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Original Article

Prevention of Self-medication in Women of Reproductive Age Based on a Health Belief Model: A Quasi-experimental Study

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Abstract

Background: Women of reproductive age have important responsibilities such as pregnancy, breastfeeding, and children raising. This study aimed at surveying the effect of educational interventions, based on the health belief model (HBM), in the prevention of self-medication (SM) in women of reproductive age.

Methods: This quasi-experimental study was performed on women of reproductive age in Jahrom in 2019 (January-September). Simple multi-stage random sampling was used to select the participants, and the sample size was determined 60 people for both intervention and control groups. Data collection tool was a questionnaire including demographic information and HBM construct questions. The questionnaire was completed in person by both groups before and three months after the educational intervention. The educational intervention was performed based on the HBM in the intervention group, including holding 4 educational sessions each lasting 60 minutes. The data were analyzed by SPSS 21 software using the chi-square test, paired *t* test, and independent t-test.

Results: The results showed a significant difference between intervention and control groups in terms of knowledge, perceived severity, benefits, and barriers, as well as cues to action on the correct use of drugs after the intervention ($P<0.05$). Three months after the intervention, the practice mean of women in the intervention group was significantly decreased compared with the control group ($P<0.001$).

Conclusion: Overall, educational intervention based on HBM was effective in preventing SM, but the extent of this effect varied for different HBM constructs. Nonetheless, measuring the effectiveness of the intervention based on the HBM in preventing SM behaviors requires studies with a long follow-up period.

Keywords: Education, Self-medication, Health, women, Health belief model

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Introduction

Self-medication (SM) is the prevention or treatment of a disease by taking the medication without consulting a physician (1). SM is an important health threat (2) and can cause adverse treatment, drug resistance, increased per capita drug use, and drug poisoning (3). In addition, it is known to cause 3% of fetal defects and imposes additional costs on the health care systems (2). The SM prevalence was reported to be 23.4% (4) and 11.9% (5) in Greece and Pondicherry-India, respectively. Further, its prevalence varied from 2% to 92% among adolescents in different countries (6) and was 37.7% among female school students in Saudi Arabia (7).

The health of women of childbearing age is highly important because it includes sensitive periods such as pregnancy and breastfeeding. Pregnancy in women can easily increase their use of drugs (8,9). Evidence shows that SM is common among pregnant women in many developing countries (10); the SM prevalence in pregnant women was 62.9% (11) and 60.5% (12) in Nigeria and Iran, respectively, although there are some programs to control it (10).

The main reasons for SM include a lack of attention to the severity of the disease, the successful SM experience of oneself and others, a feeling of false ability to take care of oneself, and the lack of access to a physician (13). The advertisements of pharmaceutical companies or firms also play a role in this regard (14). Using a theoretical framework in preventive interventions makes them more effective (15). People's beliefs are one of the most influential factors in adopting healthy behaviors. Studies have shown that a person's beliefs are a determining factor in the use of drugs (16).

The health belief model (HBM) is a comprehensive

model that plays an effective role in disease prevention (17) and predicts people's future performance on health-related behavior (18).HBM constructs include perceived susceptibility, perceived severity, perceived barriers, perceived benefits, cues to action, and perceived self-efficacy. According to this model, the decision and motivation of a person for adopting a behavior depend on their perceptions about risk (perceived sensitivity) and its seriousness (perceived severity), as well as their belief in the effectiveness of measures for reducing the risk of the disease (perceived benefits) and its obstacles. Cues to action are guides to healthy behaviors (19,20). Self-efficacy is a person's belief and judgment of his or her ability to perform a particular task (21). HBM has been used in many studies on women's health behaviors, including breast cancer screening behaviors (22), following the recommendations for Pap tests (23), self-care behavior of women with type 2 diabetes (24), and predictors of mammography (25). Heydartabar et al investigated the effect of HBM-based educational interventions on SM behaviors in mothers with children less than 2-year and found that model-based educational interventions can improve mothers' knowledge and practice about SM in children (26). Nonetheless, to the best of our knowledge, no educational intervention has so far been performed using the HBM to prevent SM behaviors in women of reproductive age. Women of this age group face physical and psychological problems caused by gynecological diseases, including premenstrual syndrome and the effects of approaching menopause, which can lead to SM; they also have important responsibilities such as pregnancy, breastfeeding, and children raising, and SM can affect their health and that of their children. Therefore, the purpose of this study was to evaluate the effect of HBM-based educational interventions on the prevention of SM in women of reproductive age.

