Revista Românească pentru Educație Multidimensională
ISSN: 2066-7329 | e-ISSN: 2067-9270
Covered in: Web of Sciences (WOS); EBSCO; ERIH+; Google Scholar; Index Copernicus; Ideas RePeC; Econpapers; Socionet; CEEOL; Ulrich ProQuest; Cabell, Journalseek; Scipio; Philpapers; SHERPA/RoMEO repositories; KVK; WorldCat; CrossRef; CrossCheck

2018, Volume 10, Issue 1, Special Issue 1, pages: 110-126 | doi: https://doi.org/10.18662/rrem/40

Effect of Problem Solving Based Group Counseling on Marital Satisfaction of Mothers with Intellectually Disabled Children: Gorgan, Iran (2016)

Yoosefi SOMAYEH[1], Ziaei TAYEBE[2], Jalaliaria KATAYOUN[3], Naghinasab Ardehaee FATEMEH[4], Danesh AHMAD[5], Tatari MAHIN[6]

[1] MSc in Midwifery Counseling, Counseling and Reproductive Health Research Centre, Golestan University of Medical Sciences, Gorgan, Iran.
[2] Ph.D Reproductive Health, Counseling and Reproductive Health Research Centre, Golestan University of Medical Sciences, Gorgan, Iran, tayebe.ziaee@yahoo.com
[3] Ph.D Student of Reproductive Health, School of Medical sciences, Tarbiat Modares University. Tehran, Iran, Counseling and Reproductive Health Research Centre, Golestan University of Medical Sciences, Gorgan, Iran.
[4] Ph.D in counseling, Counseling and Reproductive Health Research Centre, Golestan University of Medical Sciences, Gorgan, Iran.
[5] Ph.D Epidemiologist, Assistant Professor School of Medicine, Golestan University of Medical Sciences, Gorgan, Iran.
[6] MSc Biostatistics, Golestan University of Medical Sciences, Gorgan, Iran.

Abstract: ***Introduction:*** *Diagnosis of intellectual disability in children poses mental pressure and emotional crisis with respect to keeping, raising, and training to family members and mothers, in particular. This issue can also negatively affect marital satisfaction of the parents. The present research was conducted to assess the effect of problem-solving based group counseling on marital satisfaction in mothers with intellectually disabled children.* ***Material and Methods:*** *The Statistical population of the present intervention-control study is comprised of mothers with intellectually disabled children referring to two health centers in Gorgan City, Iran, in 2016. Research samples consisted of 30 subjects randomly assigned to two control and intervention groups. The intervention group was subjected to 6 sessions (once in a week) of problem-solving based group counseling while the control group received no intervention. At the end of these sessions, the Persian version of Evaluation and Nurturing Relationship Issues Communication and Happiness (ENRICH), which consists of 47 items with 11 subscales, was completed in two steps: one week and one month after the intervention. The gathered data were analyzed using repeated measures of analysis of variance (ANOVA) and a follow-up test in the SPSS16 software.* ***Results:*** *The results showed that mean and standard deviation of marital satisfaction scores in three steps of intervention including before, one week after, and one month after the intervention was 140.7 ± 15.08, 143.13 ± 14.43, and 150.73 ± 11.65, respectively. As can be seen, there is a statistically significant difference between marital satisfaction scores before and one month after the intervention (P = 0.016) while this score is almost constant in the control group during the study period.* ***Conclusion:*** *The results show that by the passage of time mothers learn and apply better the problem-solving skill in their life, leading to their enhanced marital satisfaction. Thus, it is suggested training these skills to the mothers with intellectually disabled children referring to the health and rehabilitation centers by midwives and midwifery consultants.*

Keywords: *marital satisfaction; group counseling; problem-solving; intellectually disabled.*

How to cite: Somayeh, Y., Tayebe, Z., Katayoun, J., Fatemeh, N.A., Ahmad, D., Mahin, T. (2018). Effect of Problem Solving Based Group Counseling on Marital Satisfaction of Mothers with Intellectually Disabled Children: Gorgan, Iran (2016). *Revista Romaneasca pentru Educatie Multidimensionala, 10*(1-Special Issue 1), 110-126. https://doi.org/10.18662/rrem/40

©2018 The Authors & LUMEN Publishing House.

