

ORIGINAL ARTICLE

THE EFFECTIVENESS OF REPRODUCTIVE HEALTH EDUCATION MODEL AMONG INDONESIAN WOMEN MIGRANT WORKERS

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ABSTRACT

Reproductive health issues are one of the issues that migrant workers face. Therefore, it is crucial to prevent reproductive disorders to maintain migrant workers' health. An effective prevention strategy is health education, which aims to increase migrant workers' knowledge and awareness about reproductive health. In Indonesia, there is still limited source of Reproductive Health Education Model for Indonesian Migrant Workers (IMWs). This study aims to assess the effectiveness of the model of reproductive health education which is created to improve health reproduction knowledge of Indonesian women migrant workers. This research is a quasi-experimental one group pre and post test design. The data were obtained from the intervention study that was carried out for migrant workers in Hong Kong in eight meetings. Sample for the intervention study was carried out by total sampling from a Indonesian women migrant worker community in Hongkong. Total of 36 people were involved in the study. Level of knowledge were assessed from the pre and post test conducted in training. Education-based interventions can improve migrant workers' reproductive health-related knowledge. Each given module significantly influences knowledge of respondents, with a p-value of each module is 0.000. The overall modules also show significant results with a p-value of 0.000 in increasing health reproduction knowledge of respondents. Indonesian women migrant workers should receive health reproduction education to increase their health reproduction knowledge.

Keywords: education; Indonesian women; transients and migrants; reproductive health

INTRODUCTION

Indonesia is one of the major sources of migrant workers in Asia and Africa. According to data from the Indonesian Migrant Workers Protection Agency, in 2022, there were 200,761 Indonesian workers, with 64% women. As many as 24,238 were placed on the continents of Asia and Africa¹. Malaysia, Taiwan, Hong Kong, Singapore, and South Korea are the five highest placement countries. Of this number, most of them, about 90,956 people, had a high school education, and 91,335 were unmarried.

Migrant workers may have various health issues, which can result in exploitation. Reproductive or sexual health issues are one of them². According to studies conducted in China and India, migrant workers have several sexual behavior issues, including active sexual behavior, the failure to use condoms, and having sex outside of marriage^{3,4}. Other research shows that young women and female migrant workers were less informed about STDs, HIV/AIDS, and contraception^{5,6}. Due to imbalances in power or gender, this may result in sexual violence^{5,7}. Sexual activity and sexual assault can raise the risk of HIV/AIDS and STDs. This situation

can have consequences for the families of migrant workers (MW). When MWs return to their countries and transmit the disease to their spouse, prevention of this disease could become increasingly out of control. Other problems related to reproductive health faced by migrant workers are lack of access to health services due to barriers in communication or language, cultural differences, insufficient knowledge and perception of risk, stigmatization, and discrimination⁸⁻¹¹. During the pandemic, there were an issue of health reproductive education among youth and women due to health care access and utilization^{12,13}, and lack of intervention of sexual and reproductive health services¹⁴. Other research also shows that during pandemic, the web was the most popular source of health reproductive education, followed by peers (friends)¹⁵.

Prevention in strengthening knowledge and awareness about reproductive health is essential nowadays. There is an urgency in providing health reproduction education among Indonesian women migrant workers because there were lack of reproductive knowledge among youth¹⁶, lack of opportunities to acquire health reproduction knowledge in destination country¹⁷, lack of freedom

in assessing health reproduction health care in destination country¹⁷, and there has been no reproductive health training for Indonesian women migrant workers. Several researchers have focused on developing a reproductive/sexual health education model for migrant workers in their countries^{18,19}. Until now, no reliable guidelines and learning models for reproductive health are suitable for prospective migrant workers from Indonesia. The existence of reliable guidelines on reproductive health curricula, accompanied by effective learning and training models, will be very beneficial for achieving good performance and prosperous conditions for Indonesian's MWs. The impact of health education has shown beneficial result for the migrant women worker such as reduce the barriers to health care access²⁰, increased knowledge and attitude²¹, and promoted better sexual and reproductive health practices²².