Materials and Methods

The current quasi-experimental study was conducted on women of reproductive age in Jahrom, southern Iran in (January-September) 2019. Two groups of women of reproductive age were randomly selected and assigned to the intervention and control groups. For the intervention group, the educational intervention was performed for correcting SM behaviors based on the HBM, while the control group received no intervention.

Using G*Power software with a confidence interval of 95%, type I error (α) of 0.05, and effect size of 1.11 (27), the sample size was determined as 60 people for both intervention and control groups by simple multi-stage random sampling. First, out of 12 health centers in Jahrom, 4 health centers were randomly selected, and then 2 health centers were chosen for each of the control and intervention groups. Sampling in each center was performed by simple random sampling. For this purpose, the files of women meeting the inclusion criteria were selected, and the participants in the study were randomly selected from among them.

The inclusion criteria included women referring to designated clinics for sampling in Jahrom who were between 15 and 49 years old and literate, and have no specific disease. On the other hand, the exclusion criteria were an unwillingness to take part in the study, the absence of more than 1 session in a training class, and the occurrence of a specific disease during the study.

The data collection tool was a questionnaire whose validity and reliability were confirmed by Shamsi et al. The validity of the questionnaire was assessed by content validity. The questionnaire was prepared based on the model of health beliefs and according to valid sources and books and then reviewed by experts in relevant fields. The validity of the questionnaire was finally confirmed after applying their opinions in the questionnaire and fixing the problems. Moreover, the reliability of the questionnaire was measured by Cronbach's alpha test on 25 women similar to the study population, and its value was 8.8, 8.3, and 8.1 for the knowledge question section, HBM constructs (i.e., perceived susceptibility, severity, benefits, and barriers), and the practice checklist, respectively (28). To assess the reliability of the questionnaire in the present study, 30 women of reproductive age completed the questionnaire by the test and retest method with a two-week interval. The Cronbach's alpha value was 7.5, 8.2, and 7.9 for the knowledge question section, HBM constructs (i.e., perceived susceptibility, severity, benefits, and barriers), and the practice checklist, respectively. This questionnaire includes the demographic information section containing 9 questions (age, marital status, occupation, husband's occupation, education level, average monthly household income, health insurance services coverage, having a child, and the number of children). The knowledge question section includes 10 questions in the form of 4-choice items. The correct and incorrect answers are given a score of 1 and 0, respectively. Finally, each person's score is calculated based on 100 points. Thus, the number of correct answers is divided by the total number of questions (10 questions) and multiplied by 100. A sample knowledge question is presented as follows:

Arbitrary use of drugs can lead to which of the following side effects? (A) The disease becomes more resistant in the body (B) Exacerbation of the complication (C) Prolonged disease (D) All cases

The perceived susceptibility, severity, benefits, and barriers in the field of SM include a total of 20 questions (each construct contains 5 questions) and are designed on a 5-point Likert-type scale ranging from strongly disagree to strongly agree. The total score of each of these parts can be between 0 and 20, and the score of the person in each part is divided by 20, multiplied by 100, and shows her score of 100. Sample of questions related to each section are provided as follows:

- *Sample perceived susceptibility question:* In my opinion, in case of disease, the drug should be taken as soon as possible in any way possible.

- *Sample perceived severity question:* In my opinion, arbitrary use of drugs can aggravate a complication or disease.
- *Sample perceived benefits question:* In my opinion, the disease can be better treated by taking medications prescribed by a physician.
- *Sample perceived barriers question:* I do not have the right financial situation to visit a physician.

The section of cues to action (2 questions) measures the types of internal and external cues to action for SM. Related questions to each part are as follows:

Which of the following items plays a greater role in preventing you from taking drugs arbitrarily? (A) Fear of complications from the arbitrary use of drugs (B) Lack of belief in SM (C) Favorable general condition (D) Other cases

From which source or sources do you get information about the correct use of medications? (A) Physician (B) Family (C) Books (D) Magazines (E) Television (F) Other patients (G) Internet

The next section has a checklist that measures a person's practice in SM over the past 3 months. After explaining the purpose of the study to the participants and obtaining written consent for taking part in the study, the questionnaire was completed in person by both intervention and control groups. Then, the obtained information was analyzed, and the educational intervention was prepared using valid scientific sources and consulting with experts in related fields.