1. Introduction

Childbirth is a great experience for parents (Campbell, 2003). Although childbirth can expand generations and have a positive effect on dynamicity of the families (Pakravan, et. al., 2013), having a disabled child is considered among a serious problem in families (Chang, et. al., 2007). Such a child needs special treatments that are beyond the expectations of their parents and have negative consequences in all their life aspects (Khalili, 2015; Floyd, Gilliom & Costigan, 1998). Among most important problems these families encounter one can name difficulty in accepting the intellectual disability of the child, fatigue induced by nursing and caring the child, leisure time-related issues, financial problems of the families, and medical, health, nursing, training, and rehabilitation problems (Malekpour, 1995; Kouhsali, et. al., 2007). These pressures create a sense of anger, guiltiness, disappointment, and depression in parents, which can negatively affect the quality of life in the family members and marital satisfaction (Floyd, Gilliom & Costigan, 1998; Yektakhah, Mozafariany & Gorji, 2014; Shahi, Ghaffari & Ghasemi, 2011; Francis, Blue-Banning, & Turnbull, 2014).

World health organization (WHO) defines family as the first social factor effective on health improvement and welfare promotion (Malekpour, 1997). Several investigations have shown the effectiveness of the relationship quality of partners and marital satisfaction on family happiness, physical and mental health, and psychosocial compatibility of the partners in various individual and social aspects (Bazrafshan, Mirzaie, & Darvish, 2013; Jenaabadi, 2012).

One of the most comprehensive definitions of the marital satisfaction is the one proposed by Hopkins: "Objective feelings, satisfaction, and pleasure experienced by partners (husband and wife) in all aspects of their marriage" (Meadan, James, & Aaron, 2010). Marital satisfaction is the result of various factors such as emotional intelligence, conflict resolving approaches, sexual satisfaction, and health level of the individual and children (Meadan, James, & Aaron, 2010; Nisell, et. al., 2003).

Olornuda, According to Gabel et al. (1983) reported some problems such as marital dissatisfaction, a frequent disorder in sexual performance, emotional break, and divorce are more prevalent in families with disabled children. In this regard, Ziolko (1991) mentions other problems such as a low self-esteem, feeling of helplessness, anger due to the unreasonable expectations, and financial burden (Eni-olorunda, Ariyo, & Lasode, 2015).

Also, parents of such children have to tolerate the Curiosity and pity look of society, relatives, and acquaintances about their children, which also

affect their relationship with others and make them isolated (Faramarzi, Karamimanesh, & Mahmoudi, 2013). Such problems endanger families and bring serious harms even to the children (Sobsey, 2004). Consequently, these issues affect the parent-parent and parent-child interactions (Khalili, et. al., 2015). Since parents, and mothers, in particular, are responsible for raising the children, these negative consequences would affect them more than other family members and therefore several mental, physical, and social pressures and problems affect them, leading to their declined mental health status (Chang, et. al., 2007; Kargar, & Asghari, 2015; Ortega, Beauchemin, & Kaniskan, 2008). Hence, mothers of such children need further attention and intervention in order to lower their mental pressure (Khalili, et. al., 2015).

One of the most important factors in the pathology of marital dissatisfaction and problems is lack of awareness and non-use of life skills (Pakravan, et. al., 2013). Learning these skills and problem solving based group counseling enables the parents to recognize their defects and problems of each other, find proper solutions, and increase their marital satisfaction through consultation and self-expression (Farsani, et. al., 2011; Keshavarz, et. al., 2011).

Unfavorable conditions imposed on the parents of intellectually disabled children affect their problem-solving skills and courageous behavior. Such conditions also make them incompetent when faced with an issue such that cannot manage and deal with it effectively (Kargar, & Asghari, 2015). Problem-solving is among the constructive skills that can reduce marital problems (Pakravan, et. al., 2013).

In addition, group counseling is a quick and economically justified approach that teaches group members some behaviors to criticize themselves and others and understand that their problems are not unique. Accordingly, such learning mediates their resistance to solving the problems (Hosini, Amiri Mojed, & Ghomri, 2013).

It has been evidenced that marital satisfaction is different in various life periods and the pathological level is significantly related to marital satisfaction. The results of Kim et al. (2003), Baker et al. (2012) in the United States, Behpazhouh & Ramazani (2005) and Janabadi (Yektakhah, Mozafariany & Gorji, 2014) in Iran have shown that having an intellectually disabled child affects marital satisfaction of parents and mothers in particular.

To the best of authors' knowledge, little study has been conducted on providing counseling services to such families. Based on the study of Vermaes et al. (2005), the present research was conducted to deal with

marital satisfaction problem in mothers with intellectually disabled children in Gorgan City, Iran, in 2016.

