

Comparing the Influence of Integrated and Group Counseling on Childbearing Attitudes in Women on the Verge of Marriage

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ABSTRACT

Background & aim: Premarital counseling is the best opportunity to provide childbirth counseling for young people on the verge of marriage. Given the lack of data on the most effective way to deliver such information during this period, the present study aimed to compare the effects of integrated and group counseling on the attitude towards childbearing in women on the verge of marriage.

Methods: This experimental study was carried out on 162 women receiving premarital counseling in the healthcare centers of Mashhad, Iran, during 2015-2016. The subjects were divided into three groups, who received the integrated, group, and routine counseling services. The integrated group received two sessions of group and one session of individual counseling. The group counseling received three sessions of 2-h counseling with one week interval. The control group received only the routine counseling. Data were collected using a demographic and childbirth attitude questionnaire and analyzed using one-way ANOVA, Kruskal-Wallis, paired sample t-test, and Wilcoxon tests.

Results: After the intervention, the attitude towards childbearing underwent a significant change in participants of integrated ($P < 0.001$) and group ($P = 0.03$) counseling, compared to that of the control group. However, there was no significant difference between two intervention groups in terms of their attitude.

Conclusion: Both integrated and group counseling methods are recommended for providing a favorable attitude towards childbearing in young people. Therefore, enough time must be spent on childbearing counseling for women on the verge of marriage attending premarital counseling clinics.

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Introduction

Childbearing is one of the most important components of population science and has received a great deal of attention in the field of social issues (1). Childbearing is the result of various factors and is influenced by the knowledge and attitude of couples (2). Attitude can be defined as the subject's readiness to act, and the positive or negative feelings that one has towards another person, idea, or situation.

Therefore, attitudes towards fertility and childbearing can be defined on the basis of a set of cognitive attitudes, feelings, emotions, and behaviors about childbirth (3). An individual's behavior depends on one's attitude towards a particular manner and how other people (i.e., important people in the community) perceive it, both of which determine whether or not a person should behave in a particular way (4).

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Evidence shows that in many parts of the world, there has been a fundamental shift in attitudes toward marriage and childbearing (5).

Advancement of technology has influenced various aspects of cultural life. As a result of such developments, attitudes and tendencies toward childbirth, as a cultural component, have also gone through changes, resulting in families with fewer children. Moreover, it seems that since young people are exposed to globalization more than others, they are more susceptible to changes. Therefore, it is essential to conduct studies regarding their attitudes and motivations towards childbearing (6) since attitudes can be modified via education and counseling (3). By changing people's attitudes, it is possible to modify their unhealthy behaviors and help them move towards the adoption of healthy behaviors (4).

Some of the highlighted objectives of the Policies for Population, Family, and School Health of Iran include the promotion of the overall fertility rate, improvement of premarital education, implementation of counseling programs regarding the religious, social, and sexual aspects, healthy childbearing, and fertility. Consolidation of the family foundation through educating couples and raising awareness, attitude, and practice of the community about the importance of healthy childbearing and avoidance of one-child families are the general policies of the country emphasized by the Supreme Leader (3, 7). Many studies have been previously conducted in Iran to identify the rate of fertility decline, factors leading to this outcome, or the relationship of various variables with this declined rate. However, there are few interventional studies available that offer a solution for the improvement of this rate. This can be a good reason for the necessity of the design and implementation of the present study. Therefore, the present study does not entail statistics on the declining rate of childbirth and its reasons since they have been repeatedly discussed in various studies.

Women play the most important role in childbirth, and their empowerment can affect their fertility behavior. For this purpose, special attention should be paid to the empowerment of this gender (8). Based on previous research,

education is the most important factor in this regard (9). Accordingly, the content of education needs to be changed in order to improve this process. Therefore, the provision of information for couples and modification of their attitudes toward childbearing rather than the delivery of family planning education seems necessary at the onset of their marriage since they are going to experience childbearing, and it is important to improve their attitude towards this issue (8).

Particular tasks for healthcare providers have been highlighted in various studies conducted inside and outside of Iran, including studies performed by Tanja Tyden et al. (2006) (10), Kearney et al. (2016) (11), and Karimian et al. (2016) (12). In an article entitled "Deciding on Fertility," Daniel Mazza revealed that many women with delayed pregnancy long for having more children, which is beyond their biological capability. However, some women have no intention of childbearing because of being unaware of the risks of pregnancy at an older age. Mazza also pointed out that related health service providers should provide women with the necessary information in this regard. Moreover, in the aforementioned research, it was stressed that future studies should introduce appropriate methods for service providers to enable them to establish proper communication and convey the necessary information (13). Furthermore, Rahmati suggested that it is possible to solve many fertility problems through careful counseling, proper communication, and the provision of information (3).

