

## INFORMATION-SEEKING BEHAVIOUR ON SEXUAL AND REPRODUCTIVE HEALTH AMONG RURAL ADOLESCENTS IN SARAWAK, MALAYSIA

Albeny Joslyn Panting<sup>1\*</sup>, Haslinda Abdullah<sup>2</sup>, Ismi Ariff Ismail<sup>3</sup>,  
Samsilah Roslan.<sup>3</sup>

<sup>1</sup> Institute for Health Behavioral Research, Ministry of Health, Malaysia.

<sup>2</sup> Faculty of Human Ecology, University Putra Malaysia

<sup>3</sup> Faculty of Educational Studies, University Putra Malaysia

*\*Corresponding author: Albeny Joslyn Panting, Institute For Health Behavioural Research, Ministry of Health Malaysia, Jalan Rumah Sakit Bangsar, 50590 Kuala Lumpur. kongsi007@gmail.com*

### ABSTRACT

**Background:** Information-seeking behavior is among one of an important element in sexual and reproductive health. However, there are limited studies which gives emphasis on rural adolescents in Sarawak regarding information-seeking behaviour on sexual and reproductive health. Thus, the purpose of this study is to identify sexual and reproductive health information-seeking behaviour among rural adolescents in Sarawak.

**Materials and Methods:** Cross-sectional study was conducted involving 3 rural districts in Sarawak namely Padawan (Kuching), Kanowit (Sibu) and Suai-Niah (Miri). This study utilized multi-stage sampling frameworks and was conducted from August to November 2016. Structured questionnaire in Malay language with constructs on information-seeking were modified from Cleland, Ingham and Stone (2005). Pilot study was conducted in Samarahan, Sarawak with Cronbach alpha value 0.81. The overall response rate in this study was 95% (N = 1086) and sample size for rural respondents was n=259. The data were then analyzed using SPSS version 21.

**Result:** Result indicated that respondents obtained sexual and reproductive health information through three main sources; internet (mean = 1.12; sd = 1.44 ), peers (mean = 1.05 , sd = 1.35), and electronic media (mean = 1.01; sd = 1.35). While the level of confidence in using the various sources of sexual and reproductive health information, were health personnel (mean = 1.37; sd = 1.65), parents (mean = 1.23; sd = 1.52), internet (mean = 1.22 ; sd = 1.50).

**Conclusion:** These findings suggested the need to utilize the strengths of these information sources regarding SRH information-seeking behaviour in developing an effective health education strategies for adolescents in Sarawak.

**Keywords:** Information-seeking, adolescent, sexual health, rural, sarawak

## 1.0 Introduction

Adolescence is a critical life phase in which individuals must have the opportunity to develop the capabilities required for realizing their full potential and achieving a healthy and fulfilling life (Ki-Moon, 2016). Sexual activity during adolescence is generally unsafe and the negative outcome associated with premarital sex includes unwanted teenage pregnancy, illegal abortions, baby dumping, sexually transmitted infections (STI's), teenage prostitution, substance abuse, HIV/AIDS, and cybersex (MOH, 2007). This is because early stage of adolescence is where they are easily influenced and the negative consequences involved health, social, and economic impact to country (MOH, 2010).

Furthermore, sexual and reproductive health (SRH) input is an important element in fulfilling adolescent health needs. Sexual and reproductive health refers to physical, mental and social wellbeing associated with one's sexuality, needs and a positive approach and respect for sexual relations, the ability to understand and consider risks and responsibilities and be safe, free from coercion and discrimination (WHO, 2012). Therefore, information-seeking behavior is one of the important aspects in SRH which refers to any actions that aims to seek information in various ways as well as from different reliable sources (Wilson, 1999). Thus, reliable information on SRH is needed as part of cognitive element in promoting healthy behaviour among adolescents.

Despite past studies on information-seeking behaviour regarding sexual and reproductive health among Malaysian adolescents (Awaluddin et. al., 2015; Khamrani et. al.,; NPFDB, 2014 & Rahim & Herman 1996), there are limited studies focused on rural adolescents in Sarawak. Indeed, adolescents need to have the right information and awareness about SRH that could guide them in making responsible judgments about their sexual behaviors. In this context, the search for SRH information is one of the main strategies to increase knowledge and awareness on SRH (Rahim & Pawanteh, 2002). Apart from that, this strategy could improve their decision-making skills in dealing with risks that are in line with their psychosocial development in making rational choices about what is good for themselves (Blum et al., 2012). Therefore, the purpose of this study is to identify SRH information-seeking behaviour among rural adolescents in Sarawak. This study focused on two aspects; to identify various sources of information on SRH and to identify the level of confidence in using the various sources of information regarding SRH.

