat too much of deer].

(Female Informant, 4, 45 years-old, Kg Bahagia, Nabawan)

Most informant face health issues because of they lacked the knowledge about balanced and healthy diet. In the case male informant 1 from Kg Taburan, the geographical location of the village is rather isolated from the town of Kota Belud. The village is hilly and the people’s only source of food comes from the river down below. Likewise, the district of Nabawan is noted for its wild deer in the jungle or payau or as its locally-known. Hence, it is not uncommon to find it sold in the local market, despite it being a protect animal under the law.

### *iii. Restricted Access to Health Information*

What this subtheme means is that poor infrastructural facilities in the rural area, also mean some villages cannot be connected by internet. Poor internet access, mean, rural people do not use the new media to gain information about health.

*“Internet tidak ada akses di sini. Susah mau cari maklumat. Cuma bila sakit, baru tau dari klinik,”* [There is no internet access here. So, it’s difficult to find information. It’s only when you get sick, then you know from the clinic].

(Male Informant 2, late 40s, Kg Salarom Baharu, Nabawan)

Their source of health information only comes from the doctor whenever they or their family got sick. Usually, they adopted a life-style change after being explained by the doctor the reason behind their health problem.

*“Ceramah sangat membantu sebab kalau TV sahaja, ada rumah-rumah.. tidak ada TV jadi dorang tidak dapatlah informasi (kesihatan) tu. Kalau jabatan kesihatan buat ceramah, orang yang tidak ada TV pun boleh dapat maklumat kesihatan,”* [Health talks are very helpful because if we were to rely on television, there are homes that have no TV, so they unable to get any (health) information. If the health department can have a talk, then those with no TV, can also get health information].

(Female Informant 5, 32 years-old, Kg Salarom Taka, Nabawan)

Restricted access to health information also implies that the media themselves have fewer health programmes to offer audiences. For rural communities who are largely received little formal education, they rely on the media especially television and radio to provide health information to them.

*“TV jarang ada program pasal kesihatan. Radio...ada yang tidak tetap. Ada juga tapi bukan tiap-tiap hari. Baru-baru ni, ada pasal kanser kanak-kanak,”* [TV seldom have programmes about health. (The) radio...they do, but it’s not regular. There are but not every day. Recently, there is one, on child cancer].

(Female Informant 6, 45-years-old, Kg Bt 61, Beaufort)

## DISCUSSION

Rural communities' low rate of adequate health literacy is not of their own doing but is largely due to the poor living conditions they are in that does not provide the basic facilities that is necessary for them. Lowly educated and poor coupled by lack of basic infrastructural facilities like good roads, limited internet access resulted in them further entrenched in exclusion and deprivation of health services. These conditions, also deprived them of having access to health information. This disempowered them to make informed decision about prevention against diseases and maintenance of good health.

This study wished to point out the importance of cultural health capital as a factor with an emphasis on the living conditions where the people/patients are embedded into, in strategizing health education programme to raise the level of health literacy of the population. It is pointless to focus merely on individual's literacy skills but ignoring the question of infrastructural, social and economic development because without these, there is no way, rural communities would have the access, skill and knowledge to use health information to their advantage.

It is hoped that these findings will shed some light on the true conditions of rural communities' health literacy. The National Health and Morbidity 2015 Survey by the government found that Sabah is among those states recorded as having Level 1 - 'Limited Likely' category for health literacy, thus, it is not surprising if it covers the rural communities as well (Institute for Public Health, 2015). More importantly, it reiterates its argument that health literacy is not just about being able to have access and the cognitive skill to understand health information but the state needs to be supportive by improving infrastructural facilities and heighten its public health education programmes before rural communities can decide for themselves what is good for their health.

## CONCLUSION

Health literacy is a very crucial form of skill that everyone should possessed. Without it, one would not take steps to protect themselves and their family against diseases. Building one's capacity for health literacy is certainly a communication issue. As is proven in this study, it requires the correct and appropriate communication strategies and channels in order for rural communities to understand how to take care of themselves better. Health literacy is pointless if it is to be seen at just an individual level rather in order to empower the power, the state must endeavour to provide basic amenities in order for the people to be health literate.

## ACKNOWLEDGEMENT

This research would not have been made possible without Universiti Malaysia Sabah (UMS) support through its Skim Bidang Keutamaan Geran (SBK) with the code SBK0369-017. Author wish to thank UMS for the funding of this research project.