The educational intervention was performed based on the model in the intervention group, including holding four educational sessions each lasting 60 minutes. Meetings were weekly held in the conference hall of health centers. Teaching methods contained lectures, questions, and answers, group discussions, and distribution of educational packages, including an educational booklet, pamphlet, and poster (Table 1).

Then, two follow-up sessions were held one and two months after the intervention to remind the educational materials. A training course on SM prevention was held for the control group at the end of the study. Three months after the educational intervention, the questionnaire was completed again by the intervention and control groups.

Data were analyzed by SPSS software, version 21. The Kolmogorov-Smirnov test showed that the data have a normal distribution. Qualitative demographic variables and cues to action questions were tested by the chi-square test. Finally, age, knowledge, perceived susceptibility, severity, benefits, and barriers were evaluated by paired and independent t-tests, and the acceptable significant level was $P<0.05$.

Results

The mean age was 30.95 ± 7.41 and 32.50 ± 7.24 in the intervention and control groups, respectively. The number of participants in the intervention and control groups was 60 and 58, respectively. Most women participating in the intervention (80%) and control (72.4%) groups were housewives. More than half of them had a diploma and low education in the intervention (53.3%) and control (58.6%) groups. Moreover, 88.3% and 91.4% of women were married in the intervention and control groups, respectively. Based on the results, 88.3% and 86.2% of women in the intervention and control groups had two or fewer children. Based on the results of statistical analysis, the intervention and control groups were similar in terms

Table 1. The Educational Program for the Intervention Group

Sessions	Objectives	A Summary of Topics and Activities	Educational Time (min)
The first session	Increasing knowledge, perceived susceptibility, and severity	Strategies used to improve the perceived susceptibility included expressing the negative consequences of SM (e.g., drug resistance, intoxication, contamination of breast milk, drowsiness, and distraction), objectifying the risks of SM (e.g., statistics on the prevalence of injuries caused by SM in women). Strategies employed for improving the perceived severity included expressing negative and serious consequences (e.g., fetal defects due to mothers' SM, home, workplace, and driving accidents due to SM), severely objectifying the consequences of SM (gave examples of women who have seriously harmed themselves and their children as a result of SM).	60
The second session	Creating a better understanding of the perceived benefits and barriers of SM and correcting it	Strategies used to improve perceived benefits encompassed identifying the positive benefits of health behaviors (e.g., reducing drug side effects, better physical and mental health for the individual and family, and reducing drug costs by receiving prescription drugs). Strategies applied to overcome perceived barriers consisted of correcting people's misunderstandings (e.g., overcoming concerns about the cost of going to the doctor's office, time-consuming medical visits, and the physician's lack of cooperation in prescribing medications that one feels to be necessary) and introducing incentives for the individual to engage in correct behaviors (e.g., the introduction of centers where physician visits and medication are free and the introduction of free or low-cost insurance coverage).	60
The third session	Introducing internal and external cues to action for better choices	The strategies used included familiarity with the concept of health literacy, credible sources for obtaining accurate health information focusing on SM, how to choose credible guides, how to modify internal cues to action leading to SM behaviors, and reduction in internal fear and anxiety to modify SM behaviors.	60
The fourth session	Improving self-efficacy and modifying behavior to prevent SM	Strategies used to improve self-efficacy were breaking the behavior into smaller steps (e.g., making appointments, going to the doctor's office, receiving a prescription, and taking medication as directed by the physician), modeling behavior (speech by a reference person with similar characteristics of the participants about her correct behaviors), using social motivation and reinforcement (e.g., stating that doing the right behavior is praised and supported by the health system and health professionals), reducing stress before starting a behavior (e.g., giving guidance to talk to literate people in the family before going to the doctor's office), and strengthening life skills including learning how to properly protect yourself and follow up to treat diseases.	60

Note. SM: Self-medication.

of demographic variables, and there was no statistically significant difference between them ($P > 0.05$, Table 2). Data reported by participants about average monthly household income and husband's occupation were not analyzed due to unreliability.

