

Perceived Social Support and Its Social Determinants in Gastrointestinal Cancer Patients in Zanjan, Iran, in 2018

Alireza Shoghli^{1,2} , Negar Ansari³ , Nima Motamed^{1,2} , Somayeh Abdollahi Sabet^{*1,2} 

1. Dept. of Community Medicine, School of Medicine, Zanjan University of Medical Sciences, Zanjan, Iran
2. Social Determinants of Health Research Center, Zanjan University of Medical Sciences, Zanjan, Iran
3. School of Medicine, Zanjan University of Medical Sciences, Zanjan, Iran

Article Info

 10.30699/jambs.28.128.132

Received: 2019/12/29;

Accepted: 2020/04/10;

Published Online: 01 May 2020;

Use your device to scan and read the article online



Corresponding Information:

Somayeh Abdollahi Sabet

Dept of Community Medicine,
School of Medicine, Zanjan
University of Medical Sciences,
Zanjan, Iran

E-Mail: drsabet@zums.ac.ir



Copyright © 2020. This is an original open-access article distributed under the terms of the Creative Commons Attribution-noncommercial 4.0 International License which permits copy and redistribution of the material just in noncommercial usages with proper citation.

ABSTRACT

Background & Objective: Social support helps patients cope with the outcomes of diseases and therapy side effects. However, there is little information about the social support status among Iranian cancer patients. This study assessed the amount of perceived social support status (SSQN) and satisfaction (SSQS) in gastrointestinal (GI) cancer patients based on socio-economic factors.

Materials & Methods: This study was carried out in 2018 on all GI cancer patients referred to health centers in the province of Zanjan (i.e., Vali-e Asr teaching hospital and Mehraneh charity clinic for cancer therapy). The Persian version of Sarason's social support questionnaire was applied.

Results: The questionnaire was completed by 284 patients. The average amount of SSQN was 3.56 ± 1.25 . The average score of SSQS was 4.87 ± 0.57 . Network dimension and satisfaction status were significantly correlated ($P < 0.001$). Groups were significantly different in terms of their satisfaction ($P < 0.001$), whereas they were the same in terms of network size.

Conclusion: Cancer patients reported high levels of social support in terms of network (SSQN), but were not highly pleased with the support received (SSQS). More secure employment, higher income, a higher level of education, and being an urban resident are predictors of high levels of satisfaction of perceived social support.

Keywords: Cancer, Social determinants, Social support

Introduction

Social support is a cumulative form of support provided by family members, friends, social networks, care-providers, and organizations (1-3). Some definitions further suggest that the recipient should have a perception of someone caring for them and a resultant sense of well-being (4).

Cancer is a major health problem that adversely affects different dimensions of patients' lives. Being diagnosed with cancer and the treatment process, combined with its heavy economic burden, significantly affects the physical and psychological abilities of the patient, as well as the lives of their family. Social can help patients cope with the outcomes of their diseases and therapy side effects (5,6). Several studies on cancer patients indicated that high levels of perceived social support are correlated with decreased psychological problems (7,8), better ways of coping with the disease (9), and increased quality of life (10-13). Furthermore, social support has been shown to affect tumor growth (14-16).

There is little information about social support status of Iranian cancer patients. However, the few studies that are available suggest that cancer patients generally perceive high levels of social support (17-19). Heidari *et al.* studied patients with cancer in Tehran hospitals using the Northouse Questionnaire. The average social support score of 136.44 (from a maximum of 200) was reported, indicating that 95.9% of patients perceived moderate to high levels of support. Patients received the most support from their spouse and family members and received the least support from friends (17). Naseri *et al.* studied Isfahanian patients (both inpatients and outpatients) of different types of cancer. They reported more than 95% of the studied population perceived high levels of social support from family and friends (18). Faghani *et al.* studied social support in a group of inpatients and outpatients with different types of cancers in Tabriz. The mean total score reported by this study's participants was 68 out of 84 (19).

An important question that is not addressed in previous studies is the question of whether the quantity

or quality of social support has beneficial effects. Therefore, the present study assessed the amount of perceived social support status (quantity) and satisfaction (quality), and related factors, in Gastrointestinal (GI) cancer patients who referred to the Vali-e Asr teaching hospital of Zanjan and the Mehraneh charity foundation.

Materials and Methods

This cross-sectional study was carried out over three months in 2018. The study included all 284 cases that had referred to health centers in the Zanjan province (Vali-e Asr teaching hospital, which is the only referral hospital for cancer therapy in the province) (218 cases) and Mehraneh charity clinic for cancer therapy (66 cases). Inclusion criteria were suffering from GI cancer, awareness of cancer, not suffering from any cognitive disorders, and agreement to participate in the study.