Therefore, the improvement of the quality of premarital counseling to provide young people with the required information necessitates effective consultation and proper use of health counseling techniques (14). The premarital counseling program includes four aspects, namely emotional and social relationships, marital relationships, family planning, and healthy pregnancy, which are provided for couples in the form of a 2-h session. Previous research has revealed that the time allocated to learning these topics is not sufficient since this limited duration does not allow for a comprehensive presentation of all the four topics (15). Accordingly, healthcare planners have considered the necessity of increasing the

duration of these sessions. Currently, the common method of providing premarital counseling includes group counseling and education.

If group counseling is performed by the adoption of proper techniques with a suitable duration, it can improve one's attitudes and perceptions, thereby leading to the development of better problem-solving abilities. Moreover, the individuals taking part in such counseling learn new behaviors in groups and criticize themselves and others. Members of a group show more reactions to each other and this helps them to develop insights. Furthermore, in group counseling, clients understand that they are not alone and that there are other people who have similar problems (16). Therefore, group counseling can set the ground for individual counseling (17).

On the other hand, group counseling has its own disadvantages. For instance, it may not be able to affect all aspects of individuals' perceptions (18). Based on the experiences of researchers, other limitations of group counseling include the inability to disclose certain problems (e.g., personal issues) that the individuals are ashamed of expressing in front of others. Accordingly, it may be more appropriate to use individual counseling or a combination of individual and group counseling. On the other hand, group counseling is more cost-effective than individual counseling if the aim is to provide information and prevent psychological disorders (19). Based on the above-mentioned issues, in the current study, a need assessment was conducted by the researcher in order to measure the level of need for face to face counseling and the level of their desire for individual counseling. This need assessment also included inquiries regarding the number of appropriate sessions for having rich-content counseling sessions and prioritization of the required information. The need assessment revealed that most women wanted to attend individual sessions to gain awareness regarding their problems or find proper solutions.

With regard to the results of previous studies on individual and group counseling and the review of the existing literature, no study has compared the effects of premarital group and

integrated counseling. Therefore, the kind of counseling that is more effective in improving attitudes towards childbearing in healthcare centers remains to be investigated. This issue shows the necessity of designing and implementing a more effective program by modifying the schedule and content of the program. Therefore, the present study was designed and conducted to compare the effects of group and integrated counseling on attitudes towards childbearing among women referring to premarital counseling centers in Mashhad, Iran, in 2014-15.

Materials and Methods

The present interventional study was performed on 162 eligible women referring to the premarital counseling centers affiliated to Mashhad University of Medical Sciences, Mashhad, Iran. The inclusion criteria were: 1) Iranian nationality, 2) residency of Mashhad or nearby villages, 3) husband's written consent to participate in the study, 4) literacy, and 5) first marriage. On the other hand, the exclusion criteria were: 1) unwillingness to continue the study, 2) absence in counseling sessions (a total of 90 min absence during all sessions), and 3) incomplete response to the questionnaire. Cohen's table was used to determine the sample size since no similar article was found by searching the reliable scientific websites.

The sample size was estimated at 135 participants (45 cases per group) using a two-tailed test at a significance level of 0.05, effect size of 0.60, and power of 0.80. Given the 20% ($n=27$) dropout rate, the sample size increased to 54 cases for each group and 162 cases in total (20). The samples were selected using convenience sampling method. Subsequently, the subjects were assigned to three categories of "group counseling", "integrated counseling", and "control group" (recipients of the normal training provided by these units) using the random method and random number table generated by the software. Both of the intervention groups received three 2-hour counseling sessions, with one-week intervals on topics related to emotional-sexual marital relationships, pregnancy care, and childbirth. The integrated counseling group received two group counseling sessions at first, followed by an individual counseling session. The

participants in the group counseling received all of the three sessions in the form of group counseling.

Childbirth counseling was provided in the second session of group counseling and the first session of integrated counseling. Individual recipients of integrated counseling were also provided with information on childbirth during individual counseling depending on the needs and requirements of the client. After referring to the mentioned health centers, the researcher presented himself to the clients, explained the purpose of the research and its benefits, and assured them that the data would be collectively reviewed and kept confidential. They were then asked to sign an informed consent form if they liked to cooperate. The number of participants in the group counseling session in each of the two groups was 5-15 cases. Finally, in each consultation program, 45 volunteers were selected and randomly assigned to three groups.