The results represented that there were no significant differences between study groups in terms of the mean score of knowledge, perceived susceptibility, severity, benefits, and barriers before the intervention ($P > 0.05$). Conversely, the mean score of the knowledge of women in the intervention group (74.5 ± 14.66), compared with the control group (58.62 ± 18.20), was statistically significantly higher three months after the intervention ($P < 0.001$).

Three months after the intervention, the mean score of the perceived susceptibility of women in the intervention group (70.58 ± 9.26) was higher compared with the control group (68.19 ± 15.61), but it was not statistically significant ($P = 0.359$). Additionally, the mean score of the perceived susceptibility of women was significantly increased in the intervention group three months after the educational intervention compared to before ($P = 0.015$).

Based on the results, three months after the intervention, the mean score of the perceived severity of women in the intervention group (52.25 ± 24.4), compared with the control group (36.81 ± 17.69), was statistically significantly higher ($P < 0.001$).

The mean score for perceived benefits was statistically significantly higher in the intervention group (56.08 ± 21.25) compared with the control group (40.34 ± 28.62) three months after the intervention ($P < 0.001$). Likewise, the mean score of the perceived benefits of women was significantly increased in the intervention group three months after the educational intervention compared to before ($P < 0.001$).

Similarly, three months after the intervention, the mean score perceived barriers for women in the intervention group (69.83 ± 14.26), in comparison with the control group (62.67 ± 18.43), was statistically significantly higher ($P = 0.002$). The mean score of perceived barriers for women was significantly increased in the intervention group three months after the educational intervention compared to before ($P = 0.007$, Table 3).

Before the intervention, 71.7% and 63.8% of women in the intervention and control groups received information from physicians about the correct use of medications, respectively. This frequency increased to 76.7% in the intervention group three months after the educational

Table 2. Description of Demographic Variables in the Intervention and Control Groups

Variables		Intervention (n = 60) n (%)	Control (n = 58) n (%)	*P* Value[a]
Occupation	Employed	12 (20)	16 (27.6)	0.333
	Housewives	48 (80)	42 (72.4)	
Education	Primary	6 (10)	1 (1.7)	0.191
	Middle	5 (8.3)	6 (10.3)	
	Diploma	21 (35)	27 (46.6)	
	College	28 (46.7)	24 (41.4)	
Marital status	Single	7 (11.7)	5 (8.6)	0.584
	Married	53 (88.3)	53 (91.4)	
Insurance coverage	Yes	53 (88.3)	49 (84.5)	0.541
	No	7 (11.7)	9 (15.5)	
Number of children	0	14 (23.3)	13 (22.4)	0.672
	1	21 (35)	17 (29.3)	
	2	18 (30)	20 (34.5)	
	3	4 (6.7)	7 (12.1)	
	≥4	3 (5.1)	1 (1.7)	

[a]Chi-square test.

Table 3. Comparison of Knowledge, Perceived Susceptibility, Severity, Benefits, and Barriers in Intervention and Control Groups Before and After the Intervention

Constructs		Intervention (Mean ± SD)	Control (Mean ± SD)	*P* Value[a]
Knowledge	Before intervention	59 ± 18.93	58.28 ± 17.78	0.891
	After intervention	74.5 ± 14.66	58.62 ± 18.20	< 0.001
	P value[b]	< 0.001	0.999	
Perceived susceptibility	Before intervention	65.08 ± 14.36	68.19 ± 15.61	0.427
	After intervention	70.58 ± 9.26	68.19 ± 15.61	0.359
	P value[b]	0.015	0.999	
Perceived severity	Before intervention	31.83 ± 15.94	35.7 ± 16.62	0.085
	After intervention	52.25 ± 24.4	36.81 ± 17.69	0.001
	P value[b]	< 0.001	0.871	
Perceived benefits	Before intervention	37 ± 17.5	37.24 ± 15.59	0.758
	After intervention	56.08 ± 21.25	40.34 ± 28.62	< 0.001
	P value[b]	< 0.001	0.992	
Perceived barriers	Before intervention	61.75 ± 19.02	62.5 ± 18.36	0.810
	After intervention	69.83 ± 14.26	62.67 ± 18.43	0.002
	P value[b]	0.007	0.977	

Note. SD: Standard deviation.
[a] Independent *t* test; [b] Paired *t* test.

intervention, but it remained constant in the control group, and there was a significant difference between the intervention and control groups in terms of the source of information on the correct use of drugs ($P=0.041$).