A two-part questionnaire was applied: the first part asked participants about their demographic information, and the second part measured the perceived social support received by the respondents using the Persian version of Sarason's social support questionnaire (SSQ), consisting of 27 items (20). The uniqueness of Sarason's questionnaire is to simultaneously examine two different but related dimensions. In the first section, it asks respondents to name all available supporting people (SSQN); in the second section, the subjects are asked to rate their level of satisfaction with the perceived support (SSQS). SSQN represents the average number of supporting people (up to 9), and SSQS represents the average satisfaction with this number of supporting people on a six-point scale (1 = very dissatisfied, 2 = somewhat unhappy, 3 = slightly unhappy, 4 = slightly pleased, 5 = somewhat pleased, 6 = very pleased). Naaseh *et al.* confirmed the internal consistency of SSQN as 95% and 90% for SSQS in the Persian version (21). The questionnaire was self-administered and was filled via interviews for illiterate patients.

Data analysis was performed using a Chi-square test, an independent samples t-test, and a one-way ANOVA in SPSS version 24 (SPSS Inc., Chicago, Ill., USA). The significance level for all analyses was considered as 0.05.

This study received the approval of the ethics committee (IR.ZUMS.REC.1397.074). Questionnaires were answered anonymously, and patients were assured that their information would remain confidential.

Results

In this study, 284 questionnaires were analyzed. The age of patients ranged from 24-88 years (mean±SD = 60.16±13.89). Detailed demographic and disease information is provided in [Table 1](#).

The average number of social supporting people (SSQN) was 3.56±1.25 (range: 1-9). The average score of social support satisfaction (SSQS) was 4.87±0.57 (range 0-6). Network dimension and satisfaction status were significantly correlated ($P<0.001$) (correlation coefficient = 0.41).

There was no significant difference in the number of supporting people among different categories of social determinants ([Table 2](#)). Satisfaction with social support was not different when comparing males and females. Single patients were more satisfied with the support they received than the other two groups ($P<0.001$). Considering education, patients who were more literate (diploma and higher) were more satisfied ($P<0.001$) with their support. Students and employed patients were the most satisfied group. Unemployed and retired patients were the second-most satisfied group, and self-employed patients were the least satisfied. Satisfaction scores were significantly different among the above three groups ($P<0.001$). Affluent patients reported the highest levels of satisfaction ($P<0.001$). Furthermore, urban patients expressed the most satisfaction with their support ($P<0.001$).

Table 1. Demographic characteristics of patients (n=284)

| Variable | N(%) | |
|----------------|----------------|-----------|
| Sex | Male | 161(56.7) |
| | Female | 123(55.7) |
| Age | <40 yrs | 27(9.5) |
| | 74-60 yrs | 85(29.9) |
| | >60 yrs | 172(60.6) |
| Marital status | Single | 9(3.2) |
| | Married | 226(79.6) |
| | Divorced/widow | 49(17.3) |

| Variable | N(%) | |
|--------------------------------------|-----------------------|-----------|
| Literacy | Illiterate | 140(49.3) |
| | Under diploma | 97(34.3) |
| | Diploma | 13(4.4) |
| | University degree | 34(12) |
| Occupation status | Housewife/unemployed | 151(53.2) |
| | Employed | 20(7) |
| | Self-employed | 73(25.7) |
| | Retired | 37(13) |
| | Student | 3(1.1) |
| Income status (IRR*per month) | <10,000,000 | 148(52.1) |
| | 10,000,000-20,000,000 | 111(39.1) |
| | 20,000,000-30,000,000 | 16(5.6) |
| | >30,000,000 | 9(3.2) |
| Residential status | Urban | 145(51.1) |
| | Rural | 139(48.9) |

*Islamic Republic of Iran Rials

Table 2. SSQN and SSQS of patients by social determinants

| Status | SSQN m±sd | Sig | SSQS m±sd | Sig |
|-----------------------|--------------|--------|--------------|----------|
| Sex | | | | |
| Male | 3.51±1.24 | 0.53* | 4.85±0.57 | 0.47* |
| Female | 3.61±1.26 | | 4.90±0.56 | |
| Age | | | | |
| <40 yrs | 3.52±1.15 | 0.14** | 5.40±0.51 | <0.001** |
| 40-60 yrs | 3.36±1.46 | | 4.94±0.60 | |
| >60 yrs | 3.67±1.12 | | 4.73±0.49 | |
| Marital status | | | | |
| Single | 3.28±0.52 | 0.63** | 5.63±0.47 | <0.001** |
| married | 3.59±1.28 | | 4.87±0.56 | |
| Divorced/widow | 3.45±1.17 | | 4.73±0.51 | |