2. Materials and methods

The statistical population and research sample: The present research is an intervention study with a pretest-posttest design and a control group. The research population consisted of all mothers with intellectually disabled children covered by Welfare Organization of Gorgan. In this work, 30 participants were randomly selected from two rehabilitation centers and assigned into two control and intervention groups. The inclusion criteria to participate in this work were a willingness to participate the study, reading and writing literacy, having at least one intellectually disabled child covered by the Welfare Organization, monogamy of the father, not suffering from any self-reported physical and mental disease, not addiction to drugs, narcotics, and alcohol (reported by self), lack of studying in psychology and counseling, non-participation in psychotherapy classes and other counseling courses, and lack of any other diseases in the children. On the other hand, the exclusion criteria included having a severe medical and physical problem during the study and reluctance to continue the counseling sessions.

3. Methodology

We found that, among the health centers covered by Welfare Organization of Gorgan, only two centers are allocated to trainable intellectually disabled children with intelligence quotient (IQ) range of 50-70. Samples were gathered from Sina and Rouyesh centers. To analyze the conditions of the subjects, first, the medical documents of the children were studied and then the mothers who had inclusion qualification invited by sending a letter from the head of the center to participate in the study in certain dates and times. Overall, 88 files were reviewed and then the mothers were asked a few questions about the inclusion criteria. Finally, 61 participants were qualified to include in the study, among which 14 ones were reluctant to participate. Therefore, the final population of the research consisted of 47 mothers. Through the pretest session, the study and answering the questionnaire were explained to participants by the supervisor and student. Then, after ensuring the confidentiality of the responses, participants were asked to complete the informed consent papers to be included in the study. During the pretest, the participants were said that it is not known which group (either control or intervention) they would be

placed. The participants were randomly assigned into two control and intervention groups, each one having 15 members.

Mothers attended 6 sessions of problem-solving based group counseling once a week each one lasting 90 min. In the first session, the objectives of the counseling sessions were explained to the mothers. To improve counseling quality, an educational whiteboard and pamphlets were used. The sessions were held in rehabilitation centers. The addressed topics were designed based on the problems of intellectually disabled children and were adjustable with respect to their needs. In each session, one of the problem-solving steps was counseled.

The Professor of counseling was the supervisor of the researcher and director of the counseling sessions. It is noteworthy that the researcher had attended the group counseling courses in advance and gained the certification. In each session, first, the homework of the previous sessions was reviewed and then the new materials were provided. At the end of each session, the course materials were summarized and the homework for the next session was assigned. Assessments were made using the Evaluation and Nurturing Relationship Issues Communication and Happiness (ENRICH) questionnaire in both intervention and control groups one week and one month after the last session. Eventually, list because of the ethical considerations, the members of the control group, who received no counseling and psychological support, were put in the waiting and contacted to know whether they are willing to attend in the next counseling sessions after presenting them with the research results and if they were positive.

One month after the last counseling session, for two groups, post-test (follow-up) was performed and problem-solving based group counseling pamphlets were distributed among the control group members. At the end of session 6, the members of intervention groups were rewarded with some gifts. After the follow-up step, two couples from the intervention group were referred to the counselor due to their family problems.

The contents of problem-solving based group counseling sessions were as follows (Keshavarz, et. al., 2011):

Session	Activities/objectives
1	Familiarization of group members and the leader with each other; explaining the objective of courses; defining the concept problem solving and the necessity of their counseling; defining emotion-based and problem-based coping strategies; acquaintance with steps of problem-solving; homework assignment
2	Reviewing the materials and homework from the last session;

	teaching the first step of problem-solving; statement/formulation of the problem/ expression of problems by the family members as a homework assignment
3	Reviewing the materials and homework from the last session; teaching the second step of problem-solving; production and creation of several solutions with brainstorming/ homework assignment
4	Reviewing the materials and homework from the last session; teaching the third step of problem-solving; evaluation of benefits and drawbacks or advantages and disadvantages of each solution/ homework assignment
5	Reviewing the materials and homework from the last session; teaching the fourth step of problem-solving; applying, evaluation, and reviewing the solution/ homework assignment
6	Reviewing the materials and homework from the last session; integration and summary of the problem-solving steps; further exercise of the problem-solving skill using the practical problems by the group members; acknowledging and thanking the group members

4. Data collection instruments

Demographic information-personal characteristics form and a Persian version of ENRICH questionnaire were data collection instruments.

Demographic information-personal characteristics form (consisting of information such as age, marriage length, job, education, and number of children)

The Persian version of ENRICH marital satisfaction questionnaire includes 47 items and 11 subscales; idealistic distortion, marital satisfaction, personality issues, marital communication, conflict resolution, financial management, leisure activities, sexual relationship, children and parenting, family and friends, and religious orientation.

