Original Article

Access this article online



Website: www.jehp.net DOI: 10.4103/jehp.jehp 308 20

Assistant Professor of Midwifery, Nursing and Midwiferv Care Research Center, Mashhad University of Medical Sciences, Mashhad, Iran, 1MSc of Midwifery, School of Nursing, Larestan University of Medical Sciences, larestan, Iran, ²Department of Midwifery, Faculty of Medicine, Social Development and Health Promotion Research Center, Gonabad University of Medical Sciences, Gonabad, Iran, ³Midwifery Faculty, Kerman Branch, Islamic Azad University, Kerman, Iran, ⁴Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Neyshabour University of Medical Sciences, Mashhad, Iran, ⁵PhD Candidate in Reproductive Health, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran

Address for correspondence:

Dr. Zahra Mohebbi-Dehnavi, PhD Candidate in Reproductive Health, Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran. E-mail: zahra.midwife@ yahoo.com

> Received: 04-04-2020 Accepted: 27-06-2020 Published: 29-12-2020

Investigating the relationship between social support and self-compassion by improving the adequacy of prenatal care

Nahid Golmakani, Raziyeh Rahmati¹, Fatemeh Shaghaghi², Hadise Safinejad³, Zahra Kamali⁴ , Zahra Mohebbi-Dehnavi⁵

Abstract:

INTRODUCTION: Getting pregnant care is different due to the psychological problems of pregnant mothers. Self-compassion and social support are the important components of mental health. Women with higher self-compassion and social support can take full care of their pregnancies. The aim of this study was to determine the relationship between social support and self-compassion with adequate prenatal care.

METHODS: The present study is a cross-sectional descriptive study that was performed in 2018 using the available sampling method on 500 pregnant mothers referred to Isfahan health centers. Individuals entered the study if they had entry criteria and no exit criteria, and completed social support, self-compassion, and adequacy of pregnancy care questionnaires. The data were coded and analyzed by SPSS software version 22 and Pearson's correlation statistical test.

RESULTS: The results of data analysis with Pearson's correlation test showed a positive and statistically significant relationship with pregnancy care between the overall score of social support (P < 0.001) and the dimensions of social support such as family support (P < 0.002), support of friends (P < 0.004), and the support of other people (P < 0.001). The results also showed a positive and statistically significant relationship between self-compassion and prenatal care (P < 0.001). There was a significant positive relationship between the subscales of the self-empathy questionnaire, including kindness to oneself, human commonalities, mindfulness and increasing replication, and pregnancy care, but there was a significant negative relationship between subscales of isolation and self-judgment with pregnancy care.

CONCLUSION: According to the results of the present study, social support and self-compassion as two components of mental health can affect the quality of services during pregnancy. For this reason, it is recommended that health-care providers pay attention to these two issues in order to increase the level of care during pregnancy and thus ensure maternal health during pregnancy and childbirth and the health of the fetus and baby.

Keywords:

Adequacy of prenatal care, self-compassion, social support

Introduction

Providing health care during pregnancy is one of the main health issues in the society and an important health indicator.^[1] Providing these cares is an important tool

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

for determining and reducing the risks of childbirth, such as low birth weight and stillbirths, or the death of a child during the 1st year of life.^[2] The main purpose of providing care during this period is to give birth to a healthy baby without

How to cite this article: Golmakani N, Rahmati R, Shaghaghi F, Safinejad H, Kamali Z, Mohebbi-Dehnavi Z. Investigating the relationship between social support and self-compassion by improving the adequacy of prenatal care. J Edu Health Promot 2020;9:340.

© 2020 Journal of Education and Health Promotion | Published by Wolters Kluwer - Medknow

Golmakani, et al.: Social support and self-compassion and improving the adequacy of prenatal care