Before the intervention, 66.7% and 84.5% of women in the intervention and control groups mentioned that fear of getting sick had a greater role in preventing the arbitrary use of drugs, respectively. The results demonstrated that there was no significant difference between the intervention and control groups in terms of the role in preventing the arbitrary use of drugs ($P=0.304$, Table 4).

No significant difference was found between the study groups in terms of the practice mean of women in the number of the SM of diseases before the intervention ($P=0.678$). Contrarily the practice mean of women was significantly decreased in the intervention group (0), compared with the control group (10), three months after the intervention ($P<0.001$).

In the intervention group, the practice mean of women was significantly increased three months after the educational intervention compared to before ($P<0.001$, Table 5).

Discussion

The results of the study showed that the knowledge of the intervention group significantly increased compared to before the intervention and the control group. Shamsi et al in a study on SM in pregnant women reported a significant difference in women's knowledge (28). The findings of Zare et al (29) and Sripad et al (30) are similar to those of the present study on the effect of educational interventions based on the HBM on increasing people's knowledge. In another study, Maldonado et al concluded that changing knowledge and attitudes about SM in adolescents is possible with educational interventions (31). Therefore, the HBM is a successful model in increasing women's knowledge about SM prevention. In the present study, although individuals had a relatively good knowledge of SM, their performance was inadequate. This confirms the results of other studies (32,33), indicating that knowledge alone is not enough to adopt healthy behaviors.

Perceived susceptibility in the intervention group increased significantly compared to before the intervention; however, there was no significant difference between the intervention and control groups. The results of various studies confirmed the effectiveness of the HBM in improving the perceived susceptibility in individuals (33-36). In a similar study by Kouhpayeh et al on the educational intervention based on HBM in the SM of Iranian mothers, the perceived susceptibility of women in the intervention group increased significantly compared to the control group (37). The mean score of perceived susceptibility in the intervention and control groups in the present study was higher than average before the educational intervention, thus it seems that due to high perceived susceptibility, the educational intervention could not make a significant difference between the two groups. In the above-mentioned study, the mean score of perceived susceptibility in the two groups before the intervention was below average (37). In another study on HBM-based students' SM, Pirzadeh and Mostafavi also found that people's perceived susceptibility levels were below average (32). It seems that people's perceived

Table 5. Comparison of Practice in the Intervention and Control Groups Before and After the Intervention

Variable		Intervention (Mean ± SD)	Control (Mean ± SD)	*P* value[a]
Practice	Before intervention	10 (±0-20)	10 (±0-20)	0.678
	After intervention	0 (±0-0)	10 (±0-20)	<0.001
	P value[b]	<0.001	0.999	

Note. SD: Standard deviation.
[a] Independent *t* test; [b] Paired *t* test.

Table 4. Comparison of the Role of Effective Factors in Preventing Arbitrary Drug Use in the Intervention and Control Groups Before and After the Intervention

Variables		Before Intervention		After Intervention	
		Intervention (n = 60)	Control (n = 58)	Intervention (n = 60)	Control (n = 58)
		No. (%)	No. (%)	No. (%)	No. (%)
Source of information on the correct use of drugs	Physician	43 (71.7)	37 (63.8)	46 (76.7)	37 (63.8)
	Family	6 (10)	6 (10.3)	3 (5)	6 (10.3)
	Books and magazines	4 (6.7)	11 (18.9)	4 (6.7)	11 (18.9)
	TV	1 (1.7)	2 (3.4)	7 (11.7)	2 (3.4)
	Other patients	1 (1.7)	2 (3.4)	0 (0)	1 (1.7)
	Internet	5 (8.3)	0 (0)	0 (0)	1 (1.7)
	P value[a]	0.148		0.041	
Role in preventing the arbitrary use of drugs	Fear of getting sick	40 (66.7)	49 (84.5)	44 (73.3)	49 (84.5)
	Lack of belief in SM	15 (25)	6 (10.3)	12 (20)	6 (10.3)
	Bad general conditions	4 (6.7)	3 (5.2)	4 (6.7)	3 (5.2)
	Other issues	1 (1.7)	0 (0)	0 (0)	0 (0)
	P value[a]	0.118		0.304	

Note. SM: Self-medication.
[a] Chi-square test.

susceptibility to SM behaviors varies greatly in different groups, times, and places. In addition, the HBM cannot make extensive improvements in this construct in people with high perceived sensitivity.

