
Sexual Health Communication among Youth: A Study of Knowledge and Attitude

SUFFIAN HADI AYUB
Sunway University, Malaysia

MOHAMMAD REZAL HAMZAH
University Malaysia Perlis

SHARIPAH NUR MURSALINA SYED AZMY
WAN ABDUL HAYYI WAN OMAR
NOR HAFIZAH ABDULLAH
ZANIRAH WAHAB
HISHAMUDDIN SALIM
Universiti Sultan Zainal Abidin

ABSTRACT

Sexual health communication is currently one of the most discussed topic in Malaysia as the country witnessed the surge of sexual related crime and social problem among youths. In relation to this, youths' knowledge and attitude are the important factor that contribute to this delinquent behaviour and must be addressed as it will shape the youths in the future. The paper discussed the correlation between knowledge and attitude concerning youths in obtaining information on sexual related materials. The research primarily focuses on youths in Malaysia which made up 40% of Malaysia population. The study is significant as it provides a thorough picture how knowledge and attitude influence youths communicate the sexual health topic which is deemed as taboo in Malaysia. The study involved 853 respondents from various demographic group in Malaysia and self-administered questionnaires were distributed and analysed using SPSS to address the research objectives. The result indicated there are significant relationships between knowledge and attitude among youths toward sexual health communication practice. Results showed that 55.1 percent of the studied factors contributed to sexual health communication model among Malaysian youths. Moreover, knowledge and attitude are very critical for the youths to have a better comprehension on sexual health communication. This further testified that Malaysia government and various stakeholders need to acknowledge the importance of sexual health communication and how knowledge and attitude shape positive youth's development which ultimately contribute to nation building.

Keywords: *sexual health communication, youths, knowledge, attitude, Malaysia.*

INTRODUCTION

The National Youth Development Policy of Malaysia defines youth as people aged between 15 and 40 years. It stipulates further that the main focus of youth development programmes and activities in the country should be young people aged 18 to 25 years (MOYS, 1997). Youth constitute half of the Malaysian population (D'Silva et al., 2010). Statistics from Department of Statistical Malaysia shows that in 2008, from 27.7 million people in Malaysia, 11.26 million people (40.6%) is from youth group. Meanwhile, it is expected that in 2012, the number of youth in Malaysia will be increased to 11.65 million (40.2%). Youth represent a significant group in a society. Youth characteristics within society is able to either give hope

or despair to the country. In the current era, most of the issues and social problems happened in Malaysia involved the youth (Dzulhaimi et al., 2012). It is in this notion that most countries invest in planning and implementing various programmes to educate and propel youth to greater heights so the stake of the country remains stable and secure. Since youth is considered as the future of the country, the emphasis on how this population seek information must be addressed as it furnishes the way think and ultimately how they behave.

Delgado (2002) stated that positive youth development aims to identify youth needs and cultivate relevant competency towards producing successful adult generation. Taking for this cue, it is significant that youths have the right knowledge and attitude to ensure check and balance between mental and physical attributes. Mohammad Rezal (2016) stated that a healthy youth is defined by examining his or her ideal physical, mental, social and free from illnesses. This can be achieved when youths are able to align their knowledge and translate into attitude which could potentially alter their lifestyle. Che Su (2012) stated that the process to search for information must be systematic to ensure accuracy and reliability. Health information seeking is motivated by the need to understand which involve individual's perception on the lack of information towards certain issues. This can be achieved when youths are able to align their knowledge and translate into attitude which could potentially alter their lifestyle.

When discussing about health related information, it is crucial for youths to have better grasps of the type of information they search on as this will shape how they perceive and act towards the particular issues encompassing the subject matters. Exponential growth of access to health information offers, 'seemingly endless opportunities to inform, teach, and connect professionals and patients alike' (Silberg et al., 1997). Niederdeppe (2007) further explained that the health relation information seeking is specific type of activity and its purpose is to solely to obtain knowledge on health. These two reasons will result in the users to resort in using various complex sources which will be used to assist in remedy processes to the illnesses, diagnoses as well as preventive measures to curb it from becoming more serious (Beaudoin & Hong, 2011). The relationship between health information seeking and health knowledge and lifestyle is also highly significant (Ramanadhan & Viswanath, 2006). Mayer et al. (2007) stated that information seeking too provided a social support through the sharing of experiences with other people. Notwithstanding youths, the importance to fully understand the health related information also apply to all demographics groups. Any mishap in obtaining the correct information could severely affect the quality of life a person is leading especially for a sick person who require medical attention.

