



Reproductive Health Literacy and its Related Factors in Women of Reproductive Age Referring to Comprehensive Healthcare Centers in Chabahar in 2021

Zahra Sayadi¹, Habibeh Ahmadipour^{2*}

¹Department of Medical Education, Medical Education Development Center, Kerman University of Medical Sciences, Kerman, Iran

²Department of Community Medicine, Medical Education Leadership and Management Research Center, Kerman University of Medical Sciences, Kerman, Iran

Abstract

Background: Reproductive health literacy plays a vital role in the health of women as one of the vulnerable groups in the community. Therefore, the present study aimed to investigate reproductive health literacy and its related factors in women of reproductive age referring to comprehensive healthcare centers in Chabahar in 2021.

Methods: This cross-sectional study was conducted on women of reproductive age referring to comprehensive urban and rural healthcare centers in Chabahar. The participants were 220 women who were selected using convenience sampling. The data were collected using the Reproductive Health Literacy Scale and analyzed via SPSS software (version 22).

Results: The mean score of reproductive health literacy was significantly lower in the women aged 15-24 years, those with lower education, women in rural areas, and housewives. The mean score of reproductive health literacy was significantly different among the women in terms of socioeconomic status ($P=0.12$). The results of multiple linear regression analysis indicated that the age group and education could significantly predict the women's overall reproductive health literacy.

Conclusion: Following the findings of this study, effective interventions need to be incorporated into national women's health programs to improve reproductive health literacy in women with lower age and primary education, women living in villages, and housewives.

Keywords: Educational needs, Reproductive health, Health literacy, Reproductive health literacy

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Introduction

Health literacy refers to the degree to which individuals are able to find, understand, and use information and services to inform health-related decisions and actions for themselves and others. Health literacy develops under the influence of individual and social factors such as demographic characteristics, socioeconomic status, education, occupation, and a person's prior health knowledge (1,2)

Various studies in Iran have shown that Iranians do not have a high level of health literacy (3-5). Javadzade et al showed that the female gender, older age, lower economic status, and education are associated with low health literacy (6).

Women of reproductive age are considered one of the vulnerable groups in any community due to their special physiological conditions during this period such

as pregnancy, childbirth, and breastfeeding. Thus, there is a need for effective interventions to increase the level of health literacy in these women (2).

According to the World Health Organization (WHO), reproductive health literacy can play an effective role in countries achieving sustainable development goals such as gender equality and higher education levels (7). On the other hand, complications such as unwanted pregnancies, high-risk sexual behaviors, and sexually transmitted infections can occur in women due to the low level of reproductive health literacy (7).

Izadirad et al showed that there is a significant relation between reproductive health literacy and pregnancy care, highlighting the need to pay more attention to reproductive health literacy in health promotion programs (8). A study by Najimi et al in Isfahan showed that people with insufficient health literacy had a lower average self-



care score (2). Khalajabadi et al, showed that in Tehran only 44% of couples had correct fertility information. The authors highlighted the need for planning comprehensive educational interventions to improve fertility knowledge, especially for people who have a low level of education and health literacy (9).

To the best of the researchers' knowledge, no study has addressed reproductive health literacy in women of reproductive age in Chabahar, Iran and the surrounding areas. Furthermore, an awareness of reproductive health literacy in this group of women can contribute to subsequent planning in maternal health programs. Accordingly, the present study sought to investigate reproductive health literacy and its related factors in women of reproductive age visiting comprehensive urban and rural healthcare centers in Chabahar in 2021.

Methods

This cross-sectional (descriptive-analytical) study was conducted in Chabahar. The research population consisted of all women of reproductive age referring to comprehensive urban and rural healthcare centers in Chabahar in 2021. Following a similar study, with a 95% confidence interval, 4% accuracy, and optimal reproductive health literacy of 90%, the sample size was estimated as 216 persons (10). However, 220 persons were selected as the participants in the study. To this end, the women visiting all the urban and rural healthcare centers (8 centers) in Chabahar were selected as the participants using non-probability convenience sampling. The inclusion criteria were married women aged 15 to 49 years and willingness to participate in the study. The participants who submitted questionnaires with more than 10% of the questions unanswered were excluded from the study.

The data were collected using a questionnaire that contained two sections. The first section assessed the participants' demographic characteristics (age group, education, occupation, and place of residence). The second section was the Reproductive Health Literacy Scale. The scale was developed in a study in Japan. Its validity and reliability were checked and the reliability of the original version was reported as 0.88. Kohan et al confirmed the reliability of the Persian version of the instrument with Cronbach's alpha of 0.80 and a correlation coefficient of 0.71 (10). The instrument contains 21 items with four subscales: (a) Women's selection and use of health information (9 items), (b) self-care during menstruation (five items), (c) awareness about the woman's body (five items), and (d) sexual counseling with the life partner (two items). Each item is scored on a four-point Likert scale (4= Always true to 1=Not true at all). A respondent's total score ranges from 21 to 84 (10,11).

To collect the data, the researcher visited comprehensive urban and rural healthcare centers in Chabahar.