For group allocation, the participants were numbered from 1 to 45 using the random allocation technique. Subsequently, random numbers were generated within the range of 1-45 and randomly assigned to three groups through Minitab software (version 16). The participants were informed of the meeting dates via the contact number they had written in the informed consent form. Sampling started in November 2015 and lasted until August 2016. The data were collected using a demographic form and attitude towards the childbearing questionnaire. This questionnaire contains 47 items developed based on a qualitative study conducted by Khadivzadeh (2013) (21). The validity of this instrument was verified in a study conducted by Khadivzadeh et al. (2015) (3). This questionnaire is rated on a five-point Likert scale (strongly disagree=1, disagree=2, neutral=3, agree=4, and strongly agree=5) after the confirmation of its validity and reliability. Therefore, the minimum and maximum scores are 47 and 235, respectively.

Reliability of the questionnaire was tested through content and face validity tests. The questionnaire was then distributed between 10 faculty members of Nursing and Midwifery of Mashhad University of Medical Sciences. Internal validity of the questionnaire was also confirmed through Cronbach's alpha coefficient

($r=0.94$). The investigation of the validity of the questionnaire also rendered a test-retest coefficient of 0.97 ($P<0.001$), indicating the external validity of the questionnaire. The content of the counseling session was based on a need assessment carried out by the researcher, using reliable scientific resources after the approval of the experts in the field.

Counseling generally included such topics as the importance of childbearing in Islam, physical, psychological, and spiritual benefits of childbirth, familial benefits of childbirth, and negative consequences of having no or few children for the country, parents, and children. The sessions on health issues were held with regard to the principles and techniques of counseling. These issues included the establishment of a favorable and trusting relationship, familiarization of the client with the counseling plan, active listening, identification and explanation of the problem based on the client's needs, assistance to make informed decisions or change attitudes in clients, management, and termination of the session. These items were related to the counseling topics and used as needed during the counseling sessions.

The researcher participated in several counseling sessions to receive the necessary training needed for holding group counseling. Moreover, the researcher obtained the approval of the experts for holding these sessions. Furthermore, he/she received the necessary training in sexual health and healthy pregnancy workshops and passed related courses. Accordingly, her/his qualifications for holding these sessions were approved by professors in this field.

The data were analyzed in SPSS software (version 16). Descriptive statistics were used to describe the characteristics of the participants. In addition, an inter-group comparison was made using the one-way ANOVA and Kruskal-Wallis test. Additionally, group homogeneity for the measurement, ranked, and nominal variables was determined using the one-way ANOVA, Kruskal-Wallis test, and Chi-square test, respectively. A p-value of less than 0.05 was considered statistically significant.

Results

A total of 162 eligible women on the verge of

marriage referring to healthcare centers were included in the study. However, 18 participants were excluded due to the lack of regular attendance at counseling sessions and incomplete response to the items of the questionnaire. Finally, the data of 144 individuals were subjected to statistical analysis.

All the groups were homogeneous since they had no significant difference in terms of age, place of residence, education, and occupation ($P < 0.05$). However, they were heterogeneous only with regard to their income. The demographic characteristics of the study population are presented in Table 1.

Table 1. Demographic characteristics of study population and test results of each variable

Variable	Group counseling N=45	Integrated counseling N=45	Control N=45	Test Result
Age				
SD±Mean	24.5±51.36	25.5±0.4	23.5±61.16	
Min	15	15	15	*P=0.38
Max	38	36	37	
Place of residence				
City	44 (97.8)	45 (100.0)	54 (100.0)	**P=0.3
Village	1 (2.2)	0.0	0.0	
Level of Education				
Elementary school	(0.0)	1 (2.2)	0.0	
Junior high school	4 (8.9)	3 (6.7)	2 (3.7)	***P=0.26
High school	13 (28.9)	6 (13.3)	12 (22.2)	
Academic education	28 (62.2)	35 (77.8)	40 (74.1)	
Occupation				
Clerk	7 (16.3)	11 (24.4)	10 (19.6)	
Student	10 (23.3)	13 (28.9)	24 (45.1)	** P=0.09
Housewife	15 (34.9)	16 (35.6)	15 (27.5)	
Others	13 (25.6)	5 (11.1)	6 (7.8)	
Income				
Moderate	37 (82.4)	27 (61.3)	46 (86.5)	
Low	8 (17.6)	10 (22.6)	0.0	***P=0.04
High	0.0	8 (16.1)	8 (13.5)	

* One-way ANOVA test, ** Chi-square test, *** Kruskal-Wallis test

Table 2. Determination and comparison of attitude toward childbearing after the intervention and attitude changes among the three groups