According to Keys et al. (2008) in their study on sexual health information for young people in Australia found that information pertaining to health is available through sources such as friends, family, health professionals, government, and mass media campaigns that have employed television, radio, posters, newspapers and magazines, websites, short message service (SMS), wallet cards, pamphlets, posters, billboards, and the like. Young people in Australia also prefer to access sexual health information through the media, even though they express a lower level of trust in this source.

A study conducted by Percheski & Hargittai in the United State of America revealed that youths have drastically change the way they search for information where they are more inclined to use digital media in searching for information. The study further attested

even though youths are less likely to contract serious illnesses or diseases, the type of health related information that this group seek were more related to drug usage, sexually transmitted diseases (STD), and unplanned pregnancy. With the advent of technology, searching for information has becoming easier and encourage youths search online for health related information for personal usage, solving health issues and to satisfy cognitive needs.

Sexual health Communication

According to World Health Organisation (WHO) (2015), sexual health can be defined as a fundamental to the physical and emotional health and well-being of individuals, couples and families, as well as communities and countries. Adolescents or youths have been closely associated with STD and the preventive action to address it has been often debated whenever sexual health communication is discussed. One of the option that is highly recommended to this group is the use of condoms to avoid contracting STD especially for non-married individuals. Consistent condom use among sexually active adolescents and young adults is of paramount importance for sexual health. Condoms are the most effective method to prevent sexually transmitted infections (STIs) and HIV for sexually active youth, and condoms can also prevent unwanted pregnancy (Centers for Disease Control and Prevention [CDC], 2010; Holmes, Levine & Weaver, 2004). Theories pertaining to youths and their perceived knowledge and attitude towards sexual health communication have been widely discussed in behavioural theories related to health. These theories further put forward the condom use behaviour among youths.

According to Fisher & Fisher (1992), historically, condom use has pushed the limits of behavioural theories because, unlike most health behaviours that are enacted by individuals, condom use requires the cooperation of two people. In some cases, new theories have been developed that include a dyadic communication component, such as the Information-Motivation-Behavioural Skills Model. This model suggests that perception and action with regards to sexual communication skills are the important behavioural skills in the usage of condom itself. Nevertheless, other theories, such as the Reasoned Action Model (Fishbein & Ajzen, 2009) and Social Cognitive Theory (SCT) (Bandura, 1999), have been expanded to incorporate the role of sexual communication as an intervening variable that can account for the roles of other, more distal predictors of condom use, such as condom attitudes and intentions (Bryan, Fisher & Fisher, 2002; Widman, Golin & Noar, 2013; Zimmerman et al., 2007).

Dutta-Bergman (2004) and Garcia-Cosvalente et al. (2010) stated some of the medium that were frequently used in seeking for health related information would be interpersonal communication, print media, and the Internet. These channels inferred the availability and the abundant of readily accessible information pertaining to health but most importantly, it ties back to which demographics frequencies of using such medium. Subsequently, the Internet users made up of people from various demographics; individuals or organisations. Its users comprise young children to senior citizens and in this modern society it made all the differences when the social media began to latch on the Internet where it offered different perspectives on how the Internet connect people. Carr & Hayes, (2015) defined Social media as Internet based and persistent channels of mass personal communication facilitating perceptions of interactions among users, deriving value primarily from user-generated content.

Duggan & Smith (2014) also stated that online social media have grown exponentially over the last years. This positive trends clearly showed the rising needs and demand of the information as social media dominate the cyberspace. Boyd & Ellison, (2008) further added SNSs are a form of virtual community, with sites such as Bebo, Facebook and MySpace attracting millions of users worldwide, many of whom have integrated the uses of these sites into their daily routines. These sites are based on the premise of relationship creation and maintenance, either with existing members of a social circle or connecting people with similar or shared interests. One of the defining factor that makes social media appeals among users is its interactivity function that allow users to become active users as well as contributors. The user generated content that social media has also opens up many other possibilities for its users to actively converse in virtual manner without the need to engage in face to face transaction. Prestin & Chou (2014) further added that on online social media platforms, audiences become active participants. Audience members can respond to others' comments and questions in a horizontal manner. They can also pose questions and offer feedback to health campaigners in a bottom-up manner (Chung, 2015).

