INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 8, Issue 14, (2018) E-ISSN: 2222-6990

Conceptual paper: Awareness and Risk Perception towards Sexually Transmitted Infections (STIs) among Adolescents in Kuching and Kota Samarahan, Sarawak

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To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v8-i14/5023 DOI:10.6007/IJARBSS/v8-i14/5023

Published Date: 23 December 2018

Abstract

Sexually transmitted infections (STIs) are on the rise in Sarawak with the age of those infected getting younger by year. Latest available data on reported cases of STIs is from a newsletter published by the Sarawak Health Department in March 2015 showing 26 cases of gonorrhea and 3 cases of syphilis for Kuching while 8 cases of gonorrhea and 2 cases of syphilis for Samarahan recorded for that month (Sarawak Weekly Epid News, 2015). Based on reviews of past studies it can be concluded that the level of awareness is still low despite the rising cases of STIs reported in Sarawak. A study by Catterall (1981) found gonorrhea to be the most common infection affecting Sarawakians prior to 1981 and based on the current statistics, that has not changed. Knowledge on STIs among adolescents and youths is generally low to moderate, even among health sciences students (ElKalmi et. al, 2015; Soleymani et. al, 2015; Anwar et. al, 2010). The prevalence of pre-marital sex among adolescents (Awaluddin et. al, 2015; Manaf et. al, 2015; Ahmadian et. al, 2014; Anwar et. al, 2010) could be a factor in contributing to the rise of STIs infections. The Sexually Transmitted Disease Knowledge Questionnaire (STD-KQ) and the Health Belief Model are used in this study to gauge the level of awareness and risk perception among the adolescents in Kuching and Kota Samarahan. The focus of this paper is to understand the level of awareness and knowledge of STIs among

adolescents, to assess the attitudes of adolescents towards STIs, to determine the risk perception of adolescents concerning STIs, and to find out factors affecting level of awareness and risk perception of STI among adolescents.
Keywords: Sexually Transmitted Infections, Adolescents, Sarawak

Introduction

Sexually transmitted infections among adolescents and young adults Sexually transmitted infections (STIs) "are infections that are commonly/have a high probability of being spread from person to person through sexual contact" and is a more preferable term compared to sexually transmitted disease (STDs) as "some infections are curable and may not cause any symptoms" (Sexually Transmitted Infections (STIs), n.d.). According to statistics revealed by Datuk Fatimah Abdullah, the Sarawak Minister of Welfare, Women and Family Development, there are 683 cases of gonorrhea reported in Sarawak in the year 2014 with 514 cases involving patients aged between 18 to 29 and 49 cases involving teenagers aged between 10 to 17 years old ("Gonorrhea semakin membimbangkan", 2015). Out of the 683 cases, Samarahan and Asajaya areas in Sarawak recorded 96 cases of sexually transmitted infections (STIs) in the year 2014 with 64 cases of gonorrhea involving youths aged 18 to 29 years old while the other 12 cases involved teenagers aged 10 to 17 years old ("Gonorrhea semakin membimbangkan", 2015). When the age of the patient is as young as 10 years old, or equivalent to Primary 4, it is an issue worth investigating.

As disclosed by Dr Ruzaina Mis (Mustafa, 2012) who is an Epidemologist Officer from Pejabat Kesihatan Kuching, the statistics for STIs patients in Kuching showed that 40 of the STIs cases involved teenages aged between 13 to 19 years old. The most common STIs reported are gonorrhea, followed by syphilis with the former mostly contracted by single (unmarried) people (Chia, 2012). This also shows that the teenagers and youths are sexually active and thus, measures should be taken to gauge their awareness and knowledge of STIs, their attitude towards STIs, and also how they perceived themselves to be at risk of contracting STIs. Mail (2015) wrote a feature story in Borneo Post on the stigma of STDs and quoted a medical doctor who declined to be named saying that the three most common STDs in Kuching are herpes, HIV and viral hepatitis. Latest available data on reported cases of STIs is from a newsletter published by the Sarawak Health Department in March 2015 showing 26 cases of gonorrhea and 3 cases of syphilis for Kuching while 8 cases of gonorrhea and 2 cases of syphilis for Samarahan recorded for that month (Sarawak Weekly Epid News, 2015).
Due to the nature of transmission of the infections, STIs is still a taboo subject and most of those infected might not seek treatment at public hospitals or clinics and therefore the cases might not be recorded.