This research is the third phase of research to develop a Reproductive Health Empowerment Model for Indonesian Migrant Workers which is started in 2019. The first phase was collecting profile information of Indonesian migrant workers, develop early model and made pilot project of initial model. The result of this research showed that there were significant differences between participants who received modules with a few cases and subjects who received modules with many cases. Our findings reveal that modules with a high number of cases had the greatest intervention effect in reproductive health education models²³. The result of the first phase become our uniqueness in this health reproductive model. The second phase was an improvement on the pilot project and made a wider-scale trial. The method of the third phase is the final refinement of the model and its implementation in groups of migrant workers. This third phase aims to assess how the reproductive health education approach has improved participant knowledge, attitude and practices among Indonesian women migrant workers in Hong Kong.

METHODS

This was an quasi-experimental with one group pre and post- test research design. Study population was member of Indonesian women migrant workers community in Hongkong, Buruh Migran Cerdas (BMC). Sample was recruited by total sampling which was 36 members. The inclusion criteria were individuals who could participate in the training from beginning to end, able to use the Zoom platform, and completed the online surveys. Exclusion criteria were participants who dropped out in the middle of the training for any reason. The total number of participants in this training was 36 people. This research has obtained ethical approval

from the Faculty of Medicine, Airlangga University, Surabaya with number of letter: No.231/EC/KEPK/FKUA/2019.

Informed consent was obtained from the respondents before the training was started. The research team, explained about the training, the duration and length of training, the topics, their rights and obligations and the incentive. The researcher also ensuring their privacy and confidentiality. After that, the respondents who agreed to participate will fill the informed consent via google form. The training was conducted online and consisted of four modules. Each module was given for two times with total time 120 minutes. Total eight meetings were conducted. Before and after the meeting, participants were given pre and post-tests to assess their health reproduction knowledge. During the training, a trained facilitator facilitated the meeting. The learning model was in the form of an explanation followed by a case discussion as the uniqueness of this model. The media used were presentation slides, books, posters, and videos. The topic of module 1 was sexual violence and harassment. Health reproduction knowledge was assessed with 17 questions. Module 2 was about pregnancy, abortion, and sexually transmitted infections and was assessed with 17 questions. Module 3 was about the continuation of sexually transmitted diseases with 36 questions to assess the knowledge. The topic of module 4 was about partner's sexuality including myths related to sex, with as many as 30 questions were given to assess the knowledge. The total questions were 100. Pre and post-tests were given before and after each module. The questionnaire used in this research was already passed the validation and reliability test and was used in previous research²³. Data analysis used SPSS to see if there were significant differences before and after the intervention was given. The analysis was carried out per module and as a whole result. Analysis used the parametric test, paired sample t-test for normally distributed data; and non-parametric test, the Wilcoxon test for data obtained that was not normally distributed.

This research also conducted an qualitative assessment for the development of the module. The qualitative assessment was obtained from focus group discussions (FGD) with four key informants. A research team carried out the FGD with four key informants who were considered to represent stakeholders that is Head of Manpower and Transmigration of East Java province, scholars which were represented by lecturer and book author, and user which was represented by community leader of Indonesian MWs in Hongkong. The purpose of this FGD was to obtain an evaluation from the relevant parties regarding the developed

model in terms of the methods and media to be used. Before the FGD was held, the research team sent a letter of request and materials to be studied in the FGD. FGD material is the opinion of stakeholders about the content of the book, the layout of the book, the feasibility of the model, and the theory used in the book. Then the participants of FGD, were expected to provide input regarding the material, which then be discussed together during the FGD. The results of this evaluation were then analyzed qualitatively and grouped by theme.

RESULTS

Characteristics of Respondents of Intervention Study

Table 1 shows the characteristics of the respondents, which are their region of origin, ever worked at which country, and length of work as Indonesian migrant workers (n=36).