compromising the health of the mother.^[3] Pregnancy increases the health needs and physical and mental problems of mothers. The care of this period is the best guarantee for maintaining the health of the mother and giving birth to a healthy baby. It is now accepted that providing prenatal care is more cost-effective than any intervention to reduce maternal mortality and complications, as well as mortality and complications before and after birth.^[4] Inadequate care during pregnancy is significantly associated with the birth of low birth weight infants, and this low weight is one of the main determinants of mortality and disability in infancy and childhood and has long-term effects on the health indicators of puberty.^[3] It also incurs heavy costs in the health sector and imposes a significant burden on the society as a whole.^[5] Early initiation of prenatal care will improve pregnancy and childbirth outcomes.^[6-8] Despite the provision of care in various forms by health centers, it seems that some factors prevent the proper and timely receipt of care during pregnancy.^[9] Pregnancy care refers to the correct and accurate implementation of principles that are aimed at maintaining a healthy pregnancy in terms of physical health and the desired psychological consequences for the mother, baby, and family. The adequacy of prenatal care is an important indicator in predicting infant and maternal mortality.^[10] Lack of information about women's pregnancy is the most common reason for the low number of caregivers. The second most common reason is the lack of financial resources or insurance coverage for these cares, and the third factor is the impossibility of attending on time to obtain these cares.^[11] A comprehensive prenatal care program includes a coordinated, integrated approach that includes medical care and psychosocial support, and in optimal conditions, begins before pregnancy and continues throughout the prenatal period. The ultimate goal of prenatal care is to maintain the health of both mother and child.^[12,13] Insufficient care increases the risk of miscarriage, intrauterine death, and ectopic pregnancy.^[14,15] The results of a study by Briese *et al.* show that among women who received prenatal care, there was a significant decrease in the birth of premature infants and low birth weight infants.^[16] The findings of many studies have shown that adequate prenatal care is an effective intervention to improve pregnancy outcomes, and adequate pregnancy care provides an opportunity for counseling and reduction of complications related to childbirth and infancy.^[15,16] Pregnancy and childbirth is one of the most stressful conditions for mothers, and social support is the strongest coping force to deal with stressful situations, and by strengthening people's cognition, it reduces stress and improves people's quality of life.^[7-19]

In 2000, Cohen defined social support as: "Social support is a social network that provides individuals

with psychological and tangible resources to cope with the stressful conditions of life and daily problems."[20] Social support contributes to improving mental health as well as improving the quality of life. People with close families can share their problems with them and ask for guidance. Even if they can't guide them, their emotional support can reduce stress. In times of crisis, the environmental system and the individual system together can affect health outcomes. Supporting the family as an important variable in the social system in times of crisis helps reduce stress. Lack of family support in stressful situations puts a lot of psychological pressure on a person and can lead to psychological consequences such as stress and make the person very vulnerable to stress. Families whose members communicate with each other freely and without restriction, and who express their feelings easily to other family members, consult with each other in decision-making and are free to choose their opinions and decisions. The level of communication and interaction is at its peak, and they will have a higher level of resilience and effective confrontation and flexibility against accidents and injuries.^[21-25] Mental health is the ability to communicate harmoniously with others, improve the environment, and resolve conflicts in which one recognizes one's abilities and can cope with the pressures of life. The self-compassionate person also tries to distance himself from the experience of suffering. Thus, self-compassion promotes mental health, and in addition, self-compassion is positively associated with life satisfaction, progress, and intrinsic motivation, and is negatively associated with anxiety and depression. On the other hand, intrinsic motivation leads to proper care and reduces the effects of negative events.^[26]

- Kindness to self: Self-compassion requires self-love when faced with pain and shortcomings instead of ignoring it or criticizing oneself with self-criticism
- Common humanity: Self-compassion also involves accepting that suffering and failure are part of the common human experience
- Mindfulness: Self-compassion requires a balanced approach to negative emotions so that emotions are neither suppressed nor magnified.

Negative thoughts and feelings are perceived without hindrance by conscious thinking. Mindfulness or presence in the moment is a receptive state of mind without bias or judgment in which the person perceives his/her thoughts and feelings as they are, without suppressing or denying them. In other words, the mind needs to be aware that the person is not overly dependent on a mental or emotional phenomenon and does not feel overwhelmed by the coping reactions. This type of response requires careful concentration and review of negative emotions.^[26,27] Therefore, examining the level of access and exploitation of pregnant women in each region to pregnancy care, identifying the individual and social characteristics of women, and identifying various factors affecting this exploitation is one of the research priorities in most countries, especially in developing countries. In Iran, in order to implement the integrated health-care program for mothers with the aim of standardizing maternal care services at out-of-hospital levels, and their views on whether or not to receive adequate and adequate care, the study of how to receive care by mothers will be the basis for improving the quality of care and health planning policy.^[6] Therefore, a study was conducted to determine how to receive prenatal care from Isfahan health centers and its relationship with self-compassion score and social support of care recipients.