| Status | SSQN m±sd | Sig | SSQS m±sd | Sig |
|----------------------------------|--------------|--------|--------------|----------|
| Literacy | | | | |
| illiterate | 3.56±1.39 | 0.49** | 4.65±0.44 | <0.001** |
| Under diploma | 3.44±0.99 | | 4.90±0.57 | |
| diploma | 3.85±2.08 | | 5.35±0.41 | |
| University degree | 3.75±0.85 | | 5.52±0.41 | |
| Occupation status | | | | |
| Housewife/unemployed | 3.52±1.25 | 0.32** | 4.87±0.58 | <0.001** |
| Employed | 4.06±1.12 | | 5.43±0.38 | |
| Self-employed | 3.49±1.35 | | 4.66±0.45 | |
| retired | 3.61±1.11 | | 4.91±0.55 | |
| student | 3.21±0.00 | | 5.92±0.00 | |
| Income (IRR*** per month) | | | | |
| <10,000,000 | 3.43±1.09 | 0.08** | 4.73±0.48 | <0.001** |
| 10,000,000-20,000,000 | 3.62±1.46 | | 4.90±0.60 | |
| 20,000,000-30,000,000 | 3.72±0.82 | | 5.33±0.38 | |
| >30,000,000 | 4.44±1.20 | | 5.81±0.96 | |
| Residential status | | | | |
| urban | 3.74±1.13 | 0.10* | 5.06±0.54 | <0.001* |
| rural | 3.36-1.33 | | 4.68±0.53 | |

*independent samples t-test sig

**One-way ANOVA sig

***Islamic Republic of Iran Rials

Discussion

This study was conducted to investigate the status of social support from two aspects of (quantity and satisfaction) among GI cancer patients in Zanjan city based on socio-economic factors.

Based on our results, the mean social support network (SSQN) score was 3.56 (out of 9), while the mean social support satisfaction (SSQS) score was 4.68 (out of 6). SSQN had a correlation with SSQS ($r = 0.41$). Sarason *et al.* (20) reported a mean SSQN and SSQS of 4.25 and 5.38, respectively, and a correlation coefficient of 0.34 between these two variables. Although SSQN and SSQS were significantly correlated both in our study and Sarason's, both studies

showed only moderate correlation coefficients. Therefore, the correlation between the quantity of social support and satisfaction does not appear to be strong, and other factors likely influence patients' satisfaction. Evidence suggests that Satisfaction with the available support may be influenced by several factors, such as personality and recent experiences (20), and not merely the quantity of supporting people.

In 2016, Moonesar *et al.* (22) reported a mean SSQN and SSQS of 1.67 and 4.83, respectively, among the general population older than 65-year who visited an emergency department. In a study in Uganda (23) on women with complicated abortion, the reported SSQN

and SSQS values were 1.5 and 4.59, respectively. While both of these studies present a lower mean SSQN than that of our study, the reported mean SSQS values are similar. Regardless of the differences between the study populations, the quantity of social support in the present study has a stronger effect than indicated in the mentioned studies, even though patients' satisfaction was similar across the studies.

In some Iranian studies, cancer patients reported high levels of social support (17,18,24,25). In 2009, Naseri *et al.* (18) applied the Multidimensional Scale of Perceived Social Support (MSPSS), which is a self-report measure of subjectively assessed social support, and reported that more than 95% of patients suffering from different cancers in Isfahan perceived high levels of social support from family and friends. Madani *et al.* (26) studied the relationship between hopelessness and social support in cancer patients in Zanjan in 2016 and revealed moderate levels of perceived social support, which does not support the high levels reported in the current study. Although the age, sex, literacy, and marital status of the population were similar between the studies, the questionnaire used by Madani *et al.* (Procindano 1983) was different from the one used in the present study.

In this study, SSQN and SSQS were analyzed based on several social determinants: gender, age, marital status, educational level, job status, income level, and place of residence. There was no significant difference between the groups in terms of network size. This result is not in agreement with a Turkish study in which the mean social support score reported by men was significantly higher than that reported by women (27).

In terms of satisfaction, younger, single, more educated, employed (in contrast to un-employed or self-employed), higher-income urban patients reported more satisfaction with perceived support than other patients. Conversely, Naseri *et al.* concluded that there was no significant correlation between demographic variables (age, sex, marital status, occupation, education, the average income of the spouse, and place of residence) and perceived social support among cancer patients (18) Faghani *et al.* also did not find any significant association between marital status and satisfaction (19).