A study by Keys et al. (2008), Pitts et al. (2003), and Sorenson & Brown (2007) on young people's pattern in seeking health information in Australia revealed that it is usually post facto—after already engaging in risky sexual behaviour. Although geographically separated, the sexual cultures of these young people could remain the same as in Malaysia settings. Studies by Carmody (2009), Ito et al. (2009), Lenhart & Madden (2007), Livingstone (2008), Pascoe (2011), and Pitts et al. (2003) were added that the attributes such as peer pressure, conflicting parental messages, and the power of broader cultural messages would shape their expectation of sexual health and this eventually merge with the pre-existing sexual culture that they have been exposed such as pleasure, stigma, behaviours and ethics). All of these internal and external factors would eventually form how young people perceive the importance of health communication and their decision to act on it or otherwise. The studies on young people in Australia provide useful information on how to manage the information that tackle sexual health communication and how to disseminate it to young people. Notwithstanding Australia, the aim to provide a healthy growth and development of young people has been the focal point everywhere for this group is the future of the world and there is a need to provide an outlet for young people to healthily express the curiosity pertaining to sexual health.

According to Shtarkshall et al. (2007) stated that one of the means to enhance young people's healthy development is through positive sexual socialization and communication. Although parents generally acknowledge the importance of reproductive and sexual health, communication to promote it for healthy adolescent development remains sensitive, and sometimes controversial. The study clearly indicated that it is paramount to cater this need no matter how difficult or taboo it could be. Failure to provide would make young people seeking the wrong information on sexual health and the consequences could be disastrous as no guidance are given to this group. Although a lot of studies have been conducted revolving young people and sexual health communication, the literature concerning it remains scarce due to no systematic revision which is very crucial in providing definition and measurement pertaining to the level of knowledge on sexual health communication among young people at the tertiary level. As a consequence of this, health care providers and other stakeholders will be facing a challenge to work with this population and further comprehend their variation and range of their sexual health knowledge thus difficulty in preparing the

best practices and tools to involve them. The study (on impact of sexual health course on Malaysian University students) found a significant improvement in sexual knowledge and attitudes towards sexual myths and autoeroticism. It appears that taking this sexual health course does have an impact on one's sexual knowledge and attitudes. Elsewhere, sexual education program in schools have generally had positive effects on one's knowledge (Low, 2004).

METHOD

This study is based on quantitative approach which is used self-administered questionnaire for data collection. A total of 853 university students from peninsular Malaysia were involved in this study consisting of Eastern Malaysia and Klang valley.

The measurement of variables (attitude and knowledge) were developed based on literature reviews. Attitude was measured by eight statements; "sex is something repulsive", "sometimes I like to think about sex", 'I quickly noticed if any man / woman tried to lure me', 'I believe, when I expressed my feelings to the man / woman it is a healthy sexual activity' I feel happy when people say I'm sexy', 'I believe that masturbation is not wrong because there are physicians / religious expert that believes it is a healthy practice and allowed', 'I feel inferior if I do not have a boyfriend /girlfriend', 'Sometimes I feel good when talking about sex'. There were ten statements that measured element of knowledge based on five-point Likert scale which 1 meant "strongly disagree" and 5 meant "strongly agree. The ten statement are 'It's okay involved with sex as a teenager because it can repent when older', 'I understand the process of sexual intercourse', 'I know about oestrogen related to sex', 'it is considered an offence when someone involved with sexual misconduct without marriage', 'In my opinion, teenagers are not able to think wisely about sex', 'Sex education makes me more informed about sex', 'The process of maturation of the body make me intend to have sex', 'I know about safe sex', 'To me, everything related to sex is something normal' and 'Sex is a necessity in human life'.