> The magnitude of sexually transmitted infections (STIs) in Malaysia is very much underrepresented. This is due to under-reporting and under diagnosis, asymptomatic manifestation of the disease as well as patients preferring to access the private healthcare facilities to treat STIs as opposed to seeking treatment at public hospitals and clinics. Some also prefer to self-treat through alternative medicine. Despite the existence of the Prevention and Control of Infectious Diseases Act of 1988 which requires reporting of incidences of syphilis, gonorrhoea, chancroid and HIV, most cases of STIs are not reported by private practitioners.

(Malaysia 2010 Ungass Country Progress Report, 2010: 10)

A study involving 1,071 young Malaysians in 2015 reported that one in ten Malaysians "would not get tested and treated even if they have been exposed to STI risks as it is 'shameful'" (The Malaysian Youth Sexual Reproductive Health Survey E-Booklet).

Soleymani, Rahman, Lekhraj and Zulkefli (2015) studied postgraduate students in Malaysia on their understanding of and beliefs about sexual and reproductive health and found that their level of knowledge was not satisfactory. Most of them (92.2%) believed that STI "can be transmitted through shaking hands" (Soleymani et. al, 2015). This implies the low level of awareness among the postgraduate students.

Even health sciences students from a public university in Malaysia who are assumed to be more knowledgeable showed moderate level of awareness concerning treatment, transmission and knowledge of HIV/AIDS, which is a type of STI (ElKalmi, Al-Shami, Alkoudmani, Al-Syed, Al-Lela & Patel, 2015).

Anwar, Sulaiman, Ahmadi and Khan (2010) conducted their study on the awareness of school students in Penang and found that they have insufficient knowledge about STI despite a "considerable percentage of them is involved in risky sexual behaviour" (p. 5).

The rise of STIs could also be due to the prevalence of pre-marital sex among adolescents as several studies have found out. Ahmadian, Hamsan, Samah and Noor (2014) investigated data of 770 rural female students in Peninsular Malaysia where 3.2% reported they were involved in sexual intercourse with psychological factors and peer group influences as the main reasons. A study on the prevalence of sexual activity among 21,438 older adolescents throughout Malaysia who were attending youth program (National Service Training) found that female adolescents were more likely to engage in pre-marital sex (Awaluddin et. al, 2015), which can also mean the females were more honest in reporting their sexual behaviour compared to males. Manaf et. al (2014) who analysed 1328 health screening data taken from two Youth Training Institutions in Selangor on the prevalence of pre-marital sex also found the percentage of female trainees who had pre-marital sexual intercourse to be higher than the male trainees.

Problem Statement

Kuching stated 205 cases of gonorrhoea in 2014 whereas Samarahan recorded 136 cases. As for syphilis, Kuching has 35 cases while Samarahan has 25 cases (Laporan Tahunan 2014). Based on reviews of past studies it can be concluded that the level of awareness is still low despite the alarming cases of STIs reported in Sarawak. A study by Catterall (1981) found gonorrhea to be the most common infection affecting Sarawakians prior to 1981 and based on the current statistics, that has not changed.

Although statistics on the rise of STIs are available, understanding to the factors that contribute to the increase of the infections and the low level of awareness is still unclear. Therefore, this study is deemed necessary and timely particularly targeting younger age group in Sarawak.

It is important to conduct a study on this phenomenon to understand the level of awareness and knowledge of STIs among adolescents, to assess the attitudes of adolescents towards STIs, to determine the risk perception of adolescents concerning STIs, and to find out factors affecting level of awareness and risk perception of STI among adolescents.

Literature Review on the Model Used

Risk Perception and Health Belief Model

"When people's beliefs about their personal risk are heightened, they will be motivated to take action to mitigate the threat" (Rimal & Turner, 2015: 148). As explained by Sjöberg, Moen and Rundmo (2004, p. 8), risk perception is "the subjective assessment of the probability of a specified type of accident happening and how concerned we are with the consequences. To perceive risk includes evaluations of the probability as well as the consequences of a negative outcome." Since risk perception is about belief and probability of something happening as well as the consequences, the Health Belief Model (HBM) is deemed the most appropriate as it contains the elements.

The HBM was first developed in the 1950s by a group of social psychologists, Godfrey Hochbaum, Stephen Kegels and Irwin Rosenstock, at the U.S. Public Health Service (Skinner, Tiro & Champion, 2015).