Methods

The present study is a cross-sectional study that was performed in 2018 on pregnant mothers who referred to health centers in Isfahan. The sample size was 500 people. Sampling from health centers (Motahhari, Nawab, and Amir Hamzeh) was performed by the available method. After obtaining permission from the ethics committee of Mashhad University of Medical Sciences (IR.MUMS.REC.1397.062) and referring to Isfahan health centers, all pregnant mothers were invited to participate in the study. After obtaining written consent, for pregnant mothers with criteria for entering the plan, the objectives of the study and the procedure were described. The criteria for entering the study were: being Iranian and Muslim, resident of Isfahan, having the desire and physical and mental ability to participate in the study, having written consent to participate in the study, Have given birth and go to health centers for postpartum care (up to 42 days after delivery). The criteria for nonacceptance in the study were: taking psychotropic drugs; experiencing an unfortunate, anxious, or stressful event (death of first-degree relatives, severe family and marital disputes, financial problems, and spouse leaving home) during and after pregnancy; and having a medical condition (thyroid, diabetes, high blood pressure, cardiovascular disease, kidney, nerve, etc.). The questionnaires were then given to the research units to complete in the presence of the researcher. After completing the questionnaires, the participants in the study were welcomed and all participants were thanked for their cooperation.

The questionnaires used were: Personal and Midwifery Profile Questionnaire, Social Support Questionnaire, Self-Compassion Questionnaire, and Pregnancy Care Adequacy Questionnaire. Eligible individuals first completed an Individual/Fertility Profile Questionnaire containing 11 questions. They then completed the Multiple Scale of Social Support and Self-Compassion for Neff 2003. The Multidimensional Perceived Social Support Scale is a 12-item tool. This questionnaire was developed to assess the perceived social support from three sources of family, friends, and important people in life. This scale measures the perceived social support of the individual in each of the three areas mentioned in the 7-point Likert ranging from completely opposed to strongly agreeing. The maximum score for each scale is 20 and the minimum is 4. To get the total score of this scale, the score of all the items is added together and divided by their number.^[12] The score of each subscale is obtained from the sum of the scores of the items related to it, divided by the number of items in that scale.^[4] The validity and reliability of this questionnaire have been confirmed in several studies.^[28] In this study, the reliability of the questionnaire was determined using the retesting method and was confirmed with an alpha of 0.85.

Neff 2003 Self-Compassion Questionnaire includes 26 items in six areas of kindness to oneself (five phrases), self-judgment (five phrases), shared human feelings (four phrases), isolation (four phrases), mindfulness (four phrases), and metacognition (four phrases). Self-compassion consists of six components, namely, self-compassion in the face of self-judgment, human commonalities in the face of isolation, and mindfulness in the face of extreme imitation. The options in this questionnaire are five options according to the Likert ranging from 1 almost never to 5 almost always. The validity and reliability of this questionnaire have been confirmed in several studies.^[29] In this study, the reliability of this questionnaire was determined using the retesting method and was confirmed with an alpha of 0.89.

The standard Kotel chuck tool was used to determine adequacy and how to receive prenatal care. First, the number of times you received care was divided by 10 as the number of times you received standard care. This questionnaire has validity and reliability.^[30]

Finally, the collected information was coded and entered in the SPSS software, version 22 (IBM, SPSS Inc., Chicago, Illinois, USA), and was examined.

Results

The analysis of the results on 500 people showed that the average age of the mothers participating in the study was 26.66 ± 6.09 years, and the average age of their spouses was 32.33 ± 6.50 years.

The average score of social support was 4.78 ± 1.40 . The frequency distribution of the overall score and the dimensions of social support and the self-compassionate dimensions of mothers are listed in Table 1. The results of data analysis with Pearson's correlation test showed that the overall score of social support (P< 0.001) and the dimensions of social support such as family support (P < 0.002), support of friends (P < 0.004), and the support of others (P < 000.001) have a positive and significant relationship with pregnancy care. The results also showed a positive and statistically significant relationship between self-compassion and prenatal care (P < 0.001). There was a significant positive relationship between the subscales of the self-compassion questionnaire, including self-compassion, human commonalities, mindfulness, and increasing resemblance to prenatal care. However, there was a significant negative relationship between the subscales of isolation and self-judgment with prenatal care [Table 2].