Table 1: Characteristics of Respondents (n=36)

Variable	n	%
Origin (province):		
East Java	15	41.6
West Java	5	13.8
Central Java	9	25
Lampung	3	8.3
South Sumatera	2	5.5
West Nusa Tenggara	1	2.7
East Nusa Tenggara	1	2.7
Ever worked at:		
Hongkong	16	44.4
Saudi Arabia	3	8.3
Malaysia	6	16.7
Singapore	11	30.5
Length of work:		
<5 years	5	13.8
5-10 years	20	55.5
11-15 years	8	22.2
16-20 years	2	5.5
>20 years	1	2.7

Results of model intervention studies to IMW

Table 2 shows a statistical analysis of the study interventions for IMWs where reproductive health education interventions can increase the knowledge of migrant workers. This intervention also significantly affects the knowledge of migrant

workers from each given module and as a whole. The maximum scores of modules 1,2,3 and 4 were 17,17,36,30, respectively. The maximum score for total module 1 to 4 was 100. A smaller p-value indicates a more significant change.

Table 2: Respondents' knowledge before and after intervention (n=36)

	Pre-intervention	Post-intervention	p-value
Module 1	9.47	11.00	0.000*
Module 2	10.52	12.58	0.000**
Module 3	27.35	29.30	0.000**
Module 4	22.15	23.83	0.000**
Total (Module 1-4)	69.52	76.72	0.000**

*using the t-test because the data is normally distributed

**using the Wilcoxon test because the data is not normally distributed

Model evaluation from FGD

Table 3 shows the results of the qualitative analysis of the FGD. Three main themes were obtained which were 1) Indonesian Migrant Worker (IMW)

preparation before departure, 2) reproductive health material content, and 3) reproductive health education media. All of these inputs were followed up by the research team to refine the model.

Table 3: Qualitative analysis of Focus Group Discussion (n=4)

Statement	Coding	Theme	Implication to Model
<i>The five destination countries for IMW from East Java in 2020 were Hong Kong, Taiwan, Malaysia, Singapore, and Saudi Arabia (source 1)</i>	Country destination	of Reproductive health material content	Cases in IMW destination countries can be included as content in reproductive health materials for IMW
<i>Protection for IMW before employment consists of administrative protection and technical protection (source 1)</i>	Protection for IMW	IMW preparation before departure	This model can be included as a form of IMW prevention and protection given before IMW departs
<i>The book that has been made is good and good to recommend to IMW who have not departed yet (source 2)</i>	Reproductive health book	Reproductive health education media	Books are one of the effective media in this training
<i>Migrant workers need to get education about reproductive health because, so far, it has never existed (source 2)</i>	Reproductive health education for IMW	IMW preparation before departure	This model can be included as a form of IMW prevention and protection given before IMW departs
<i>The books needed are books that contain figures and are attractive so that migrant workers can easily read them (source 3)</i>	Reproductive health book	Reproductive health education media	Figures are one of the strengths of this book
<i>It is necessary to add tips on how to maintain and clean the reproductive organs of the vagina and penis so that infection does not occur because they lack knowledge (source 3)</i>	Reproductive health education	Reproductive health material content	Additions on this topic to the material
<i>It should also be added regarding the prevention and symptoms of cancer (source 3)</i>	Reproductive health education	Reproductive health material content	Additions regarding this topic to the material
<i>The size of the image needs to be adjusted so that it doesn't break when enlarged (source 4)</i>	Image size	Reproductive health education media	Improvement of image size
<i>In terms of the purpose of the book, it must be clear who it is intended for (source 4)</i>	Book goals	IMW preparation before departure	This model can be included as a form of IMW prevention and protection given before IMW departs

DISCUSSION

This research, to our knowledge, is the first research that attempts to reproductive health education model specifically for Indonesian women migrant workers. The results of this study prove that the designed reproductive health education intervention model for Indonesian women migrant workers resulted in an increase in health reproduction knowledge and significant difference between participants before and after the intervention. The increased knowledge related to reproductive health in Mozambique shows the same thing. Interventions in the form of education, such as radio commercials and local theater, have improved knowledge of reproductive health. The respondents' attitudes regarding family planning improved as the instruction was delivered²⁴. Other studies also showed similar results that reproductive health education could improve the attitudes and knowledge of young women^{25,26}.