The items were scored using the 5-item Likert scale as 1 (completely disagree), 2 (disagree), 3 (have no idea), 4 (agree), and 5 (completely agree). The items 4, 6, 8, 11-16, 18-24, 30-32, 35, 37,-43, and 45-47 were scored inversely. The scores 47 and 235 represent the lowest and highest marital satisfaction, respectively (Jafari, 2009; Mousavizadeh Seyyedeh, Sohrabi Asromud & Hasan, 2012).

Validity and reliability of Persian version of ENRICH questionnaire: Soleymanian et. al. (1994) investigated the validity of ENRICH questionnaire through a study titled "the effect of unreasonable thoughts on marital satisfaction in married students". For that study, the first step was a

translation of questionnaire from English to Persian. After translation, some psychologists were asked about the approval of content validity. Next, the questionnaire was implemented on a 110-research population and its Cronbach's Alpha coefficient was estimated to be 0.93. Considering the high number of items in the questionnaire, which makes participants bored, a short version of the questionnaire was prepared. Then, the correlation of each item with the original questionnaire was measured and the items with relatively high correlation were selected. This selection was done equally on different scales of the questionnaire, such that 47 items were selected and again the Cronbach's alpha coefficient of these 47 items on a population of 110 participants was calculated (0.95) (Soleymanian, Nawabinejad, & Naderi, 1994; Solaimanian, Mohammadi, 2009).

Pretest and posttest were held one week after and one month after the last counseling sessions.

5. Data Analysis

In the present study, the independent variable is group counseling and the dependent variable is marital satisfaction. Normality of all continuous variables such as marital satisfaction in each group was determined using Shapiro-Wilk test. Considering the obtained normality analysis results, the normal data were analyzed using independent t, covariance, and regression tests while the non-normal ones were analyzed using χ^2 and Mann-Whitney tests.

6. Findings

The mean ages of participants in the intervention and control groups were 37.4±5.58 and 33.2±5.67 years, respectively; and their mean marriage periods in the intervention and control groups were 15.2±6.8 and 12.2±3.7 years, respectively. The average number of children in both control and intervention groups was 2. Two groups were significantly different (P = 0.04) in terms of their age but not significantly different in terms of the number of children (Table 1).

Table 1: Mean and standard deviation (mean ± SD) values for some quantitative demographic characteristics in mothers with intellectually disabled children in the intervention and control groups (Fakor et al., 2015)

Intellectual characteristics	Intervention group (mean +	Control group (mean +	Test type	P-value

	SD)	SD)		
Age (year)	37.4 (5.58)	33.2 (5.67)	Independent t	0.04*
Marriage period (year)	15.2 (6.80)	12.2 (3.70)	Independent t	0.14
Number of children	2.1 (1.34)	1.5 (0.62)	Mann-Whitney	0.24

As shown in Table 2, 6.67% of the participants had a high school diploma while 26.6% of them were below diploma. Besides, they were all housewives.

Table 2: Frequency distribution of some qualitative demographic characteristics in control and intervention groups of mothers with intellectually disabled children subjected to group counselling (Khodayari, et al., 2016)

Personality	Category	Intervention group Number (percentage)	Control group Number (percentage)	Test type	P-value
Education level	Below high school diploma	4. (26.6)	6. (35.3)	χ^2	0.47
	High school diploma	10 (66.7)	8 (47.1)		
	Above high school diploma	1 (6.7)	3 (17.6)		
Occupation status	Housewife	15 (100.0)	14 (82.4)	Fisher	0.23
	Working outdoor	0 (0)	3 (17.6)		

The results of Shapiro-Wilk tests showed that marital satisfaction scores of participants have a normal distribution before, one week, and one month after the intervention. Therefore, the analyses were done using parametric tests.

The mean marital satisfaction scores before in the counseling in the control and intervention groups are 162.4±25.1 and 14.07±15.08, respectively; suggesting a statistically significant difference between these two groups(P=0.006). Considering this difference, to extract variables effective on all demographic variables, covariance and regression analyses were performed. The results show that the occupation status of the mothers

is an effective variable in marital satisfaction score. Among the participants of this study, all mothers in the intervention group were housewives, while three mothers in the control group had an outdoor job. The results of regression analysis in the control group show that occupation status can have a strong effect on marital satisfaction. In the present study, the three mothers working outdoor gained a higher score (i.e., 190) compared to the housewife mothers (i.e., 156). Overall, such a difference in marital satisfaction in two control and intervention groups in the pre-test step can be attributed to the outdoor job of the mothers in the control group. It is noteworthy that in the intervention performed after one month, 3 housewives mothers were absent. Hence, they had no effect on marital satisfaction of the control group. The average marital satisfaction score one week after the intervention indicates a significant difference between intervention and control groups. One month after the study, the intervention and control groups indicate a significant difference in marital satisfaction score. Again, since the difference between intervention and control groups before the group counseling was significant, the average marital satisfaction was higher in the control group.