Meanwhile, sexual health communication was measured through twelve statements such as 'Talk about sex more exciting than anything else', 'Merely seeking information about sex is not a big mistake in life', 'Sex should be discussed everyday', 'I cannot refrain from talking about sex', 'Knowledge about sex, I learned through friends', 'prohibition of talking about sex doesn't no impact on me', 'Information about sex is readily available', 'I usually do discuss about sex with friends', 'I am more comfortable talking to friends about sex', 'Discussion about sexual health is useful for life as human being', 'discussion about sexual health is a healthy activity' and 'talk about sexual health will provide answers related to sex issues/matters.

In term of reliability of the instrument, present study shows that the items measured obtained a very good reliability value Alpha Cronbach (sexual health communication = 0.912, attitude=0.880 and knowledge =0.887) and this further attested to the significance of the study and strength of the instruments used.

For analysis of the data, researchers used structural equation model (Structural Equation Modelling) to determine the influence of attitudes and knowledge on sexual health communication among respondents (look at Figure 1). For this purpose, confirmation factor analysis (CFA) (second order) was carried out to determine how fit the model established in accordance with the survey data. Through this process, some items had to be removed to meet the needs of goodness of fit model. The final items used for measurement of variables

were 9 items consist of attitude (5 items) and knowledge (4 items). Nevertheless, it is significant to highlight that the items that were removed did not contribute to the overall attainment of the research and also did not produce any impact upon removal.

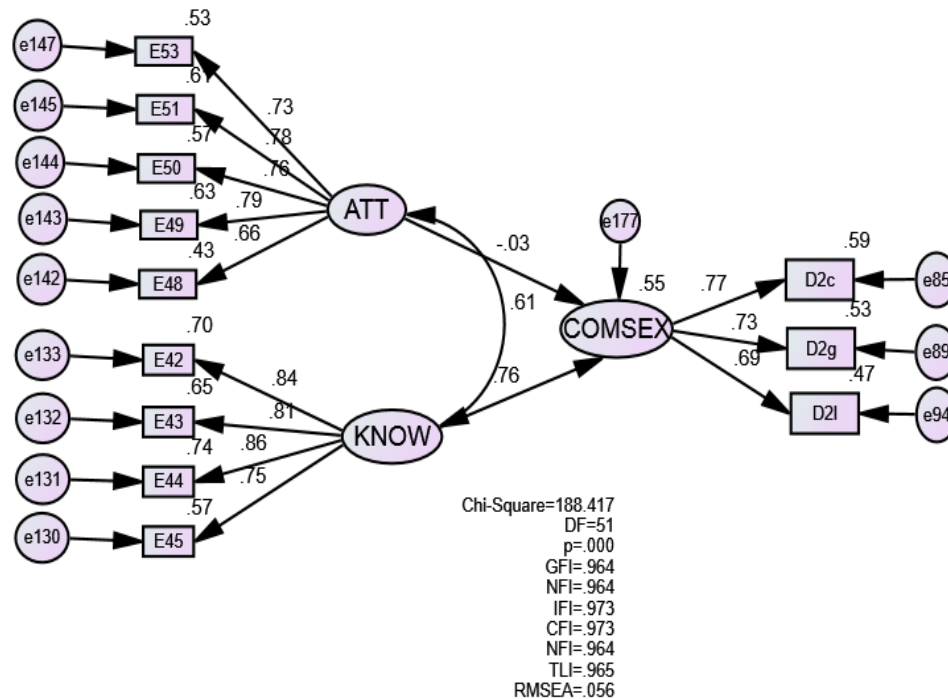


Figure 1: Structural Equation Modeling using SPSS AMOS

The goodness of fit indices determine how well a priori model fits the sample data (McDonald and Ho, 2002) and demonstrates which proposed model has the most superior fit. Present study showed that the data compliance with the goodness of fit indices as follow $\chi^2= 188.417$. $p = .000$, $\chi^2/df = 3.694$, $CFI = 0.973$, $IFI = 0.973$, $TLI= 0.965$, and $RMSEA = 0.056$.

FINDINGS

The study was conducted among university students in two selected zones in Malaysia (east and west). Table 1 shows the overall respondents were female (52.9%) while the remaining 47.1 percent were male students and further deduce the good ratio among gender. The average age of respondents is 20.5 (years) and this clearly indicates that the respondents fell into youth category. On the section of race, the majority of the respondents are Malay and followed by Chinese (8.6%), Indian (3.8%) and others (2.0%). Since Malay makes up the majority of the respondents, therefore when it comes to religion, 86.3% of the respondents are Muslim with small percentage of respondents comprise of Buddha (7.4%), Hindu (3.3%) and finally Christian represented with 3%.