The model was initially used to explain and predict preventive health behaviour focusing on the relationship of health behaviours, practices and utilization of health services and was later revised to include general health motivation (Hochbaum, Rosenstock & Kegels, 1952).

The current model included self-efficacy, which refers to the level of a person's confidence in his or her ability to successfully perform a behaviour. This model has been widely used in studies concerning health behaviour and diseases. This include the studies of sexually transmitted infections such as predicting condom use behaviour among adolescents (Slater, 2015), promoting vaccination and increased condom use among upper secondary school students to prevent human papillomavirus (HPV) infection (Grandahl et. al, 2015) and reviewing evidence-based interventions aiming to reduce STIs and sexual risk behaviour in adolescents in the United States (Petrova & Garcia-Retamero, 2015).

In the context of this study, perceived susceptibility includes the population at risk (adolescents) and their risk level whereas perceived severity specifies and describes the consequences of the risk and the condition. Perceived benefits deal the actions taken and the benefits the adolescents will derive from such actions. Perceived barriers refer to the adolescents' beliefs in the tangible and psychological costs of adhering to certain behaviours. Cues to action comprises of evidence or experiences either personal, interpersonal or environmental. Personal includes something that is experienced by the adolescents themselves such as having the symptoms, or their friends either having the symptoms or being diagnosed with infection, or it can be from media publicity such as an STIs awareness campaign. Self-efficacy refers to the adolescents' confidence in their ability to successfully take action.

Method of Study

Study Area and population

The study area comprises of Kuching and Kota Samarahan, two neighbouring divisions in Sarawak, Malaysia. The study population is adolescents aged 13 to 17 years old as secondary school students are the main target participants in this study. However, the participants will not only include schooling adolescents but also non-schooling adolescents as well as urban and rural adolescents. This age group is chosen based on the age of STIs patients reported and based on studies focusing on pre-marital sex among adolescents in Malaysia.

Sampling

This study uses simple random sampling. Participants will be recruited from public spaces frequented by adolescents such as Pustaka Negeri, Kuching Waterfront, shopping malls and other public spaces frequented by adolescents. Based on past studies on the same phenomenon, the sample size ranges between 60 participants (Suhaimi & Salim, 2013) to 21,438 participants (Awaluddin et. al, 2015). Thus, given the range of sample size emphasized in past studies, the sample size of this study is about 500 adolescents as participants.

Questionnaire

Questionnaire will include a section on socio-demographic characteristics of the respondents and two other sections for awareness and HBM. Participants of the study will be given a self-administered questionnaire together with an envelope. They can choose to seal the envelope to protect their privacy and confidentiality from the enumerators.

To capture the level of awareness on STIs, The Sexually Transmitted Disease Knowledge Questionnaire (STD-KQ) by Jaworski & Carey (2007) is used. Risk perception components are based on the constructs of HBM, thus several items are adapted from Shade (2010) on his study about HBM and effects of sexual portrayals on television. The items are modified to suit the need of this study.

For level of awareness, the participants will be asked questions on their familiarity with the types of STIs, the symptoms, their experiences as well as items from STD-KQ. The items for HBM will include statements concerning health motivation, sexual permissiveness, sexual practice, religiosity, perceived susceptibility, perceived severity, perceived benefits, perceived barriers and self-efficacy.

Limitations and Delimitations

The delimitation of this study is its focus on the components of the Health Belief Model to gauge the level of awareness and perception among the adolescents. The limitation is mainly the inclusion of only those adolescents from Kuching and Samarahan.

Conclusion

The result of this study can contribute to understanding the awareness and perception of adolescents concerning STIs and the need for sexual reproduction health education in schools.

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References

Ahmadian, M., Hamsan, H.H., Abdullah, H., Samah, A.A. & Noor, A.M. (2014). Risky Sexual Behavior among Rural Female Adolescents in Malaysia: A Limited Role of Protective Factors. *Global Journal of Health Science, 6(3).*

Anwar, M., Sulaiman, S.A.S., Ahmadi, K. & Khan, T.M. (2010). Awareness of school students on sexually transmitted infections (STIs) and their sexual behavior: a cross-sectional study conducted in Pulau Pinang, Malaysia. *BMC Public Health*, 2010, 10:47.