Table 3: Comparison of marital satisfaction score in mothers with intellectually disabled children before, one week after, and one month after the group counselling in the intervention and control group

Variable		**Intervention group (mean ± SD)**	**Control group (mean ± SD)**	**P-value**
Overall satisfaction score	Before	140.7 (15.08)	162.4 (25.1)	0.006*
	One week after	143.13 (14.43)	163.59 (21.82)	0.004*
	One month after	150.73 (11.65)	162.79 (17.773)	0.39*

A comparison between before, one week, and one month after the group counseling in two control and intervention groups reveals that, In the intervention group, mean score of marital satisfaction is a significant difference between before and one month after the counseling, but this difference is not significant between before and one week after intervention.

However, in the control group, the mean score of marital satisfaction is not significantly different between before and both times of follow up after the counseling (Table 4).

Table 4: Comparison of marital satisfaction score in mothers with intellectually disabled children before, one week, and one month after the group counseling for two groups (Fakoor, et al., 2016)

variable		Intervention group (mean ± SD)	Control group (mean ± SD)
Overall satisfaction score	before	14.07 (15.08)	162.4 (25.1)
	After one week	143.13 (14.43)	163.59 (21.82)
	P- value	0.474	0.715
	Before	140.7 (15.08)	162.4 (25.1)
	One month after	150.73 (11.65)	162.79 (17.773)
	P- value	0.016	0.583

Considering the significant interaction of time and group in the present study, to test the effect of time and intervention, variance analysis with repeated measures was performed between two groups at various times. The results show that there is no significant difference between two groups in none of the tested times; i.e., before, one week, and one month after the group counseling. In other words, marital satisfaction scores vary with time in both control and intervention groups. The results of follow-up tests show that these differences are significant between three Tim's test (before, one week and one month after the counseling). Moreover, the results show that marital satisfaction scores are different between the control and intervention groups, because of the intervention effect (Table 5). As can be seen, the average marital satisfaction in the control group is considerably higher than that in the intervention group, which increase significantly one week after and one month after, in particular, leading to a small difference between these two groups. Moreover, in the intervention group, the average marital satisfaction scores before, one week, and one month after the group counseling increase while in the control group it first increases followed by a decrease. Anyway, the average marital satisfaction score in the control group is higher than that in the intervention group (Fig. 1).

Table 5: A comparison of marital satisfaction before, one week after, and one one month after the intervention between the intervention and control groups

Variable	Group	Mean (± SD) before, one week after, and one month after the intervention (1, 2, and 3)*			Analysis of variance with repeated measures	Results of Bonferroni follow-up test (1 and 2, 1 and 3, and 2 and 3)**		
		(1)	(2)	(3)	(1, 2, and 3)	(1 and 2)	(1 and 3)	(2 and 3)
Total marital satisfaction score	**Intervention**	140.73 (15.08)	143.13 (14.43)	150.73 (11.659)	<0.001	0.289	<0.001	<0.0101
	Control	162.3 (25.1)	163.59 (21.82)	162.79 (17.77)				
* (1) before, (2) one week after, and (3) one month after		** (1 and 2) before and one week after, (1 and 3) before and one month after, and (2 and 3) one week after and one month after						

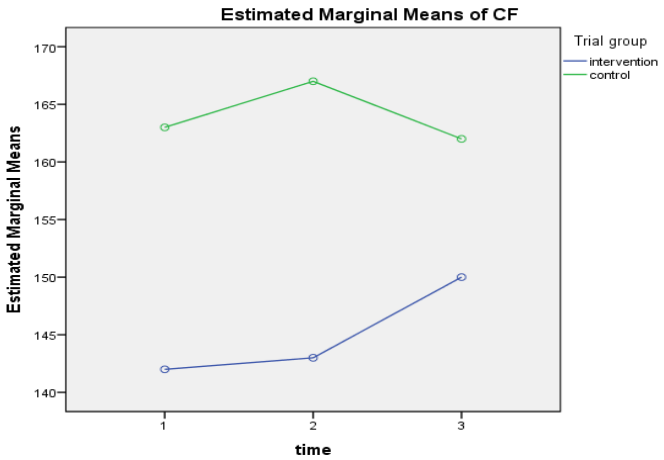


Fig. 1: Average marital satisfaction score based on ENRICH questionnaire in mothers with intellectually disabled children before, one week, and one month after the group counseling in both groups.