Table 1: Profile Demographic

Item	%
Gender	
Male	47.1
female	52.9
Age (mean)	20.5

Race	
Malay	85.6
Chinese	8.6
Indian	3.8
lain-lain	2.0
Religion	
Muslim	86.3
Buddha	7.4
Hindu	3.3
Christian	3

Table 2 shows the path analysis mapped using the structural equation modelling (SEM). The results showed that there was no significant relationship between attitudes to sexual health communication. While the relationship between knowledge and sexual health communication showed a significant relationship and contribute to the model of present study. Overall, this model shows that this relationship accounted for 55.1 percent of variance of the model. Knowledge is a key predictor of which have contributed to changes of variants in sexual health communication model. It explains that when knowledge has changed in the standard deviation units, it will adversely affect the sexual health communication with changes to 0.763 units or 76.3 percent of the variance.

Table 2: Path analysis

Path Analysis	Estimate	Standardized			
		Regression Weights: Estimate	S.E.	C.R.	P
COMSEX <--- ATT	-0.032	-0.036	.042	-.755	0.450
COMSEX <--- KNOW	0.675	0.763	.051	13.295	0.000

Note: COMSEX = sexual Health Communication, ATT = Attitude, KNOW= Knowledge

DISCUSSIONS

The study of the health information seeking in Malaysia is still minimal. From empirical analysis perspective, there has not been much study on various issues arising in the context of health information seeking. Scholars mentioned that although there are no significant differences pertaining to information seeking in a different context in health, it however must be noted that the issues inherent in the health context is different. This is due to the various subject of analysis such as type of disease, the environment, and psychology, culture and health status (Mohammed Rezal et al., 2015). Househ (2014) revealed that there is an empirical need to further study on the usage of social media in the information seeking behaviour context with the inclusion of issues such as type of information, the quality of the information, and the reliability of the information in the users' health context.

Further to this, when discussing the relationships between knowledge and attitude towards sexual health communication among youths in Malaysia, the findings indicated there is a need for relevant parties to investigate further onto these two correlations. Wilson (2000) stated that the attitude in seeking information is an ongoing process that involve a person to search for information through numerous reliable source. While knowledge does contribute to fulfilment of cognitive behaviour; for youths in Malaysia, it failed to address how this group perceive and later behave from their understanding of the gained

knowledge. The attitude that youths have though largely contributed to other facts such as socio-economy, personality, culture and subcultures could be used to manoeuvre future research by bridging and considering these aspects.

Increased consumer participation in interactive health communication is likely to influence the health care system due to its information dissemination, health promotion, social support and health services functions (Robinson et al., 1998). It is empirical that various stakeholders explore the abundant type of media that are available in today's society to ensure maximum exposure in breadth of knowledge while at the same time increase the possibility of the change to the desired attitude. Evidently, in order to gauge youth's involvement and participation, the Internet and social media must be fully utilised. Moreover, social media is also a tool that could be used for health intervention (Shaw et al., 2011; Househ, 2014). Maher et al. (2014) and Barrera et al. (2002) further added that health intervention through social media could be done with the creation of specific groups and this could be seen through Facebook. According to Egan (2012), a lot of users especially youths resorted to using social media as a tool to motivate them in achieving health goals such as quit smoking, lowering the high blood pressure or cholesterol, losing weight or even to begin with fitness regime. The health related campaign via the social media often targeting youths in particular, because this group spend more time online. This further illustrates the importance of the Internet to the authorities in reaching out to its intended/targeted public (Suffian et al., 2017).

Nevertheless, all of the accessibility and abundant of information online would not be useful if youths fail to adhere to the advice and correct information from the authority. There is still need for relevant party to seek expert opinion and meet up in person such as medical expert especially when there are flight risks of casualty. Rezal (2016) stated that patient with chronic diseases would be seeking additional information after consulting with the doctor and this is a mean for the patient to manage his or her conditions. Thackeray et al. (2013) also stated that the issue of online information is seen as secondary due to the fact that health information in social media generally relies on the needs of certain groups or community and it may or may not be applicable to another group or community although both group are having the same health issue.