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## REFERENCES

- Abel, T. (2008). Cultural capital and social inequality in health. *Journal of Epidemiology and Community Health*, 62(7), 1-5.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Bourdieu, P. (1986). Forms of capital. in J. Richardson (Ed.), *Handbook of theory of research for the sociology of education* (pp. 241-258). Westport CT: Greenwood Press.
- Dodson, S., Good, S., & Osborne, R. (2015). *Health literacy toolkit. For low and middle income countries. World Health Organization Regional Office for South East Asia-Public Health Innovation Unit, Deakin University*. India: World Health Organization Regional Office for South East Asia.
- Dubbin, L. A., Chang, S. J., & Shim, J. K. (2013). Cultural health capital and the interactional dynamics of patient-centred care. *Social Science & Medicine*, 93, 113-120.
- Institute for Public Health. (2015). National health & morbidity survey 2015: Non-communicable diseases, risk factor & other health problems (Vol. II). KL: Author.
- Institute for Public Health. (2017). Malaysian burden of disease and injury study 2009-2014. Kuala Lumpur: Author.
- Jordan, J. E., Buchbinder, R., & Osborne, R. H., (2010). Conceptualising health literacy from the patient perspective. *Patient Education and Counseling*, 79(1), 36-42.
- Kementerian Kesihatan. (2012). Maksud bekalan/pembangunan 42. Retrieved on 19 July 2019, from [http://www.treasury.gov.my/pdf/bajet/maklumat\\_bajet\\_kerajaan/2012/ap2.pdf](http://www.treasury.gov.my/pdf/bajet/maklumat_bajet_kerajaan/2012/ap2.pdf)
- Kementerian Kesihatan. (2013) Maksud bekalan/pembangunan 42. Retrieved on 19 July 2019, from [http://www.treasury.gov.my/pdf/bajet/maklumat\\_bajet\\_kerajaan/2013/b42.pdf](http://www.treasury.gov.my/pdf/bajet/maklumat_bajet_kerajaan/2013/b42.pdf)
- Kementerian Kesihatan. (2014). Maksud bekalan/pembangunan 42. Retrieved on 19 July 2019, from [http://www.treasury.gov.my/pdf/bajet/maklumat\\_bajet\\_kerajaan/2014/b42.pdf](http://www.treasury.gov.my/pdf/bajet/maklumat_bajet_kerajaan/2014/b42.pdf)
- Kementerian Kesihatan. (2015). Maksud bekalan/pembangunan 42. Retrieved on 19 July 2019, from [http://www.treasury.gov.my/pdf/bajet/maklumat\\_bajet\\_kerajaan/2015/b42.pdf](http://www.treasury.gov.my/pdf/bajet/maklumat_bajet_kerajaan/2015/b42.pdf)
- Kementerian Kesihatan. (2016). Maksud bekalan/pembangunan 42. Retrieved on 19 July 2019, from [http://www.treasury.gov.my/pdf/bajet/maklumat\\_bajet\\_kerajaan/2016/b42.1.pdf](http://www.treasury.gov.my/pdf/bajet/maklumat_bajet_kerajaan/2016/b42.1.pdf)
- Kementerian Kesihatan. (2017). Maksud bekalan/pembangunan 42. Retrieved on 19 July 2019, from [http://www.treasury.gov.my/pdf/bajet/maklumat\\_bajet\\_kerajaan/2017/b42.pdf](http://www.treasury.gov.my/pdf/bajet/maklumat_bajet_kerajaan/2017/b42.pdf)
- Kementerian Kesihatan. (2018). Maksud Bekalan/pembangunan 42. Retrieved on 19 July 2019, from [http://www.treasury.gov.my/pdf/bajet/maklumat\\_bajet\\_kerajaan/2018/b42.pdf](http://www.treasury.gov.my/pdf/bajet/maklumat_bajet_kerajaan/2018/b42.pdf)
- Kickbusch, I. (2001). Health literacy: Addressing the health and education divide. *Health Promotion International*, 16(3), 289-297.
- Kickbusch, I., Wait, S., Maag, D., McGuire, P. & Banks, I. (2005). Navigating health: The role of health literacy. Retrieved on 10 August, 2019, from file:///C:/Users/UMSBEN272010/Downloads/NavigatingHealth%20(4).pdf
- Mancuso, C. A., & Rincon, M. (2006). Impact of health literacy on longitudinal asthma outcomes. *Journal of Internal Medicine*, 21, 813-817.

- Manganello, J. A. (2008). Health literacy and adolescents: A framework and agenda for future research. *Health Education Research*, 23(5), 840-847.
- Mohammad Rezal Hamzah, Emma Mohamad, & Mohd Yusof Abdullah. (2016). Pengaruh literasi kesihatan terhadap tingkah laku pencarian maklumat kesihatan dalam kalangan pelajar universiti awam. *Jurnal Komunikasi: Malaysian Journal of Communication*, 32(2), 405-424.
- Nutbeam, D. (2000). Health literacy as a public health goal: A challenge for contemporary health education and communication strategies into the 21st century. *Health Promotion International*, 15(3), 259-267.
- Nutbeam, D. (1998). Health promotion glossary. *Health Promotion International*, 13(4), 349-369.
- Paasche-Orow, M. K., & Wolf, M. S. (2007). The causal pathways linking health literacy to health outcomes. *American Journal of Health Behaviour*, 31(1), 819-826.
- Rohaya Mohd-Nor, Teddy Edwin Chapun, & Constance Rinen Justine Wah. (2013). Malaysian rural community as consumer of health information and their use of ICT. *Jurnal Komunikasi: Malaysian Journal of Communication*, 29(1), 1-27.
- Shim, J. K. (2010). Cultural health capital: A theoretical approach to understanding health care interactions and the dynamics of unequal treatment. *Journal of Health and Social Behavior*, 51(1), 1-15.
- Speros, C. (2005). Health literacy: Concept analysis. *Journal of Advanced Nursing*, 50(6), 633-640.
- Unit Perancangan Dasar dan Pelan Kesihatan. (2016). *Pelan strategik KKM 2016-2020*. Putrajaya: Bahagian Perancangan Kementerian Kesihatan.
- White, S., Chen, J., & Atchison, R. (2008). Relationship of preventive health practices and health literacy: A national study. *American Journal of Health Behavior*, 32(3), 227-242.
- Zarcadoolas, C., Pleasant, A., & Greer, D. S. (2005). Understanding health literacy: An expanded model. *Health Promotion International*, 20(2), 195-203.