Theoretical approaches regarding information-seeking behavior as suggested by Dervin (1992) in his Sensory Theory proposed that if a person intend to search for information, he will do so when he feels that there is a need between the existing information and the situation they encounters and when he feels he need that information, thus will trigger him to seek that particular information. In another perspective, different sources of information will disseminate different types of information regarding SRH and the varieties in the sources may influence adolescents views and sexual behaviors (Bleakley, et al., 2009). Thus, good knowledge and awareness on SRH is based on information and facts as well as acquired through experiences, socialization and education; which are needed to foster healthy lifestyle and skills in shaping healthy personal adolescents and their behaviors in the context of SRH (MOH, 2007).

According to Rahim and Herman (1996), SRH information source refers to how frequent someone obtained, received and used information from various sources and channels.

Previous study in other countries indicated that among unmarried adolescents in Changchun City, China aged 15 to 19 years old regarding information-seeking on sexually transmitted infections (STI's) and HIV/AIDS found that most adolescents who are not sexually active choose school teachers and parents while sexually active adolescents choose their peers (Zhang et al., 2007). Similar study also showed that sources of knowledge on certain SRH topics varies according to the sensitivity and taboos associated with the Chinese culture in which information with less sensitive were obtained from the teacher while topics that are considered sensitive (for example sexuality and STI's and HIV/AIDS) is obtained from the mass-media.

Study also showed that religious factors influenced the decision to choose the source of information regarding SRH. A cross-sectional study by Coleman (2007) conducted in London, UK to identify who is the best person in delivering information about SRH involving a sample of 3,007 students aged 15-18 years old revealed that among Hindu respondents; higher preference towards someone of similar age and least preference towards someone of same religion as compared to Muslim respondents which have higher preference towards someone with same religion and cultural beliefs.

While in Malaysia, studies related to SRH information-seeking among adolescents showed that friends and parents are among the main sources of information. A survey conducted by the National Review on Reproductive Health and Teen Sexuality (WHO, 2007); found that adolescents communicate with mothers, teachers and friends about the topic on puberty, pregnancy and contraception but for topics concerning sexual intercourse; most of them communicate with friends. In another study, conducted among 1,034 high school students in Kelantan found that the primary source for information related to SRH were friends and a few respondents choose teachers and parents (Rahman et. al., 2011). A study conducted by National Population Family Development Board (NPFDB) (2014) among adolescents in Sarawak on protective factor and risky behaviors also found that friends and peers were the main source of SRH information-seeking. However, a study conducted by Kamrani et al., (2011) among high school students in the Klang Valley revealed that mother is the first source chosen especially on topic regarding puberty.

In another local study revealed barriers related to SRH information-seeking among adolescents in Malaysia. A study by Wong (2012) among 1695 female students at a public university in Malaysia regarding knowledge and attitudes concerning human reproductive system, contraceptives and pre-marital sex issues showed that more than half of respondents reported that they did not have access to information related to safe, contraceptive and pregnancy. The main reason respondents do not seek information about safe sex, and contraceptive is that they do not know where to get information. Respondents also reported that they were not looking for information such as safe and contraceptive sex practices because they thought they were unmarried, therefore they do not need that information.

## 2.0 Materials and Methods

This cross-sectional study is part of a bigger study investigated the relationship between protective factors and risky sexual behaviors among adolescents in Sarawak. This study relied on quantitative approach involving 3 major locations which represent Sarawak populations were chosen namely Kuching Division, Sibu Division and Miri Division. For each division one rural district selected namely Padawan (Kuching), Kanowit (Sibu) and Suai-Niah (Miri).