7. Discussion

The present research was conducted to investigate the effect of problem-solving based group counseling on marital satisfaction of mothers with intellectually disabled children.

The results of this study show that marital satisfaction score in the intervention group is considerably increased after the problem solving based counseling, which may be because of the effect of group counseling in these mothers. The increase in marital satisfaction score in the intervention and control groups one week after the counseling in both groups show no significant difference compared to the pre-intervention score; however, this increase in the intervention group is higher than that in the control group. Masumi et al. (2016) conducted a study to investigate the effect of sexual counseling on marital satisfaction of pregnant women and reported a significant difference in marital satisfaction in the control group before and two weeks after the intervention. This result, which is consistent with our findings, can be attributed to the effect of response to the questionnaire since after four weeks this difference was not significant in the control group. The Nowshadi et al. (2012), who studied the efficacy of group learning of mutual behavior analysis on marital satisfaction of women, Farsani et al. (2011), who investigated the effect of life skills learning on marital satisfaction and compatibility of married women, and Mousavizadeh et. al. (2012), who determined the efficacy of self-expression learning and problem solving based skill learning on marital satisfaction in student women, all show that marital satisfaction score in the intervention group significantly increases immediately after the intervention; inconsistent with our results. An explanation for this contradiction might be participant mothers in our study did not have proper concentration to employ the learned materials in the short run such that it did not affect their marital satisfaction in short time(one week) after intervention. However, our results show that one month after the intervention marital satisfaction in the intervention group increases up to 10 points while it decreases 1.5 points in the control group compared to before the intervention. It means that, these mothers need more time to apply problem solving skills to promote marital satisfaction in their lives.

Our results show that the change in average score in the intervention and control groups is significantly different one month after the intervention. Pakgohar et al. (2007) measured the effect of counseling on improving the marital relationship and reported a significant difference one month after and 6 months after the intervention, such that the 6-month

follow-up score was higher than that of one-month follow-up (Pakgohar et al., 2007). The results of analysis of variance of repeated measures reported by Masumi et al. show that marital satisfaction has significant difference two and four weeks after the counseling and increases with time (Masoumi, et. al., 2016). The results of Mousavizadeh et al. (2012) for a 2-month follow-up show that problem solving based skill learning still keeps its effects. Moreover, Markman et al. (1993) investigated the efficacy of marital relationship enrichment in the long run and found that after the training course the couples still have a higher sexual intimacy and relationship stability compared to the control group. According to these researchers, martial training programs enhance marital satisfaction level, solve the conflicts, and reduce communication problems between couples (Markman, et. al., 1993). Overall, these studies show the positive effect of time length on a better efficacy of counseling programs and its employment. Indeed, to benefit better from the learned materials, it needs more practice and, in turn, longer times. In this regard, analysis of variance with repeated measures was performed to determine the effect of time and found that marital satisfaction increases with the passage of time.

Our results for the test groups show that the average satisfaction score in the intervention group increases both in the post-test and follow-up steps, where this increase in the follow-up step is significant compared to the pre-test step. On the other hand, marital satisfaction score in the control group in the post-test indicates a slight increase while in the follow-up test indicate a significant increase compared to the post-test score. These results are in agreement with those of Masumi et al., who reported a slight increase in marital satisfaction two weeks after and a slight decrease four weeks after the intervention. Their average marital satisfaction score reported by them for the intervention group is same as that reported by us. Shapiro & Gottman (2005) measure effect of psycho-communicative educational skills on the quality of communication between pregnant women and their husbands. The results of analysis of variance with repeated measures show that the scores of post-tests performed 3 months and 1 year after indicate a generally higher marital satisfaction quality in the intervention group compared to the control group (Shapiro & Gottman, 2005).

Comparing the results of the other studies mentioned above, this study suggests that, unlike other mothers, mothers who are mentally impaired have more time to use for learning skills. But in the continuation and use of skills, they are not different from other mothers.

8. Conclusion

The results of the present study show that the group counseling based on problem solving skills for mothers with intellectually disabled children can also improve marital satisfaction. Of course, it should be noted that they do not change in the short term. But these mothers should be given more time to use this skill to promote their marital satisfaction .Increasing marital satisfaction can promote family health. Therefore, since midwifery counselors along with midwifery science, marital (sexual and non-sexual) information have ability to train life skills including problem-solving skills, they should be present in the centers.

9. Limitations

An insufficient number of intellectually disabled children in the health centers of Gorgan, considering the inclusion criteria and the reluctance of some mothers to participate in the study, limited the number of participants to 15 in each group.