Awaluddin, S.M., Ahmad, N.A., Saleh, N.S., Aris, T., Kasim, N.M., Sapri, N.A.M. & Rashid, N.R.N.A. (2015). Prevalence of sexual activity in older Malaysian adolescents and associated factors. *Journal of Public Health Aspects*, *2(1).*

Chia J. (2012). Sexually transmitted diseases on the rise. *Borneo Post Online*. Retrieved February 5, 2016, from http://www.theborneopost.com/2012/02/24/sexually-transmitteddiseases-on-the-rise/

ElKalmi, R.M., Al-Shami, A.K., Alkoudmani, R.M., Al-Syed, T., Al-Lela, O.Q.B. & Patel, I. (2015). Knowledge, Attitudes and Risk Perceptions towards Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome (HIV/AIDS) Among Health Sciences Students in a Public University, Malaysia. *Journal of Pharmacy Practice and Community Medicine*, *1(1), 24-29*.

Gonorrhea semakin membimbangkan. (2015). *Utusan Sarawak*. Retrieved February 4, 2016, from http://www.utusansarawakonline.com/news/23865/Gonorrhea-semakinmembimbangkan/

Grandahl, M., Rosenblad, A., Stenhammar, C., Tydén, T., Westerling, R., Larsson, M., Oscarsson, M., Andrae, B., Dalianis, T. & Nevéus, T. (2016). School-based intervention for the prevention of HPV among adolescents: a cluster randomised controlled study. *BMJ open*, 6(1), e009875.

Hochbaum, G., Rosenstock, I., & Kegels, S. (1952). Health belief model. United States Public Health Service.

Jaworski, B. C., & Carey, M. P. (2007). Development and Psychometric Evaluation of a Self-administered Questionnaire to Measure Knowledge of Sexually Transmitted Diseases. *AIDS and Behavior, 11, 557-574*.

Laporan Tahunan 2014. Jabatan Kesihatan Negeri Sarawak.

Malaysia 2010 Ungass Progress Country Report. (2010). Ministry of Health, Government of Malaysia.

Manaf, M.R.A., Tahir, M.M., Sidi, H., Midin, M., Jaafar, N.R.N., Das, S. & Malek, A.M.A. (2014). Pre-marital sen and its predicting factors among Malaysian youths. *Comprehensive Psychiatry*, *55*.

Mustafa, R. (2012). Penyakit kelamin berleluasa. Borneo Post Online. Retrieved February 4, 2016, from http://www.theborneopost.com/2012/02/24/penyakit-kelamin-berleluasa/ Mail, R. (2015). The taboo of discussing STDs. *Borneo Post Online*. Retrieved February 10, 2016, from http://www.theborneopost.com/2015/04/05/the-taboo-of-discussing-stds/

Petrova, D., & Garcia-Retamero, R. (2015). Effective Evidence-Based Programs For Preventing Sexually-Transmitted Infections: A Meta-Analysis. *Current HIV research*, *13(5), 432-438*.

Sarawak Weekly Epid News. (2015). Sarawak Health Department.

Sexually Transmitted Infections (STIs). (n.d.). Retrieved February 10, 2016, from http://www.health.umd.edu/healthpromotion/sexualhealth/sti

Shade, D.D. (2010). Let's Talk About Sex: The Health Belief Model and Effects of Prime Time Television Sexual Portrayals. (Unpublished dissertation). Virginia Polytechnic Institute and State University, Blacksburg, VA.

Sjöberg, L., Moen, B. E., & Rundmo, T. (2004). *Explaining risk perception*. An evaluation of the psychometric paradigm in risk perception research. Trondheim.

Skinner, C. S., Tiro, J., & Champion, V. L. (2015). Background on the Health Belief Model. *Health Behavior: Theory, Research, and Practice*, 75.

Slater, H. M. (2015). Predicting Condom Use Behavior In Sexually Active Adolescents: Application Of The Health Belief Model And Developmental Assets Framework.

Soleymani, S., Rahman, H.A., Lekhraj, R. & Zulkefli, N.A.M. (2015). A cross-sectional study to explore postgraduate students' understanding of and beliefs about sexual and reproductive health in a public university, Malaysia. *Reproductive Health*, *2015, 12:77.*

Suhaimi, N.S. & Salim, S.S. (2013). A case study of adolescent believes and intentions in the use of condom in Bukit Bintang, presented at Graduate Research in Education (GREDUC 2013).

Rimal, R. N., & Turner, M. M. (2015). The Role of Anxiety, Risk Perception, and Efficacy Beliefs. *Uncertainty, Information Management, and Disclosure Decisions: Theories and Applications*, 145.