Moreover, the accessibility, validity and usefulness of health related information also rely very heavily on how the youths receive such messages through social media. The acceptance of this information is crucial if the aim is to make changes in the targeted group's life. A number of studies in health communication have established measures of "receptivity" to public service advertising (PSA) that capture audiences' subjective appraisals of message persuasiveness, believability, and other aspects of cognitive processing (Dillard et al., 2007; Bruner, 1998). Evans et al. (2011) further added that these measures are often used as proxies of potential ad effectiveness as they have been shown to predict changes in attitudes towards the social issues and subject matter of PSAs these messages were developed for. Such measures can be used to assess effectiveness of campaign messages during development and prior to implementation. Although the study mainly focused on PSAs, the methods it employs could be adopted when strategizing the social media outreach. This further cemented the notion that behavioural changes and cognitive elements have significant relationships where such change in attitude and behaviour must be cognitively sound and just. Evans et al. (2011) noted in their findings that message receptivity was most frequently associated with short term and long-term expectations regarding the

effectiveness of sexual communication in influencing children to wait before having sex, and one advertisement tested in our study, the Gadget ad, was found by far to be the most positively associated with message receptivity.

To put the context into perspective, social learning theory posit that adolescents learn both by direct experience and by observation (Bandura, 1977, 1986). Previous work has indicated that observation of peers is a major source of influence on adolescent health attitudes, intentions, and behaviours (Keefe, 1994; Wood et al., 2004). The social learning theory strategically highlight the relationships between users and the environment they are surrounded with. Although social media is relatively new, Bandura's theory aptly described how youths (adolescents) encapsulate this tool to fulfil their cognitive needs especially when the theory stated that people learn through observing others' behaviour, attitudes and outcomes of those behaviour. While there is very little physical interaction when communicating via the social media, the impact it gives amid virtual connection is sparingly significant. The influence that the social media offer help its audience to evidently meet the four condition in modelling the social learning theory framework; attention, retention, reproduction, and motivation. In the attentional processes, social media would not be beneficial if the users fail to learn through observation when such information are not attended to or recognise its existence. This is the essential part of the model's behaviour. Retention processes on the other hand postulate that one cannot be influenced if they could not remember the message that they have been exposed to. In the realm of social media, the message exposure could be massive due to its ability to make any information viral which means that an individual could be exposed to the same message numerous times from one social media platform to another. The third model's behaviour is observational learning that highlights on two representation systems – an imaginal and a verbal one. During exposure, modelling stimuli produce, through a process of sensory conditioning, relatively enduring, retrievable images, and modelled sequences of behaviour (Bandura, 1977). The final model's behaviour is the motivational process where it dictates that an individual will be able to acquire, retain and even possess the skills in executing the modelled behaviour provided the positive incentives are clearly offered which could translate into action (modification of behaviour to certain extent).

Social learning theory also proposes that any behavioural action is a product of learning and the process may take up more than one channel. From the learning experience, individual will make sense to his or her existence before taking step to change behaviour which may or may not suit the expectation of society but most suitable to the person's personality. Bandura (1977) further added most of the behaviours that people display are learned, either deliberately or inadvertently, through the influence of example. It is from this notion that social media aid in the propagation of health related issue to the youth although the modification of behaviours would only be materialised over time.

Based on social learning theory and youth's acceptance to information provided in the social media, health communication is becoming more relevant to this demographic group as and when needed especially through information seeking behaviour that result in the creation of awareness; the initial step in the modification of behaviour – from unhealthy lifestyle to a more rewarding way of life. The issues of needs and wants that have been so elusively tackle by relevant stakeholders are also addressed in this theory through the last step which highlights on the motivational process. Wakefield et al. (2010) stressed that the great promise of mass media campaigns lies in their ability to disseminate well defined

behaviourally focused messages to large audiences repeatedly, over time, in an incidental manner, and at a low cost per head. Behaviour change might also be achieved through indirect routes. First, mass media messages can set an agenda for and increase the frequency, depth, or both, of interpersonal discussion about a health issue within an individual's social network, which, in combination with individual exposure to messages, might reinforce (or undermine) specific changes in behaviour. Second, since mass media messages reach large audiences, changes in behaviour that become norms within an individual's social network might influence that person's decisions without them having been directly exposed to or initially persuaded by the campaign (Wakefield et al., 2010).