10. Suggestions for further research

Studying the effect of problem-solving based group counseling on marital satisfaction of fathers with intellectually disabled children

Studying the effect of problem-solving based group counseling on marital satisfaction of couples with intellectually disabled children

Studying the effect of group counseling based on other life skills on marital satisfaction of couples with intellectually disabled children

Moreover, it is suggested conducting studies with longer follow-ups such that to investigate the effect of time passage on counseling.

Acknowledgement

This paper was extracted from the master thesis of the first author with code no. 941218340 and etic committee code no. IR.GOUMS.REC.1364.366 conducted at Golestan University of Medical Sciences.

We thank the authorities of Golestan University of Medical Sciences, Bouyeh School of Nursing and Midwifery of Gorgan, Deputy of health centers of Gorgan and Welfare Centers of Sina and Rouyesh in Gorgan, and particularly all mothers and their family who generously cooperated with the researcher.

References

Baker, J.K., Seltzer, M., & Greenberg, J.S. (2012). Behavior Problems, Maternal Internalizing Symptoms, and Family Relations in Families of Adolescents and Adults with Fragile X Syndrome. *Journal of Intellectual Disability Research, 56*(10), 984–95.

Bazrafshan, M., Mirzaie, F., Darvish, M. (2013). Association of Fetal and Parental Chromosomal Abnormalities with Congenital Anomalies. *Journal of Kerman University of Medical Sciences, 20*(6), 536-545

Behpazhuh, A., Ramazani, F. (2005). [Marital satisfaction in parentswith mentally handicapped Children and parents with typically developing children (Persian)]. *J Soc Sci Humanit Shiraz Univ, 22*(4), 72-81.

Campbell, T.L. (2003). The effectiveness of family interventions for physical disorders. *Journal of Marital and family Therapy, 29*(2), 263-81

Chang, E.C., Sanna, L.J., Riley, M.M., Thornburg, A.M., Zumberg, K.M., Edwards, M.C. (2007). Relations between problem-solving styles and psychological adjustment in young adults: Is stress a mediating variable? *Pers Individ Dif., 42*(1), 135-144.

Eni-olorunda, T., Ariyo, M., Lasode, A. (2015). Influence of the presence of a child with intellectual disability on marital stability in south-west Nigeria. *African journal for the psychological studies of social issues,* 18(1), 37-46.

Fakoor, M., Kosari, A., Jafarzadeh, M. (2015) Revision on fuzzy artificial potential field for humanoid robot path planning in unknown environment, *International Journal of Advanced Mechatronic Systems*, 6(4), 174-183,

Faramarzi, S., Karamimanesh, V., Mahmoudi, M. (2013). Meta-Analysis of Effectiveness of Psychological Interventions in Mental Health of Families with Children with Mental Disabilities (2012-2013). *Clinical Psychology Studies, 4*(13), 89-106.

Farsani, K.Z., Ahmadi, S.A., Fatehizadeh, M.S. (2011). The effect of life skills training on marital satisfaction and adjustment of married women in rural areas of Farsan. *Family Counseling and Psychotherapy, 2*(3), 373-387.

Floyd, F.J., Gilliom, L.A., & Costigan, C.L. (1998). Marriage and the parenting alliance: Longitudinal prediction of change in parenting perceptions and behaviors. *Child Development, 69*(5), 1461-79.

Francis, G.L., Blue-Banning, M., Turnbull, A.R. (2014). Variables Within a Household That Influence Quality-of-Life Outcomes for Individuals With Intellectual and Developmental Disabilities Living in the Community Discovering the Gaps. *Research and Practice for Persons with Severe Disabilities, 39*(1), 3-10.

Hosini, T., Amiri Mojed, M., Ghomri, M. (2013). The Effectiveness of Solution-Focused in Enhancing Marital Intimacy of Married. *Group Counseling,* 52-4.

Jafari, A. (2009). Effectiveness of premarital communication skills training on marital satisfaction after marriage. *Behavioral Sciences, 1,* 31-51.

Jenaabadi, H. (2012). The effect of marital counseling on marital satisfaction of parents of mentally retarded children. *Journal of Urmia Nursing and Midwifery Faculty, 10*(4).

Kargar, M., Asghari, M.J. (2015). Comparing problem solving style and marital adjustment in exceptional and normal children mothers. *Exceptional Education, 2*(130), 37-44.

Keshavarz, A.H., Khoshkonesh, A., Jahanbakhshi, Z., Navabinejad, S., Sanaei, Z.B. (2011). Effectiveness of group counseling with problem solving method and emphasis on basic needs of choice theory on improving couples communication patterns. *Quarterly Journal of Career &Organizational Counseling,* :*3*(7), 41-53.