The sample size calculation is based on Naing et al., (2006) with an estimated sample size for this study is 1146. Sampling frame is derived from the list of districts, housing estates, and villages under the jurisdiction of their respective district offices. Multi-stage sampling was utilized to select potential respondent from each selected household. The inclusion criteria includes adolescents aged 16 to 19 years old, agree to participate and obtained consent from parents or guardians for those under 18 years and regardless whether they are still studying, school leavers, working or unemployed. Those who already married are excluded in this study.

The response rate for the whole study was 95%, (N=1086). For this particular article, focused was on rural respondents, n=259. This study was conducted during the period of August to November 2016. The data were collected using a validated structured questionnaire in Malay Language. Related questions to this study (SRH information-seeking items) were modified from Cleland, Ingham and Stone (2005). Question 1: "How often do you use the following sources of information to obtain SRH information within the last 6 months" with 4 scales to choose "never", "sometimes (at least once a month)", "often (at least, at least 1-3 times a week)" and "very often (at least once daily)" from a list of 9 sources of information. Question 2: How confidence are you using the following sources of information to obtain SRH information within the last 6 months" with 4 scales to choose "very unconfident", "unconfident", "confident" and "very confident" from a list of 9 sources of information. Validation of study instrument was conducted in pilot study in Samarahan, Sarawak with Cronbach alpha value of 0.81. The data were then analyzed descriptively using SPSS version 21.

Ethical approval granted from Ethics Committee, University Putra Malaysia with references ID: FEM (EXP16) P012 and National Medical Research Ethics Council (NMRR), Ministry of Health Malaysia with references ID: NMRR-15-1906-28326 IIR. For respondents below 18 years old, informed consent was sought from their parents or guardians. Necessary information regarding the study was also explained to the respondents and their parents or guardians.

### 3.0 Result

#### 3.1 Socio-Demographic

**Table 1:** Socio-demographic profile

Demographic profile	n=259	Frequency	Percentage
<b>Age:</b>	13 – 15 years old	6	2.3
	16 – 18 years old	187	72.2
	19 – 21 years old	66	25.5
<b>Gender:</b>	Male	99	38.2
	Female	160	61.7
<b>Ethnic:</b>	Iban	124	47.8
	Chinese	23	8.8
	Malays	47	18.1
	Bidayuh	41	15.8
	Orang ulu	10	3.8
	Others	14	5.4
<b>Religion:</b>	Islam	59	22.7
	Christian	161	62.1
	Buddha	4	1.5
	Traditional Chinese belief	9	3.4
	Traditional natives belief	21	8.1
	No religion	5	1.9
<b>Estimated parents monthly total income:</b>	Below RM 1000	137	52.8
	RM 1001 - RM 2000	71	27.4
	RM 2001 - RM 3000	24	9.2
	RM 3001 - RM 4000	8	3.1
	RM 4001 - RM 5000	7	2.7
	RM 5001 - RM 6000	5	1.9
	RM 6001 & above	7	2.7
<b>Working/ Unemployed (n=64):</b>	Working	39	15.1
	Unemployed	25	9.6
<b>Studying (n=195):</b>	Secondary school	155	59.8
	College/institute	37	14.3
	University	6	2.3

The socio-demographic characteristics of the respondents involved in the study were described as in Table 1. The majority of respondents (72.2%) are in the range of 16 to 18 years old. In terms of gender, more female respondents (61.7%) than male respondents (38.2%). Respondents from Iban ethnicity were the largest 47.8%, followed by Malays

(18.1%), Bidayuh (15.8%), and Chinese (8.8%). While Christian respondents were majority with 62.1%, followed by Islam (22.7%) and traditional natives belief (8.1%). Most parents or guardians (52.8%) have a total income below RM1000 per month. Majority of the respondents were still studying (59.8%) in secondary school while 15.1% respondents were already working.

### 3.2 Ever search for sexual and reproductive health information

**Table 2:** Percentage ever search for sexual and reproductive health information

n= 259		Intent to search for sexual & reproductive health information in the next 6 months	
		Yes (%)	No (%)
Ever search for sexual & reproductive health information 6 months ago	<b>Yes/</b> 112 (43.2%)	90 (51.2%)	22 (26.5)
	<b>No/</b> 147 (56.7%)	86 (48.8%)	61 (73.5)
<b>Total</b>	<b>259</b>	<b>176</b>	<b>83</b>

The results in Table 2 indicated that the search for SRH information for the last 6 months in which 43.2% of the respondents stated that they have searched for information and 56.7% reported did not search. For those who have searched SRH information, 51.1% intend to search SRH information in the next 6 months while 26.5% do not intend to do so. While those who reported never searched for SRH information for the last 6 months, 48.8% intent to search and 73.5% intent not to do so.