Discussion

The results of this study showed that there is a positive and significant relationship between the overall score of social support and the dimensions of social support such as family support, friends' support, and other people's support with pregnancy care. These results mean that with increasing social support for people, the rate of care during pregnancy is higher. As described by Bellin *et al.*, social support is associated with increased mental health as well as improved quality of life. People with close families can share their problems with them and ask for guidance. Even if they can't guide them, their emotional support can help reduce stress. In times of crisis, the environmental system and the individual system together can have an impact on health outcomes.[21] Nasiri and Abdolmaleki's (2017) study, which was conducted to explain the relationship between perceived social support and quality of life and the mediating role of perceived stress in female-headed households in Sanandaj, The results showed that in the simultaneous presence of family support and important individuals, family support is a better predictor (indirectly through stress reduction and directly for quality of life.^[31] A study by Namdari and Nouri (2018) aimed at the role of perceived social support and resilience in postdivorce adjustment for women showed that there is a significant relationship between perceived social support and resilience with postdivorce adjustment in women. As the social support is perceived and the resilience of divorced women increases, so does their adjustment after divorce.^[32] The study of Hassani et al. (2017) with the aim of the role of school social support on student life satisfaction, "Test of the mediating role of school satisfaction, academic competence, and general self-efficacy," showed that there is a positive and significant relationship between social support with competence, self-efficacy, school satisfaction, and life satisfaction. In addition, a positive and significant relationship was found between the variables of competence, self-efficacy, and school

Table 1: Abundant distribution of total score and dimensions of social support and dimensions of self-compassion during pregnancy

Variables	Mean±SD
Overall social support score	4.78±1.40
Dimensions of social support	
Family support	5.24±1.30
Support friends	4.32±1.48
Support other people	4.78±1.43
Dimensions of self-compassion	
Kindness to yourself	15.38±3.85
Judge for yourself	11.98±3.69
Human commonalities	12.90±3.12
Isolation	12.28±3.31
Mindfulness	13.12±3.24
Increasing replication	13.33±3.12

SD=Standard deviation

Table 2: Investigating the relationship between social support and self-compassion of mothers during pregnancy with all pregnancy care

Social support and self- compassion variables	Tota	Total care during pregnancy	
	P *	The correlation coefficient	
Social support	0.001	0.017	
Dimensions of social support			
Family support	0.002	0.132	
Support friends	0.004	0.111	
Support other people	0.001	0.012	
Self-compassion	0.001	0.140	
Dimensions of self-compassion	n		
Kindness to yourself	0.001	0.214	
Judge for yourself	0.002	-0.145	
Human commonalities	0.001	0.153	
Isolation	0.002	-0.104	
Mindfulness	0.002	0.124	
Increasing replication	0.002	0.200	

*P<0.005 is significant

satisfaction with life satisfaction. At the same time, through the mediation of school satisfaction, academic competence, and general self-efficacy, school social support can predict student life satisfaction.^[33] Although the mentioned studies have been performed on different research units from the present study, they are in line with the present study and confirm its results. According to the results of the present study, the lack of family support as variables of the environmental system makes a person vulnerable to psychological consequences such as stress. However, family support, as an important variable of the social system in times of crisis, reduces stress. Lack of family support in stressful situations puts a lot of psychological pressure on a person and can lead to psychological consequences such as stress and make the person very vulnerable to stress. Supporting the family and not leaving the individual alone, as well as understanding their grief and circumstances, makes it easier for them to deal with their problem and accept their situation. This acceptance and understanding by the family leads to a decrease in negative thoughts, isolation, and mental rumination and reduces stress progression. The rate of communication and interaction in families whose members communicate freely and frequently without any restrictions and express their feelings easily with other family members and consult with each other in decision-making and are free in choosing ideas and decisions is at the highest level. As a result, they will have a higher rate of resilience and effective and flexible resistance to accidents and injuries.^[21]