When addressing the youth in the millennium, the relevant stakeholders must swiftly understand this group's characteristics and behaviour in order to ensure the relevancy of the information that they are going to disseminate. The born digital millennia require different approach and the stakeholders must have a concerted effort to equip themselves the know-how tools. Allison et al. (2012) stated that the phrase "new media" is not a misnomer; instead, it accurately reflects the fact that not only has there been a revolution in access and engagement with media but also a constant evolution or "newness." What is hot and current in 2012 is likely to be either passé or revised in 2013. The pace of this constant evolution presents unique issues throughout the research process for those seeking to develop relevant evidence-based HIV prevention and other sexual health interventions for youth.

To conclude, the advent of social media has changed the landscape of health communication and its approach in sending the right messages to youth. Statistics from many sources has clearly shown the rapid increase in the social media usages at par with other mass communication tools. A study by Bigresearch (2017) revealed that people today are using the media more than ever, and they are multitasking during the process. While watching television, 74% of American adults are also reading the newspaper and 66% are going on-line. As a matter of fact, Bolton et al. (2013) noted that Generation Y actively contributes, shares, searches for and consumes content – plus works and plays – on social media platforms. They are the first generation to have spent their entire lives in the digital environment; information technology profoundly affects how they live and work (Bennett et al., 2008; Wesner & Miller, 2008). Slater (1995) also stated that media messages about nutrition are bountiful in number, sometimes dull, and often confusing. They are also constantly fighting for attention with other information. Nutrition and health communicators who know how to target their audiences with messages that speak personally to those groups will have a significantly improved chance of making a difference in the health of our country. The determining factor in ensuring the success of health messages through any mass media comes in two-fold; the sender and recipients of the messages. The message design must at all time consider the recipients of the messages and this include youth's cognitive and behaviour, their information seeking behaviour as well as the availability and accessibility for social media to reach out to this population. The sender or the stakeholders on the other end, should equip themselves with the appropriate skills in tapping to youths' needs and wants. They must be able to skilfully pull youths to retrieve health related information from their social media sites to avoid confusion and misinformation due to the abundant of unverified health related information in the social media sites such as *Facebook*, *Twitter*, *Instagram* and *YouTube*. One of the skill that these stakeholders must master is audience analysis and enhance their skills in communication audit and research especially when targeting the millennials. Wilson (2007) aptly stated if

communication research can help at all, it is in the arena of audience analysis. Nutrition educators must clearly define and become knowledgeable about the target audiences—their motivations, background knowledge, cognitive capabilities, values, and even their media habits. The more audience research that can be done, the more effective the communication will be.

BIODATA

Suffian Hadi Ayub is a lecturer at the School of Art, Sunway University. He is currently pursuing PhD in Health communication at UiTM. Email: suffianay@sunway.edu.my

Mohammad Rezal Hamzah is a senior lecturer at the School of Human Development and Technocommunication, Universiti Malaysia Perlis. Email: rezal@unimap.edu.my

Sharipah Nur Mursalina Syed Azmy is lecturer at the Faculty of Modern languages and Communication, Universiti Sultan Zainal Abidin. Email: mursalina0211@gmail.com

Wan Abdul Hayyi Wan Omar is lecturer at the Faculty of Modern languages and Communication, Universiti Sultan Zainal Abidin. Email: assyubainy.w.a.hayyi@gmail.com

Nor Hafizah Abdullah is lecturer at the Faculty of Modern languages and Communication, Universiti Sultan Zainal Abidin. Email: hafizah781@gmail.com

Zanirah Wahab is lecturer at the Faculty of Modern languages and Communication, Universiti Sultan Zainal Abidin. Email: zanirah.wahab@unisza.edu.my

Hishamuddin Salim is lecturer at the Faculty of Modern languages and Communication, Universiti Sultan Zainal Abidin. Currently, the UniSZA's lecturers have been appointed as a researcher for RAGS grants sponsored by MOHE. Email: hisham2020@gmail.com

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