#### 3.2.1 Type of information and reasons

**Table 3:** Types of information and reasons

n=112		Frequency	Percentage
<b>Type of information:</b>	How sexually transmitted disease transmitted	29	25.9
	Prevention	8	7.2
	Treatment	7	6.3
	Personal health	65	58.0
	Others	3	2.7
<b>Reasons:</b>	To increase knowledge	74	66.1

Health problem related to sexual health and reproductive health	3	2.7
To fulfil religious obligation	7	6.3
Preparation for adulthood	16	14.3
Curious/ might be infected with the disease	4	3.6
School/college/university assignment	6	5.4
Others	2	1.8

Table 3 showed three main types of SRH information sought in relation to personal health (58%), how sexually transmitted disease transmitted (25.9%) and prevention (7.2%) while the two main reasons reported in searching for SRH information were to increase knowledge (66.1%) and preparations for adulthood (14.3%).

### 3.3.1 Source of information and confident

**Table 4:** Source of information and confident in using source of information

n (112)	Source of information		Confident in using source of information	
	Mean	SD	Mean	SD
Parents	.80	1.07	1.23	1.52
Religious teacher	.66	.88	1.12	1.41
School teacher	.82	1.08	1.19	1.47
Siblings	.69	.95	1.01	1.30
Health personnel	.79	1.04	1.37	1.65
Electronic media	1.01	1.35	1.16	1.42
Printed media	.98	1.27	1.15	1.41
Peers	1.05	1.35	1.15	1.40
Internet	1.12	1.44	1.22	1.50



Table 4 showed the three most frequently sources of SRH information were through internet (mean = 1.12; sd = 1.44 ), peers (mean = 1.05 , sd = 1.35), and electronic media (mean = 1.01; sd = 1.35). The least frequent source of SRH information was religious teacher (mean= .66; sd = .88). In terms of level of confidence in using the various sources of SRH information, the three main sources reported were health personnel (mean = 1.37; sd = 1.65), parents (mean = 1.23; sd = 1.52), and internet (mean = 1.22 ; sd = 1.50) while siblings (mean = 1.01; sd = 1.30) reported with the least confidence.

## 4.0 Discussion

### 4.1 Ever search for SRH information.

Among the prominent findings in this study indicates that more than half of respondents acknowledged that they have never searched SRH information within the past 6 months, however nearly half of the same respondents intended to seek SRH information in the next 6 months. This possible explanations could be described in a study by Wong (2012) who found that a large number of respondents do not know where the source for SRH information which related to topics such as safe sex, contraceptives and pregnancy because respondents assumed that they unmarried, thus does not required any information on SRH. Similarly, the findings of this study were consistent with Rahim and Pawanteh (2001) which suggested that adolescents in Malaysia assumed that health are not a major issue in their lives because they considered themselves less risky from any health problems and thus not actively seeking health information. However, for respondents who have searched for SRH information, the type of information sought is related to personal health care prevention and the main reason is to increase knowledge and awareness on sexual and reproductive health. In this aspect, the findings are consistent with Blum, et al. (2012) and Rahim & Pawanteh (2002) who suggested that adolescents need to have the right information and awareness about SRH that might help them in making responsible judgments and choices regarding their sexual behavior.

### 4.2 Source of SRH information.

Another main findings in this study indicated that internet is the main source for SRH information, followed by peers and electronic media. These findings corroborated with Malaysian Youth Index 2015 (IYRES, 2015) which reported that 65.1% of Malaysian adolescents used internet to obtain information on health as compared to information on religion (66.6%) and entertainment (83%). The findings of this study also supported a study by Rahman et al. (2011) which indicated that secondary school students in Kelantan chose their peers as the primary source of information related to SRH. Another study conducted by NPFDB (2014) also showed that adolescents in Sarawak also reported friends and peers as their main sources of SRH information. In addition, the findings of this study also supported Zhang et al., 2007 which reported that sexually active sex adolescents choose their peers as source of SRH information as compared to abstinent adolescents who preferred schoolteachers and parents as their main sources of SRH information.