The strength of this reproductive health education model is the use of many case discussions. This finding is consistent with preliminary research, which shows that the group given cases as discussion material resulted in a significant increase in knowledge before and after the intervention compared to the group without cases²³. Another strength is that the information is specifically designed for Indonesian migrant workers, including using terms that high school graduates may easily understood, using the Indonesian language, and using posters and videos. This result is in line with research that has demonstrated several efficient techniques for enhancing young women's knowledge and attitudes regarding reproductive health education, including focus group discussions, discussions, sharing, lectures with PowerPoint presentations, handbooks, brochures, flipcharts, modules, videos, and roles-play, group presentations by participants, and Questions and Answers²⁷⁻²⁹.

The content of the training in this educational model is also adequate. This can be seen from the results of the FGD inputs. One of the important materials, such as research on migrant workers in Vietnam, shows that although HIV prevalence is low among migrant workers in Vietnam, some of them engage in risky sexual behavior and low use condoms²¹. This material is included in this reproductive health education model. This fact shows that materials on risky sexual behavior and contraception are needed to equip migrant workers³¹.

The modalities used in this training model are presentations, pocketbooks, posters, and videos. The more modalities used in communication, the more likely the target of communication can understand the intent and purpose of the communication³². Additionally, allowing discussion can raise respondents' interest in the subject, whether during the distribution of materials or on social media. This is consistent with qualitative research conducted in Australia and Canada, where with multiple modalities, MW has a variety of avenues to access information and support³³.

This educational model will also ultimately empower migrant workers. In addition to maintaining their reproductive health, migrant workers are encouraged to be able to help other migrant workers. This fact follows previous research in China, which showed that a community-based educational intervention targeting unmarried female migrant workers appears to be effective in substantially improving their knowledge of reproductive health and their attitudes and behavior toward health and reducing the prevalence of STDs³⁴. This empowerment is one of the keys to this reproductive health education model because, according to previous research, there are barriers to communication or openness between migrant workers and health workers, especially discussing matters related to sexual health³⁵. There appears to be a lack of effective sexual health engagement by General Practitioners with migrant and refugee youth due to confidentiality and trustworthiness issues. Empowerment of fellow migrant workers as peer educators is a potential thing in this reproductive health education³⁶.

Although the results of this study show good and promising results, there is some potential bias in this study such as the fact that the population of this study comes from the same community working in Hong Kong. Research involving migrant workers from various destination nations and different context may generate interesting discussion material and provide a recommendation for future research.

Furthermore, the majority of participants had worked for 5 to 10 years. This could indicate that respondents have adapted long enough and/or attended other health seminars to improve their capacity to understand instances and enhance knowledge. Other limitation of this study is that the intervention was given to female IMWs who had gone to work in Hong Kong. The provision of reproductive health materials as a preparation phase for IMW before leaving abroad, hopefully will be more effective in affecting health reproduction knowledge among Indonesian women migrant workers.

CONCLUSION

The provision of reproductive health education for Indonesian women migrant workers is essential. The implementation of this educational approach may entail collaboration with labor bureaus to deliver this material to workers who have gone abroad. This research could be used as recommendation for policy in employment and migration sectors to equip the migrant workers with this material. The integration of reproductive health materials into the preparation stage for the departure of migrant workers is a strategic matter that must be followed up in the future. The empowerment of migrant workers who have received health education as peer educators is also a potential issue for the continuation of this model.

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Competing Interest

We declare there is no conflict of interest in this research.

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