The educational intervention significantly increased the perceived severity of women in the intervention group compared to the control group. Comparison before and after the intervention also revealed a significant difference in the intervention group. In other studies by Kouhpayeh et al (37) and Shamsi et al (28), perceived severity was improved as a result of training to improve SM behaviors in women; however, no significant difference was observed in another study by Heydartabar (26). Further, Zare et al (29) demonstrated the impact of HBM-based education on improving the perceived severity of the health beliefs of women with cancer screening and urinary tract infection behaviors. Perceived severity is associated with concerns about the consequences of unhealthy behavioral complications, thus it seems that effective education has been able to increase people's perceived severity of SM risks and make them interested in behavior modifications, and the result is reflected in the practice mean score of individuals in this study.

Perceived benefits in the intervention group represented a significant increase compared to the control group as a result of the educational intervention. To adopt healthy behaviors, people need to understand that the benefits of action outweigh the costs (38). Other scholars such as Shamsi et al (28), Heydartabar et al (26), Tavakoli et al (39), and Zare et al (29) confirmed the effect of educational interventions on improving perceived benefits. Improving women's practice in the intervention group indicates that they have a better perception of the benefits of SM behavior modifications. Moreover, implementing regular educational programs based on the HBM can clarify the hidden aspects of the benefits of choosing the right treatment for people and be effective in preventing SM.

Significant differences in perceived barriers were observed between the intervention and control groups after the educational intervention. In studies by Kouhpayeh et al (37) and Heydartabar et al (26), women's perception of barriers to SM also improved as a result of the educational intervention. Accordingly, the educational intervention could reduce people's perception of socio-economic barriers to visiting a physician and thus attempting for SM.

Moreover, the educational intervention increased the selection of a physician as a cue to action among the intervention group and caused a significant difference between the intervention and control groups in terms of the source of information on the correct use of drugs. Khani Jeihooni and Rakhshani reported that the mean score of the cues for action was significantly higher in the interventional group after the intervention (35). According to the findings of Sadeghi et al (40), most cues to action were the health staff and physicians. Physicians and health professionals can act as the most effective guides to prevent SM.

Three months after the educational intervention, SM behavior was significantly reduced in the intervention group compared to the control group and before the intervention. Additionally, Kouhpayeh et al (37) and Shamsi et al (28) reported the effect of the educational intervention on reducing SM performance. It seems that the educational intervention, based on HBM constructs, has been extremely effective in improving the knowledge and attitude of people and has provided the ground for behavior changes.

One of the weaknesses of the present study was the lack of self-efficacy as one of the new constructs of the HBM. In addition, considering that SM is a behavior that usually occurs in the long run and when faced with various health problems, long-term studies are needed to accurately measure changes in behavior.

On the other hand, the strength of this study was the selection of a wide range of women in terms of age for participating in this study, making it possible to generalize the results to a wide range of women in society. Finally, due to full access to participants, the intervention implementation and followed up were with desired quality.

Conclusion

Although the HBM-based educational intervention was effective in preventing SM, the extent of this effect varied for different HBM constructs. Based on the results, the educational intervention could be effective in women's knowledge, severity, benefits, and perceived barriers to SM, but regarding perceived susceptibility, the effectiveness of the model was affected by a person's previous level of preparedness. Given the effective role of health care providers as cues to action, their cooperation should be used to improve SM behaviors in women. Measuring behavior in the short term showed the effectiveness of the HBM-based intervention in preventing SM behaviors, but to clarify this effect in the long run, it is necessary to conduct studies with a long follow-up period.

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Authors' Contribution

FSH (First author): Methodologist/main researcher/discussion writer (35%); HJ (Second author): Introduction writer/methodologist (15%); VKJ (Third author): Introduction writer/methodologist (15%); NS (Fourth author): Main researcher/statistical analyst/discussion writer (35%).

Conflict of Interests

Authors declare that they have no conflict of interests.

Ethical Permissions

This article is taken from a research project (with code 111.1396) entitled "the effect of education on HBM on preventive behavior of SM in women of reproductive age (15-49)", approved by the Ethics Committee of Jahrom University of Medical Sciences (Code IR.JUMS.REC.1396.066).

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