#### ***4.3 Level of confidence in using the various sources of SRH information.***

Another expected findings in this study showed that most respondents reported to be more confident with health personnel as well as parents and internet. The possible explanation might be respondents perceived health personnel which comprise doctors and paramedics are expertise and authorized in their respected medical field. Apart from that, these findings also supported a study by Kamrani et al., (2011) that indicated most respondents which comprised of secondary school students in Klang Valley have more confidence with their mother in terms of obtaining SRH information on topics regarding puberty. As for respondents confidence with internet, a report from Malaysian Communications and Multimedia Commission (MCMC) (The Borneo Post, March 19, 2015) indicated that Sarawak's internet penetration rate is edging closer to the national average of 70 per cent in which this translated into a wider opportunities for the young populations to access online information in the state.

#### ***4.4 Limitations of the study.***

As this study explored the information-seeking behavior of respondents in the context of their relationship with SRH, it is possible that the respondents do not answer questionnaires honestly because of biased factors such as social desirability, even though relevant measures such as assuring their confidentiality and privacy were taken into consideration. This is because research on sexual behavior is considered sensitive in the context of Malaysian society (Low, 2009). It is recommended that future studies will be able to find the best method in reducing this problem.

Generally, the findings in this study may provide evidence-based inputs in fulfilling the health education needs regarding SRH among adolescents in Sarawak. These findings in line with what Dervin's (1992) Sensory Theory which proposed that a person seek for information when there is a need to do so. In this context, the potential health education strategies that policy maker should look into may involve aspects such as the availability, accessibility, and affordability that tailored to adolescents needs in regards to SRH information-seeking behaviour (Collumbian et. al., 2012).

### **5.0 Conclusion and recommendation**

In conclusion, respondents preferred internet, peers and electronic media as their primary source of information on SRH as compared to other sources. However, health personnel is the most preferred choices in terms of confidence in using the sources of information followed by parents and internet. These findings suggested the need to utilize the strengths of these information sources regarding SRH information-seeking behaviour in developing an effective health education strategies for adolescents in Sarawak.

---

## **Acknowledgement**

We thank the Director General of Health Malaysia for giving permission to publish this paper.

## **Declaration**

The authors declare that they have no conflict of interest regarding publication of this article.

## **Authors contribution**

Author 1 designed the concept of study, conducted data collection, prepared the data analysis and drafted the manuscript under supervision of Author 2. Author 3 and Author 4 edited the final version of the paper prior for submission.

## References

- Awaluddin, S. M., Ahmad, N. A., Saleh, N. M., Aris, T., Kasim, N. M., Muhamad Sapri, N. A., & Nik Abdul Rashid, N. (2015). Prevalence of sexual activity in older Malaysian adolescents and associated factors. *Journal of Public Health Aspects*.
- Ki-Moon, B. (2016). Sustainability-engaging future generations now. *The Lancet*. May 2016
- Bleakley, A., Hennessy, M., Fishbein, M., Coles Jr, H. C., & Jordan, A. (2009). How sources of sexual information relate to adolescents' belief about sex. *Am J Health Behav.*, 33(1), 37-48.
- Blum, R. W., Bastos, F. I., Kabiru, C. W., & Le, L. C. (2012). Adolescent health in the 21st century. *Lancet*, 379, 1567-1568.
- Cleland, J., Ingham, J., & Stone, R. (2005). *World Health Organisation*. Retrieved 3 October, 2014, from Sexual and reproductive health: [www.who.int/reproductivehealth/topics/adolescence/questionnaire/en/](http://www.who.int/reproductivehealth/topics/adolescence/questionnaire/en/)
- Collumbien, M., Busza, J., Cleland, J., & Campbell, O. (2012). *Social science methods for research on sexual and reproductive health*. Retrieved 17 February, 2014, from World Health Organization: <http://www.who.int>
- Coleman, L. (2007). Preferences towards sex education and information from a religiously diverse sample of young people, *Health Education*, Vol. 108 Issue: 1, pp.72-91, <https://doi.org/10.1108/09654280810842148>
- Dervin, B. (1992). From the mind's eye of the user: The sense-making qualitative-quantitative methodology. In Glazier, J. and Powell, R. R. *Qualitative research in information management*(p. 61-84). Englewood, CA: Libraries Unlimited
- Institute for Youth Research Malaysia (IYRES). (2015). *Malaysian Youth Index 2015 (MYI'15). Measuring The Youth Life Well-Being*. Institute for Youth Research Malaysia (IYRES), Putrajaya.
- Kamrani, M. A., Sharifah-Zainiyah, S. Y., & Ahmad, Z. (2011). Source of information on sexual and reproductive health among secondary schools' girls in the Klang valley. *Malaysian Journal of Public Health Medicine*, 11(1), 29-35.
- Ministry of Health Malaysia (MOH). (2007). *National Adolescent Health Plan of Action 2006 - 2020*. Ministry of Health Malaysia.
- Ministry of Health Malaysia (MOH). (2008). *Malaysia's Health 2008*.
- Ministry of Health Malaysia (MOH). (2010). *Country Health Plan 10th Malaysia Plan 2011-2015*.
- Ministry of Health Malaysia (MOH). (2011). *National strategic plan on HIV and AIDS 2011-2015*. Putrajaya: Ministry of Health Malaysia.
- Ministry of Health Malaysia (MOH). (2013). *National Health and Morbidity Survey Report*. Putrajaya: Ministry of Health Malaysia.