The results also showed a positive and significant relationship between self-compassion and prenatal care. There is a significant positive correlation between the subscales of the self-compassion questionnaire, including kindness to oneself, human commonalities, mindfulness, and increasing resemblance to prenatal care. However, there was a significant negative relationship between the subscales of isolation and self-judgment and prenatal care. This means that with increasing self-esteem, human commonalities, mindfulness, and increasing replication and reduced self-isolation and judgment, the rate of self-care during pregnancy and self-care behaviors increases. Kord and Pashasharifi conducted a study to determine the role of self-compassion in predicting students' academic stress: mediated by internal and external motivation. The results showed that there was a significant negative correlation between intrinsic motivation and self-compassion with academic stress. The findings also showed that self-compassion plays a significant role in predicting students' intrinsic motivation, and intrinsic motivation plays a significant mediating role between students' self-compassion and academic stress. Therefore, it can be concluded that with increasing self-compassion and internal motivation, academic stress is significantly reduced.[34] Mahmoudi's study (2016) was conducted with the aim of comparing perceived and self-perceived social support between patients with multiple sclerosis and normal individuals. The results showed that there was a significant difference between the group of patients with multiple sclerosis and healthy people perceived in terms of social support and self-compassion. As a result, people with multiple sclerosis use perceived social support and self-compassion to further adapt to the disease.^[35] Shafiei *et al.*'s(2019) study was conducted with the aim of analyzing effective self-compassionate education on feeling lonely and resilience in poor divorced women. The results showed that compassion-based education can reduce negative thoughts that lead to differentiation from others and increase the mechanism of positive compromise in divorced women supported by welfare.^[36] Rajabi et al.'s study was conducted with the aim of determining the relationship between self-compassion and depression with mediocre ruminant meditations and

concerns in married female nurses. The results showed that there was a significant negative correlation between self-compassion variables with depression, rumination, and anxiety variables and a significant positive correlation between anxiety and rumination variables with depression.^[37] Khanmohammad et al. performed a study with the aim of comparing self-compassion, cognitive flexibility, and sense of coherence in people with diabetes and healthy people. The results showed that there was a significant difference between self-compassion, cognitive flexibility, and sense of coherence in people with diabetes and healthy people. Based on the findings of the study, it can be said that increasing self-compassion and cognitive flexibility are very important factors for better management of chronic diseases and with more and more physical and mental adjustment, it has to do with stressful life events and higher levels of performance and life satisfaction and of course, self-care behaviors and quality of life affect patients.^[38]

Although the mentioned studies have been performed on different research units from the present study, they are in line with the present study and confirm its results.

Self-compassion helps people feel more secure and secure, which can lead to better self-efficacy. Increasing self-efficacy causes people to feel inner satisfaction and as a result, their psychological well-being increases. People with high self-esteem feel valued. They feel valued for their high self-esteem and low self-criticism. This can increase the adequacy of prenatal care. Self-compassion triggers behaviors to maintain and enhance psychological well-being. Self-compassion and social support can lead to greater health by creating a protective effect. Having good social support supports a person's physical health and mental well-being. Social support increases self-care and self-esteem; has a positive effect on a person's physical, mental, and social well-being; and clearly enhances performance and improves one's quality of life. In general, social support increases people's adaptability to conditions, improves quality of life and survival rate, improves occupational care outcomes, improves economic status, maintains a sense of social harmony, facilitates self-esteem, connects with society, and combats loneliness.^[35] In other words, it is important to emphasize that pregnant mothers may experience stress during pregnancy due to stress related to pregnancy, which reduces their self-compassion. Therefore, pregnancy is a good time for screening and related diagnoses. It is obligatory for all health-care staff to rush to the aid of pregnant women with timely interventions and the necessary guidance, to strive to maintain their mental health and improve their quality of life, and to be more serious in this regard because all of these measures will ultimately improve the health of the community.^[39-41]

Golmakani, et al.: Social support and self-compassion and improving the adequacy of prenatal care

By increasing the self-esteem of pregnant mothers and the amount of support provided to pregnant mothers, self-care and parenting behaviors will improve, which will lead to self-care behaviors to protect themselves and the baby. As a result, it is important to identify the factors that affect the adequacy of pregnancy care, especially the psychological issues of the pregnant mother, which, according to the results of self-compassion and social support, can be effective on the adequacy of pregnancy care; Due to the lack of findings of a study conducted to assess the relationship between self-love and social support in pregnant women with adequate care during pregnancy, the result of comparing this result with other studies is deficient. Therefore, descriptive and analytical research in this field is emphasized in different groups of pregnant women. It is suggested that the individual and social characteristics of women and various factors affecting these cases be identified in order to increase prenatal care. On the other hand, this study has been conducted in the city of Isfahan. It is recommended to do it in different cities and villages that have different cultures so that the results can be more generalized.

Conclusion

According to the results of this study, it seems that more pregnant mothers have social support and are more compassionate toward themselves, According to the results of this study, it seems that with the increase of social support and self-love of pregnant mothers, self-care behaviors and health-related behaviors increase and it is possible to achieve this with the cooperation of families and health officials. It is hoped that more attention from maternity and family care officials will increase maternal self-esteem and support them, as well as the health of the family, which is one of the fundamental foundations of the society.