Variables	Group counseling $\bar{X} \pm SD$	Integrated counseling $\bar{X} \pm SD$	Control $\bar{X} \pm SD$	Test results
Pre-intervention attitude towards childbearing	164.22±91.2	165.23±49.2	160.17±18.7	*: P=0.39 f=0.9 df=2
Post-intervention attitude towards childbearing	167.21±73.6	169.24±38.6	160.63±17.75	*: P=0.07 2.6 f= df=2
Extent of attitude modification	2.82	3.89	0.46	** P<0.001 df=2 $\chi^2 = 15.4$
Test results	***: P=0.09 Df=44 T=1.69	***: P<0.001 Df=44 3.9 T=	****: P=0.1 Z=-1.63	

*: One-way ANOVA, **: Kruskalwalis test, ***: paired t-test, ****: Wilcoxon test

All three groups were homogenous regarding the attitudes towards childbearing before the intervention and had no statistically significant difference. On the other hand, the results of the Kruskal-Wallis test revealed a significant difference between the intervention and control groups in terms of this variable after the intervention (Table 2).

By adjusting the heterogeneous variable of income through the covariance test, the effect of group counseling on attitude towards childbearing was measured. However, based on the results, this variable, despite being heterogeneous, had no effect on the dependent variables in the two groups.

Table 3. Comparison of the extent of attitude modification after the intervention between the three groups

Groups		Extent of attitude modification
Group counseling	Integrated counseling	*P=0.6
Group counseling	Control group	*P=0.03
Integrated counseling	Control group	*P<0.001

*:U Mann-whitney

According to the results of the Mann-Whitney U test, there was a significant difference between the integrated counseling and control groups and between the group counseling and control groups in terms of the extent of attitude modification (P<0.001) (P=0.03). However, no significant difference was observed between the two intervention groups in this regard (P= 0.6) (Table 3).

A total of 37% of the participants had a positive response. Moreover, in the demographic information form, the participants were asked to mark their source of information on childbearing while being allowed to choose several items. The frequency of the use of different sources for childbearing is shown in Table 4. In total, 56.6% and 49% of the women declared that their families and internet were their sources of information about childbearing, respectively (Table 4).

The participants were asked whether or not they had received any education on childbearing.

Table 4. Sources of information of the subjects on parenting

Sources of information	Female (Percentage)
Family	56.6
Internet	49
Television	40
Friends	38.3
Colleagues	35
Books	32.4
Classes or educational textbooks	19.1
Newspapers and magazines	2
Radio	1.8

There was a significant difference between the users and nonusers of the internet as a source of information regarding the scores of attitude toward childbearing (P<0.001). According to the Mann-Whitney U test, the mean ranks were 76.18 and 106.82 in the first and second groups, respectively. However, no significant difference was observed between the subjects reporting the family as a source of information and those not

using this institution as their source of information in terms of attitudes towards childbearing (P=0.48).

Discussion

The literature contains no similar study to compare the effects of these two counseling methods (used in the present study) on the attitude toward childbearing among women on the verge of marriage. Therefore, this section of

the study made use of previous research on women's attitudes towards childbearing or the impact of education on childbearing.

Results of the statistical tests showed no significant difference between the two interventional methods regarding the change of attitude towards childbearing. However, the rate of improvement in the attitude of the two intervention groups was more significant than that in the control group. Moreover, the integrated counseling method significantly improved the attitude toward childbearing after the intervention. Therefore, the combination of individual and group counseling on childbearing can affect the attitude of young people toward this issue. In individual counseling, the counselor listens to the individual's opinions and recognizes undesirable attitudes toward the subject. Thereafter, he/she provides necessary information about the risk factors and problems of delayed childbearing or having one or fewer children in order to help them to modify their attitude and make the right decision. All the information is provided based on the specific circumstances (e.g., age) of the clients.

This issue seems to lead to a significant improvement in the childbearing attitude of the individuals in integrated counseling. The necessary information about parenting was also provided for the participants. However, spending time with just one person makes it easier to explore their views and attitudes and also increases the efficiency of counseling. Nevertheless, the provision of information in the form of group counseling caused a modification in their attitudes; however, this change was not statistically significant, compared to the pre-intervention stage.

Maeda et al. (2016), investigating the effect of education on raising awareness of and desire for childbearing and reducing anxiety level in people of reproductive age, found a significant increase in the awareness level of participants about fertility after the intervention. However, regarding fertility motivation, no significant difference was observed between the control and intervention groups (22). This may be because topics, such as childbearing, the attitudes towards which are highly important and can be influenced by interactions between individuals and their experiences are issues that

need in-person counseling since reading online brochures will not have a significant impact in this regard. In the present study, two methods of counseling were investigated.