- Naing L., Winn, T. & Rusli, B. N. (2006). Sample Size Calculator for Prevalence Studies. Available at: [http://www.kck.usm.my/ppsg/stats\\_resources.htm](http://www.kck.usm.my/ppsg/stats_resources.htm)
- National Population and Family Development Board (NPFDB). (2004). *Kajian Penduduk dan Keluarga Malaysia ke 4*. Kuala Lumpur.
- National Population and Family Development Board (NPFDB). (2014). *Kajian faktor risiko dan pelindung terhadap kesihatan reproduktif dan seksual remaja di Semenanjung Malaysia*.
- Low, W.-Y. (2009). Malaysian youth: issues and challenges. *JUMMEC*, 12(1), 3-14.
- Pawanteh, F. A., Rahim, S. A., & Abd Rahim, M. H. (2012). Representation of sexuality on television: values and attitudes of young Malaysian. *Asian Social Science*, 8(7).
- World Health Organisation (WHO). (2011). *HIV/AIDS in South-East Asia Region: Progress Report 2011*. Retrieved from <http://www.searo.who.int>.
- World Health Organisation (WHO). (2013). *Global Health Observatory*. Retrieved from World Health Organization: <http://www.who.int/gho/hiv/en/index.html>
- World Health Organisation (WHO). (2012). *Health education: theoretical concepts, effective strategies and core components*. Cairo: World Health Organization.
- World Health Organisation (WHO). (2007). *Sexual and reproductive health of adolescents and youth in Malaysia. A review of literature and projects 2005*.
- Rahim, S. A., & Herman, I. (1996). *Remaja dan AIDS. Media, Nilai, Personaliti, dan Tingkah Laku*. Kementerian Kesihatan Malaysia & Universiti Kebangsaan Malaysia.
- Rahim, S. A., & Pawanteh, L. (2001). *Penilaian intervensi sosial PROSTAR terhadap kesedaran AIDS di kalangan remaja*. Ministry of Health Malaysia and Universiti Kebangsaan Malaysia.
- Rahman, A. A., Rahman, R. A., Ibrahim, M. I., Ali, S. H., Salleh, H., & Wan Muda, W. (2015). Factors associated with attitude toward premarital sexual activities among school-going adolescents in Kelantan, Malaysia. *Asia-Pacific Journal of Public Health*, 27(2).
- The Borneo Post, March 19, 2015. "Increasing internet penetration has its own pros and cons"
- Wilson, T. D. (1999). Model in information behaviour research. *Journal of Documentation* 55(3): 249-270
- Wong, L. P. (2012). An exploration of knowledge, attitudes and behaviours of young multiethnic Muslim-majority society in Malaysia in relation to reproductive and premarital sexual practices. *BMC Public Health*, 12, 865.
- Zhang, L., Li, X., & Shah, I. H. (2007). Where do Chinese adolescents obtain knowledge of sex? Implications for sex education in China. *Health Education*, 107(4), 351-363.