Acknowledgment

The present study is conducted as part of a research project approved by Mashhad University of Medical Sciences with the code of IR. MUMS. REC.1397.062. We would like to thank the Research Vice Chancellor of Mashhad University of Medical Sciences and the Evidence-Based Research Center of the School of Nursing and Midwifery for funding this study and the participants in the study.

Financial support and sponsorship

This study and the participants in the study were financially supported by the Research Vice Chancellor of Mashhad University of Medical Sciences and the Evidence-Based Research Center of the School of Nursing and Midwifery.

Conflicts of interest

There are no conflicts of interest.

References

- Kharazi S, Peyman N, Esmaily H. Association between maternal health literacy level with pregnancy care and its outcomes. Iran J Obstet Gynecol Infertil 2016;19:40-50.
- Gennaro S, Melnyk BM, O'Connor C, Gibeau AM, Nadel E. Improving prenatal care for minority women. MCN Am J Matern Child Nurs 2016;41:147-53.
- 3. World Health Organization. Standards for Improving Quality of Maternal and Newborn Care in Health Facilities. Geneva: World Health Organization; 2016.
- Alibekova R, Huang JP, Chen YH. Adequate prenatal care reduces the risk of adverse pregnancy outcomes in women with history of infertility: A nationwide population-based study. PLoS One 2013;8:e84237.
- Borghei N S, Taghipour A, Roudsari RL. Pregnant mothers' strategies for the management of pregnancy concerns. Hayat 2017;23:106-25.
- Jones E, Lattof SR, Coast E. Interventions to provide culturally-appropriate maternity care services: Factors affecting implementation. BMC Pregnancy Childbirth 2017;17:267.
- Suzanne L. Lennon, RN, Heaman RN. Factors associated with family resilience during pregnancy among inner-city women. Midwifery 2015;31:957-64.
- Hajizadeh S, Tehrani FR, Simbar M, Farzadfar F. Factors influencing the use of prenatal care: A systematic review. J Midwifery Reprod Health 2016;4:544-57.
- Nejad PE, Najar S, Afshari P, Yaralizadeh M, Chegini SN. Evaluation of pregnant women's satisfaction of presented prenatal care at Ahvaz health care centers. The Iranian J Obstet Gynecol Infertil 2016;19:13-22.
- Cunningham FG, Leveno KJ, Bloom L, Hauth JC, Rouse DJ, Spong CY. Williams Obestetrics. 23th ed. New York: McGraw-Hill; 2014.
- 11. Dadras A, Ahmadi Z, Danesh-Kojuri M, Hosseini F. Relationship between pre-pregnancy body mass index and childbirth outcomes in primiparous women. J Iran Univ Med Sci 2010;22:56-64.
- Kharaghani R, Shariati M, Yunesian M, Keramat A, Moghisi A. The Iranian integrated maternal health care guideline based on evidence-based medicine and American guidelines: A comparative study. Mod Care J 2016;13:e9455.
- Scott JR. Danforth's Obstetrics and Gynecology. 11th ed. Philadelphia, PA: Lippincott Williams and Wilkins; 2011. p. 214-21.
- 14. Debiec KE, Paul KJ, Mitchell CM, Hitti JE. Inadequate prenatal care and risk of preterm delivery among adolescents: A retrospective study over 10 years. Am J Obstet Gynecol 2010;203:122.e1-6.
- VanderWeele TJ, Lantos JD, Siddique J, Lauderdale DS. A comparison of four prenatal care indices in birth outcome models: Comparable results for predicting small for gestational-age outcome but different results for preterm birth or infant mortality. J Clin Epidemiol 2009;62:438-45.
- Briese V, Voigt M, Hermanussen M, Wittwer-Backofen U. Morbid obesity: Pregnancy risks, birth risks and status of the newborn, comparative human biology. Homo 2010;61:64-72.
- 17. Seo HJ, Ryu EJ, Ham MY. Relationships among mood status, social support, symptom experience and quality of life in colorectal cancer patients-based on the theory of unpleasant symptoms. Asian Oncol Nurs 2018;18:104-13.
- Kim TH, Connolly JA, Tamim H. The effect of social support around pregnancy on postpartum depression among Canadian teen mothers and adult mothers in the maternity experiences survey. BMC Pregnancy Childbirth 2014;14:162.
- Parsaierad E, Akbari SA, Mashak R. Comparison of insomnia, sleepness, and social support in depressed and non-depressed women. Find Psychol 2010;5:19-34.