Counseling is the process of helping a client; in other words, the consultant attempts to empower the clients so that he/she can find solutions to their problems and answer their questions. In a study conducted by Maeda et al., despite the increase in the participants' level of awareness, their desire for childbearing did not change. Therefore, the provision of mere education without considering the opinions and concerns of the individuals and finding the root cause of problems cannot have a significant impact. Accordingly, this issue was taken into consideration in the present study. The significant intra-group improvement of attitude toward childbearing in integrated counseling can be attributed to this feature. However, the desire of young people for fewer children seems to be deeply internalized in these individuals; accordingly, their attitude cannot be changed within a few hours. Therefore, it is required to perform further and broader interventional studies and provide facilities in order to achieve more desirable results.

Findings of the present study showed that the internet can decrease the desire for childbearing. Moreover, 15.1% of the participants used educational textbooks and the usage of books was lower than that of the internet. The result of a study conducted by Enayat (2013) revealed that the modern data and communication technologies (e.g., satellites, internet, and mobile) had a negatively significant relationship with the desire for childbearing ($r=-0.4$, $P<0.001$). However, traditional media (e.g., television and radio) had neither a negative or positive impact on the desire for childbearing. In the mentioned study, data and communication modern technologies were introduced as the most important variable contributing to the desire for childbearing, which has a significantly negative impact on attitude towards childbearing. This confirms a theoretical framework derived from Giddens's view on the link between cultural globalization and the decline in childbearing (6).

Ektabi et al. (2006) in their study titled "Reduction of Fertility in Iran and its Associated

Effective Socioeconomic and Cultural Factors with Emphasis on the Role of Family Planning in Isfahan from 1986 to 1996", reported that using mass media and modern media had an association with the decrease of fertility rate (23). This is consistent with the results obtained in the present study. Therefore, authorities should revise the content of textbooks in the curriculum and think of measures to improve attitudes toward childbearing through the publication of books and preparation of appropriate and credible websites.

One of the limitations of the present study is the lack of proper place for individual counseling. In addition, given that the classroom assigned for marriage counseling was also used for other services, the time that the room was available for the researcher during the day was inconvenient for the participants.

One of the important goals of any research is to provide useful results to help change or improve the present situation. Results of the present study can be used in the following clinical, educational, managerial, and research areas.

One of the main responsibilities of healthcare professionals is to provide healthcare counseling, especially in the area of healthy pregnancy and childbearing. Therefore, it is hoped that the results of this study will help to develop the activity scope of health workers and improve their quality with respect to health counseling. Moreover, it is suggested to construct special rooms for individual counseling in health centers. The findings of the research regarding the role of families in childbearing-related decisions in young individuals underscore the need for the consideration of premarital educational programs for young parents.

Results of the present study can be used in planning to improve the knowledge and attitude of couples toward childbearing. Moreover, the findings showed that integrated counseling improved the participants' attitudes toward childbearing. Therefore, individual counseling by communicating and providing appropriate information for individuals can also be used to recognize the root cause of negative viewpoints and attitudes. Moreover, this study also identified resources that have a positive or

negative impact on young people's attitudes toward childbearing. Therefore, this information facilitates the adoption of effective measures in order to improve young individuals' attitudes toward childbearing and avoid spending extra time, energy, and money on issues that may not have an impact on their attitudes.

Results of this study can help to increase the knowledge of healthcare professionals about the impact of premarital counseling on improving the knowledge and attitude of young people. Based on the collected data on the effects of group and integrated counseling on the quality, awareness, attitude, sexual attitude, and fertility of young individuals, the results can be applied to students' educational programs. The results of this study indicate the necessity of improving group and individual counseling skills for midwifery students.

Results of the present study can be the basis for further research aiming to compare the impacts of the group and integrated counseling. Therefore, suggestions for future studies are provided below:

- 1) Comparison of the effects of group and integrated counseling on attitudes towards childbearing among men on the verge of marriage
- 2) Comparison of the effects of group and integrated counseling on attitudes toward childbearing in other community groups
- 3) Comparison of the attitudes towards childbearing in young individuals on the verge of marriage with other community groups

Conclusion

Both integrated and group counseling methods are recommended for providing a favorable attitude towards childbearing in young people. Therefore, enough time must be spent on childbearing counseling for women on the verge of marriage attending premarital counseling clinics.

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Conflicts of interest

Authors declared no conflicts of interest.

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