Socio-economic determinants are likely to influence the level of satisfaction expressed by cancer patients (20). This idea is supported by the results of our study. People in these groups (higher socio-economic class) appear to be generally more satisfied with life. In other words, the levels of satisfaction that individuals expressed in responding to this questionnaire were probably influenced by their overall level of satisfaction with life rather than solely by the amount of social support they received. With this in mind, it is likely that individuals' expressed satisfaction with the social support received is influenced by their overall quality of life, which can be explored in future studies.

Insufficient control for confounding variables that affect the quality of life is a limitation of this study.

Conclusion

This study was conducted on an acceptable representative sample of GI cancer patients in Zanjan, Iran. Patients reported high levels of social support in terms of their network (SSQN), but were not much pleased with received support (SSQS). Although SSQN was the same among different participants in terms of socio-economic variables, there was significant variability in SSQS among groups. More secure employment, higher income, a higher level of education, and being a city resident are predictors of higher levels of satisfaction of perceived social support. As such, vulnerable groups need more attention in terms of social support interventions. Arranging appointments with social workers or forming peer groups should be considered as part of the treatment of such patients.

Acknowledgments

This study was sponsored by Social Determinants of Health Research Center, Deputy for Research and Technology of Zanjan University of Medical Sciences. The authors acknowledge the doctors and nurses of the Oncology Department of Vali-e Asr teaching hospital and Mehraneh charity clinic for cancer therapy in Zanjan. We also acknowledge medical students Sarah Esmaeili and Aisan Besharati, who assisted with the distribution and collection of questionnaires.

Conflict of Interest

Authors declared no conflict of interest.

References

1. Eom CS, Shin DW, Kim SY, et al. Impact of perceived social support on the mental health and health-related quality of life in cancer patients: results from a nationwide, multicenter survey in South Korea. *Psycho-Oncol.* 2013;22(6):1283-90. [DOI:10.1002/pon.3133]
2. Lian TC. Perceived social support, coping capability and gender differences among young adults. *Sunway Acad J.* 2010; 6:75-88.
3. Fernandes A, Cruz A, Moreira C, Santos M, Silva T. Social support provided to women undergoing breast cancer treatment: A study review. *Adv Breast Cancer Res.* 2014; 3:47-53. [DOI:10.4236/abcr.2014.32007]
4. Hupcey JE. Social support: Assessing conceptual coherence. *Qual Health Res.* 1998; 8:304-18. [DOI:10.1177/104973239800800302]
5. Dunkel-Schetter C, Feinstein L, Taylor S, Falke R. Patterns of coping with cancer. *Health Psychol.*