Golmakani, et al.: Social support and self-compassion and improving the adequacy of prenatal care

- 20. Cohen S. Social relationships and health. Am Psychol 2000;59:676-84.
- Bellin MH, Osteen P, Kub J, Bollinger ME, Tsoukleris M, Chaikind L, *et al.* Stress and quality of life in urban caregivers of children with poorly controlled asthma: A longitudinal analysis. J Pediatr Health Care 2015;29:536-46.
- Pilcher JJ, Bryant SA. Implications of social support as a self-control resource. Front Behav Neurosci 2016;10:228.
- Staniute M, Brozaitiene J, Bunevicius R. Effects of social support and stressful life events on health-related quality of life in coronary artery disease patients. J Cardiovasc Nurs 2013;28:83-9.
- 24. Bøen H, Dalgard OS, Bjertness E. The importance of social support in the associations between psychological distress and somatic health problems and socio-economic factors among older adults living at home: A cross sectional study. BMC Geriatr 2012;12:27.
- 25. Lau Y, Wong DF, Wang Y, Kwong DH, Wang Y. The roles of social support in helping Chinese women with antenatal depressive and anxiety symptoms cope with perceived stress. Arch Psychiatr Nurs 2014;28:305-13.
- 26. Neff KD. Self-compassion, self-esteem, and well-being. Soc Pers Psychol Compass 2011;5:1-12.
- 27. Mantzios M, Egan HH. On the role of self-compassion and self-kindness in weight regulation and health behavior change. Front Psychol 2017;8:229.
- Tamanneifar MR, Leys H, Mansourinik A. The relationship between perceived social support and self-efficacy among high school students. J Soc Psychol 2013;8:31-9.
- 29. Cheraghian, H. The relationship between self-compassion and mental health with mediating role of self-esteem and body image in female students. Woman Fam Stud 2016;4:33-56.
- Khalesi ZB, Rafat F, Pakseresht S. Relationship between adequacy of prenatal care utilization index and neonatal outcomes. Compr Nurs Midwifery 2016;75(26):8-15.
- 31. Nasiri F, Abdolmaleki S. Explaining the relationship between perceived social support and quality of life, perceived stress

mediator role in female-headed households in Sanandaj. J Appl Soc 2017;27:99-116.

- 32. Namdari A, Nouri N. Roles of perceived social support and resilience in women's post-divorce adjustment. J Soc Probl Iran 2018;9:25-50.
- 33. Hassani M, Asghari M, Kazemzadehbeytali M, Soltanahmadi JA. The role of social support in life satisfaction of students: Examining the mediating role of school satisfaction, academic competency and self-efficacy. J Sch Psychol 2017;5:31-51.
- Kord B, Pashasharifi H. The role of self-compassion and academic stress: Mediated intrinsic and extrinsic motivation. J Educ Psychol Stud 2015;12:127-44.
- 35. Mahmoodi H. Comparison of perceived social support and self-compassion among patients with multiple sclerosis and normal people. Q J Health Psychol 2018;7:21-34.
- Shafiei M, Akbari S, Heidarirad H. The effectiveness of self-compassion training on the loneliness and resilience destitute women. Shenakht J Psychol Psychiatry 2019;5:71-84.
- Rajabi G, Gashtil K, Amanallahi A. The relationship between self-compassion and depression with mediating's thought rumination and worry in female nurses. Indian J Nephrol 2016;29:10-21.
- Khanmohammad A, Abbasi G, Javanmard SR. A comparative survey of self-compassion, cognition flexibility and sense of coherence in diabetic patients and individual normal. J Educ Psychol 2017;8:86-96.
- Ghorbani-Marghmaleki F, Mohebbi-Dehnavi Z, Beigi M. Investigating the relationship between cognitive emotion regulation and the health of pregnant women. Edu Health Promot2019;8:175.
- 40. Kiani-Sheikhabadi M, Beigi M, Mohebbi-Dehnavi Z. The relationship between perfectionism and body image with eating disorder in pregnancy. J Educ Health Promot 2019;8:242.
- Noroozi M, Gholami M, Mohebbi-Dehnavi Z. The relationship between hope and resilience with promoting maternal attachment to the fetus during pregnancy. J Educ Health Promot 2020;9:54.