After obtaining oral consent from the participants, she asked them to complete the questionnaire. The researcher resolved any ambiguity or question posed by the participants. The questionnaire was completed anonymously for at least 10 minutes. The protocol for this study was confirmed by the research ethics committee under the ethics code IR.KMU.REC.1400.087.

The data were analyzed using descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (independent samples *t* test, ANOVA, and multiple linear regression analysis, by establishing presumptions). All statistical procedures were performed by SPSS software (version 22) at a significance level of 0.05.

Results

The participants were 220 women of reproductive age referring to comprehensive urban and rural healthcare centers in Chabahar. A majority of the participants (43.6%) were in the age group of 25 to 34 years old, had a degree below the diploma status (60.5%), were living in rural areas (78.2%), and were housewives (82.3%) (Table 1).

The mean scores for reproductive health literacy and the subscales of selection and use of health information, self-care during menstruation, awareness about the body, and sexual counseling were 70.70±8.9, 30.19±3.9, 17.04±2.5, 16.86±2.4 and 6.60±1.1, respectively.

Table 2 shows a comparison of the mean scores of reproductive health literacy and its subscales in terms of demographic characteristics. As can be seen, the mean scores for reproductive health literacy and its subscales for the participants in the age group of 15 to 24 years were significantly lower than the scores of the participants in other age groups, except for the subscale of choosing and using information, which did not show any significant

Table 1. The participants' demographic characteristics

Variable	Categories	Number (%)
Age group	15-24 years	91 (41.4%)
	25-34 years	96 (43.6%)
	35-44 years	33 (15%)
Education	Under diploma	121 (55%)
	High school diploma	61 (27.7%)
	Academic	38 (17.35)
Socioeconomic status	Weak	18 (8.2%)
	Average	133 (60.5%)
	Good	62 (28.2%)
	Excellent	7 (3.1%)
Occupation	Housewife	39 (17.7%)
	Employee	181 (82.3%)
Place of residence	City	48 (21.8%)
	Village	172 (78.2%)

Table 2. A comparison of reproductive health literacy and its subscales in terms of demographic characteristics

Variable	Categories	Selection and use of information	Self-care during menstruation	Body awareness	Sexual counseling	Reproductive health literacy
Age group	15-24 years	29.51 ± 4.2	16.28 ± 2.7	16.04 ± 2.4	6.29 ± 1.2	68.14 ± 9.5
	25-34 years	30.64 ± 3.6	17.63 ± 2.2	17.51 ± 2.1	6.81 ± 1.0	72.60 ± 7.6
	35-44 years	30.75 ± 3.9	17.39 ± 2.7	17.24 ± 2.5	6.84 ± 1.0	72.24 ± 9.2
<i>P</i> value		0.10	0.001	0.001	0.004	0.001
Education	Lower education	29.15 ± 4.1	16.50 ± 2.7	16.13 ± 2.6	6.27 ± 1.1	68.06 ± 9.3
	High school diploma	30.59 ± 3.3	17.24 ± 2.4	17.27 ± 1.8	6.72 ± 1.1	71.68 ± 6.7
	Higher education	32.86 ± 3.2	18.42 ± 1.9	18.52 ± 1.5	7.47 ± 0.8	77.28 ± 6.7
<i>P</i> value		0.001	0.001	0.001	0.001	0.001
Socioeconomic status	Weak	28.88 ± 5.3	16.66 ± 3.5	16.11 ± 3.2	6.05 ± 1.5	67.72 ± 13.1
	Average	29.94 ± 3.8	17.06 ± 2.5	16.81 ± 2.2	6.66 ± 1.1	70.49 ± 8.5
	Good	31.11 ± 3.8	17.40 ± 2.2	17.29 ± 2.4	6.66 ± 1.2	72.46 ± 8.5
	Excellent	30.14 ± 1.4	14.28 ± 2.1	16.00 ± 2.4	6.28 ± 0.9	66.71 ± 4.3
<i>P</i> value		0,12	0.05	0.20	0.16	0.12
Occupation	Housewife	32.69 ± 3.3	18.61 ± 2.2	18.28 ± 1.8	7.53 ± 0.7	77.12 ± 7.1
	Employee	29.65 ± 3.9	16.70 ± 2.5	16.55 ± 2.4	6.40 ± 1.1	69.32 ± 8.7
<i>P</i> value		0.001	0.001	0.001	0.001	0.001
Place of residence	City	31.70 ± 3.9	17.68 ± 2.7	17.43 ± 2.5	7.06 ± 1.1	73.89 ± 9.5
	Village	29.77 ± 3.8	16.86 ± 2.5	16.70 ± 2.3	6.47 ± 1.1	69.81 ± 8.5
<i>P</i> value		0.003	0.05	0.06	0.002	0.006

difference ($P=0.10$).

The data in Table 2 also reveal that the mean scores for reproductive health literacy and its subscales in women living in rural areas were significantly lower compared to the women living in urban areas, except for the subscale of self-care during menstruation ($P=0.05$) and body awareness, which did not show any significant differences ($P=0.06$). Besides, the mean scores for reproductive health literacy and its subscales were significantly lower in housewives with lower level of education ($P<0.05$). However, the mean scores for reproductive health literacy and its subscales did not show statistically significant differences in the participants with different socioeconomic levels ($P>0.05$).