Khalili, Z., Sadrollahi, A., Gholipur, F., Nazari, R., Mohammadi, M.K. N. (2015). Evaluation of marital satisfaction and its associated factors in female nurses in Khalkhal City. *Qom Univ Med Sci J., 9*(10), 64-72.

Khodayari A., Razavi, S. (2017). On the thermo-flow behavior in a rectangular channel with skewed circular ribs. *Mechanics & Industry, 18*(2), 225.

Kim, H.W., Greenberg, J.S., Seltzer, M.M, Kraus, M.W. (2003). The role of coping maintaining the psychological wellbeing of mothers of adults with intellectual disability and mental illness. *Journal of Intellectual Disability Research,* 313-27.

Kouhsali, M., Mirzamani, S.M., Mohammadkhani, P., & Karimlou, M. (2007). Comparison of social adjustment between mothers of educable mentally retarded girls and mothers of normal girls in Kashan. *Journal of Rehabilitation, 8*, 40-47.

Malekpour, M. (1995). The mental health of the mentally retarded children. *Academic Jihad*, 1-132 .(Persian)

Malekpour, M. (1997). Family health for mentally retarded children.

Markman, H.J., Renick, M.J., Floyd, F.J., Stanley, S.M., & Clements, M. (1993). Preventing marital distress through communication and conflict management training: a 4-and 5-year follow-up. *Journal of consulting and clinical psychology, 61*(1), 70.

Masoumi, Z., Nejti, B., Mortazavi, O., Parsa, P.M.K. (2016). The effect of sexual counseling on marital satisfaction of pregnant mothers. *Scientific Journal of Hamadan Nursing and Midwifery Faculty, 24*(4).

Meadan, H., James, W.H., & Aaron, T.E. (2010). Families with children who have autism spectrum disorders: Stress and support. *Exceptional Children, 77*(1), 7-36.

Mousavizadeh Seyyedeh, A., Sohrabi Asromud, F., Hasan, A. (2012). Comparison of the Effectiveness of Expression Training and Problem Solving Skills on Marital Satisfaction of Allameh Tabatabaei University Students. *Journal of Social Psychological Studies of Women,* 85-108.

Nisell, M., al. e. (2003). How a family is affected when a child is born with anorectal malformation. Interviews with three patients and their parents. *Journal of pediatric nursing, 18*(6), 423-32.

Nowshadi, S.H., Motamedi, H. (2012). The Effectiveness of Group Training on Mutual Relationship Analysis on Marital Satisfaction (Female Applicants for Divorce in Bijar). *Social welfare, 15*(57), 73-94.

Ortega, S., Beauchemin, A., & Kaniskan, R.B. (2008). Best practices in mental health. *Lyceum Books, Inc, 4*(1), 2008.

Pakgohar, M.M., Ghobari Bonab, B., & Golian Tehrani, S. (2007). Investigating the effect of counseling on strengthening marital relationship. *Daneshvar, 5*(73), 1-6.

Pakravan, E., Haghayegh, S., Nshatdoust, H., & Molavi, H. (2013). Efficacy of problem solving method on the marital satisfaction and psychological profile of the couples of Brojen city. *Culture counseling, 4*(16), 15-31.

Shahi, A., Ghaffari, I., Ghasemi, K. (2011). Relationship between mental health and marital satisfaction. *Journal of Kermanshah University of Medical Sciences, 15*(2).

Shapiro, A.F., Gottman J.M. (2005). Effects on marriage of a psycho-communicative-educational intervention with couples undergoing the transition to parenthood, evaluation at 1-year post intervention. *The Journal of Family Communication, 5*(1), 1-24.

Sobsey, D. (2004). Marital Stability and Marital Satisfaction in Families of Children with Disabilities: Chicken or Egg? *Developmental Disabilities Bulletin, 32*(1), 62-83.

Solaimanian, A., Mohammadi, A. (2009). *The Relationship between Emotional Intelligence and Marital Satisfaction*. 131-50 .[Persian]

Soleymanian, A., Nawabinejad, S.H., Naderi, E. (1994). *Investigating the effect of irrational thinking (based on cognitive approach) on marital dissatisfaction*. 1-134. [Persian]

Vermaes, I.P., Janssens, J.M., Bosman, A.M., Gerris, J.R. (2005). Parents' psychological adjustment in families of children with spina bifida: a meta-analysis. *BMC pediatrics, 5*(1), 32.

Yektakhah, S., Mozafariany N., Gorji, R. (2014). Comparison of Mental Health in Mothers of Children with Deafness and Mental Retardation, *Exceptional Education, 5*(127), 16-23. http://exceptionaleducation.ir/article-1-78-en.html