- 1992;11(2):79-87. [[DOI:10.1037/0278-6133.11.2.79](https://doi.org/10.1037/0278-6133.11.2.79)]
6. Dunkel-Schetter C, Folkman, S., Lazarus R. Correlates of social support receipt. *J Personal Soc Psychol.* 1987;53(1):71-80. [[DOI:10.1037/0022-3514.53.1.71](https://doi.org/10.1037/0022-3514.53.1.71)]
 7. Chen S-C, HB-S, Lin C-Y. Depression and predictors in Taiwanese survivors with oral cancer. *Asian Pac J Cancer Prev.* 2013; 14:4571-6. [[DOI:10.7314/APJCP.2013.14.8.4571](https://doi.org/10.7314/APJCP.2013.14.8.4571)]
 8. Tanrıverdi D SE, Can G. Posttraumatic growth and social support in Turkish patients with cancer. *Asian Pac J Cancer Prev.* 2012; 13:4311-14. [[DOI:10.7314/APJCP.2012.13.9.4311](https://doi.org/10.7314/APJCP.2012.13.9.4311)]
 9. Delbruk H. Social support in cancer rehabilitation and palliation. *Rehabilitation and Palliation of Cancer Patients.* Springer. 2008:51-63.
 10. Lim JW. Different pathways in social support and quality of life between Korean American and Korean breast and gynecological cancer survivors. *Qual Life Res.* 2008;17: 679-89. [[DOI:10.1007/s11136-008-9343-4](https://doi.org/10.1007/s11136-008-9343-4)]
 11. Filazoglu G GK. Coping and social support and health related quality of life in women with breast cancer in Turkey. *Psychol Health Med.* 2008; 13:559-73. [[DOI:10.1080/13548500701767353](https://doi.org/10.1080/13548500701767353)]
 12. Sammarco A KL. Quality of life, social support, and uncertainty among Latina breast cancer survivors. *Oncol Nurs Forum.* 2008;35: 844-9. [[DOI:10.1188/08.ONF.844-849](https://doi.org/10.1188/08.ONF.844-849)]
 13. Umberson D, Crosnoe, R., Reczek, C. Social relationships and health behavior across life course. *Sociol.* 2010;36:139e57. [[DOI:10.1146/annurev-soc-070308-120011](https://doi.org/10.1146/annurev-soc-070308-120011)]
 14. Hinzey A G-DM, Lustberg MB, DeVries AC. Breast cancer and social environment: getting by with a little help from our friends. *Breast Cancer Res.* 2016;18(1):54. [[DOI:10.1186/s13058-016-0700-x](https://doi.org/10.1186/s13058-016-0700-x)]
 15. Lutgendorf SK. Biobehavioral factors and cancer progression: physiological pathways and mechanisms. *Psychosomatic Med.* 73(9):724-30. [[DOI:10.1097/PSY.0b013e318235be76](https://doi.org/10.1097/PSY.0b013e318235be76)]
 16. Zabalegui A SS, Sanchez P, et al. Nursing and cancer support groups. *J Adv Nurs.* 2005;51(4):369-81. [[DOI:10.1111/j.1365-2648.2005.03508.x](https://doi.org/10.1111/j.1365-2648.2005.03508.x)]
 17. Heydari S, Rafee F, Hoseini F. Correlation of perceived social support from different supportive sources and the size of social network with quality of life in cancer patients. *Iran J Nur.* 2009; 22:8-18.
 18. Naseri N. Social support in cancer patients referring to Sayed Al-Shohada Hospital. *Iran J Nurs Midwife Res.* 2012; 17:279-83.
 19. Faghani S RA, Parizad N, Mohajjel-Aghdam A, Hassankhani H, Mohammadpoorasl A. Social support and its predictors among Iran Cancer survivors. *Asian Pac J Cancer Prev.* 2014;15(22):9767-71. [[DOI:10.7314/APJCP.2014.15.22.9767](https://doi.org/10.7314/APJCP.2014.15.22.9767)]
 20. Sarason IG, Basham RB, Sarason BR. Assessing social support: The social support questionnaire. *J Personal Soc Support.* 1983;44(1):127-39. [[DOI:10.1037/0022-3514.44.1.127](https://doi.org/10.1037/0022-3514.44.1.127)]
 21. Nasseh M, Joghataee MT, Nojomi M, Rishter Y. Farsi version of social support questionnaire. *Soc Welfare Quart.* 2011;11(41):251-66.
 22. Moonesar R, Sammy I, Paul J. Social support in older people: lessons from a developing country. *Qual Life Res.* 2016; 25(1):233-6 [[DOI:10.1007/s11136-015-1053-0](https://doi.org/10.1007/s11136-015-1053-0)]
 23. Lubinga SJ, Levine GA, Jenny AM, et al. Health-related quality of life and social support among women treated for abortion complications in western Uganda. *Health Qual Life Outcomes.* 2013; 11:118-24. [[DOI:10.1186/1477-7525-11-118](https://doi.org/10.1186/1477-7525-11-118)]
 24. Taghavi M KE, Dehbozorgi Gh, Dehbozorgi Gh, Taghavi SMA. Investigating the relation of depression and religious coping and social support in women with breast cancer. *J Isfahan Med School.* 2011; 28:901-8.
 25. Nikmanesh Z, Emamhadi MA. Prediction of posttraumatic growth base on of spirituality and social support in patients with breast cancer. *Iran Quarter J Breast Dis.* 2013;6(2)
 26. Madani H, Pourmemari M, Moghimi M, Rashvand F. Hopelessness, perceived social support and their relationship in Iranian patients with cancer. *Asia Pac J Oncol Nurs.* 2018;5:314-9 [[DOI:10.4103/apjon.apjon_5_18](https://doi.org/10.4103/apjon.apjon_5_18)]
 27. Güneş Z ÇH. Quality of life and social support in cancer patients undergoing outpatient chemotherapy in Turkey. *Ann Nurs Pract.* 2016;3(7):1070.

How to Cite This Article:

Shoghli A, Ansari N, Motamed N, Abdollahi Sabet S. Perceived Social Support and Its Social Determinants in Gastrointestinal Cancer Patients in Zanjan, Iran, in 2018. *J Adv Med Biomed Res.* 2020; 28 (128): 132-137

Download citation:

[BibTeX](#) | [RIS](#) | [EndNote](#) | [Medlars](#) | [ProCite](#) | [Reference Manager](#) | [RefWorks](#)