The multiple linear regression analysis showed that the age group and education were significant predictors of the overall reproductive health literacy score. Accordingly, the reproductive health score was higher by 3 units on average among the participants in the age group of 25 to 34 years than the participants in the age group of 15 to 24 years (95% CI=0.6-5.5; B=3.05; $P=0.01$).

Furthermore, the reproductive health score in women with a high school diploma was on average 3.3 units higher than that of women with degree below the diploma education (95% CI=0.69-6.50; B=3.37; $P=0.01$) and the reproductive health score in women with university education was on average 5.5 units higher than women with degree below the diploma education (95% CI=0.6-5.5; B=3.05; $P=0.01$).

Discussion

The present study showed that the average mean of reproductive health awareness among women referring to Chabahar healthcare centers in 2021 was 70, which was higher compared to the mean score (66.16) reported by Kohan et al in Isfahan (10).

The findings of the present study revealed that the women in the age group of 25 to 34 years had a higher reproductive health literacy than the women in the age group of 15 to 24 years. Similarly, Kohan et al (10) showed that women younger than 25 years had a lower level of reproductive health literacy than other groups. Moreover, Hajizade-Valokolae et al (12) showed that marriage at an older age can improve reproductive health. In addition, Keshavarz et al (13) found that fertility-related behaviors are more effective in women who married at an older age. Accordingly, it can be argued that reproductive health is one of the main aspects of individual health, and paying attention to it at a younger age plays an important role in the overall health of the family. Thus, when developing health plans for women of reproductive age, it is necessary to consider women in younger age groups and organize and hold effective interventions to increase their reproductive health literacy.

The data in this study revealed that the reproductive health literacy score in women with a high school diploma and higher education was higher than that of women with degree below the diploma, as evident in a study by Dabiri et al in Bandar Abbas (7). Moreover, Kohan et al

reported that women with a higher level of education had a higher level of health literacy. However, the regression analysis showed that education could not predict health literacy probably due to the interaction between the demographic variables (10). In contrast, both univariate and multivariate regression analyses in the present study indicated that education could significantly predict the health literacy score. Education, as one of the social factors affecting health, plays a vital role in community, individual, and especially reproductive health. Increasing the level of education and consequently promoting reproductive health literacy in women who have a lower level of knowledge plays a significant role in improving the health of women and mothers in the community.

The present study showed that the overall scores of reproductive health literacy and its subscales did not show any significant difference in terms of socioeconomic status. No study was found to compare reproductive health literacy based on economic status. A study by Javadzade et al in Isfahan showed that people with a lower household income have a lower level of health literacy (6). Javadzade et al also reported that people with low-income levels have poor health (14).

Although the data in the present study revealed no significant relation between reproductive health literacy and the socioeconomic status of women of reproductive age, socioeconomic status as another social factor affecting health should be incorporated into health plans when developing interventions to promote health literacy, especially reproductive health.

The findings of the present study indicated that the mean scores for reproductive health literacy and its subscales were lower in rural women and housewives. Tavousi et al found that housewives and women living in villages had a lower level of health literacy (3). A study by Borji et al in Ilam showed that housewives had lower health literacy (15). Women who work as employees have more opportunities for social and cultural interactions. Thus, they have more knowledge about health (15). It should be noted that health awareness and knowledge, especially reproductive health, can be improved in housewives and rural women through public education and mass media.

The present study was conducted with some limitations. This study was carried out using a cross-sectional design on a limited number of participants. Thus, its findings may have limited generalizability to other populations and groups. The data in this study were collected through a self-administered instrument, which could lead to bias in the participants' answers to the questions. Besides, the participants were selected using convenience sampling. Thus, the selected participants may not be representative of the population of women of reproductive age in Chabahar.

Conclusion

Following the findings of this study, effective interventions need to be incorporated into national women's health programs to improve reproductive health literacy in women with lower age and primary education, women living in villages, and housewives.

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Authors' Contribution

Conceptualization: Zahra Sayadi, Habibeh Ahmadi-pour.

Data curation: Zahra Sayadi.

Formal analysis: Habibeh Ahmadi-pour.

Investigation: Zahra Sayadi, Habibeh Ahmadi-pour.

Methodology: Zahra Sayadi, Habibeh Ahmadi-pour.

Project administration: Habibeh Ahmadi-pour.

Resources: Zahra Sayadi, Habibeh Ahmadi-pour.

Software: Zahra Sayadi, Habibeh Ahmadi-pour.

Supervision: Habibeh Ahmadi-pour.

Validation: Zahra Sayadi, Habibeh Ahmadi-pour.

Visualization: Zahra Sayadi, Habibeh Ahmadi-pour.

Writing—original draft: Zahra Sayadi, Habibeh Ahmadi-pour.

Writing—review & editing: Zahra Sayadi, Habibeh Ahmadi-pour.

Competing Interests

The authors declared no conflict of interest.

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