Effect of Social Support on Health Related Quality of Life in Pregnant Women- A Cross-sectional Study at a Tertiary Care Hospital Multan, South-Punjab Pakistan

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Abstract

Objective: To explore the relationship between social support and health-related quality of life among pregnant women.

Method: This cross-sectional study was conducted at Nishtar Medical University Hospital Multan, Pakistan. The duration of study was from January to March2017. Pregnant women presenting to our hospital were approached for data collection. The chronological age range of the sample was 15-35 years and ages of pregnancy in months were included. Social support of pregnant women was measured through multidimensional scale of perceived social support and health-related quality of life was measured through medical outcomes study questionnaire.

Results: Of the 120 participants, 66(55%) were from rural areas, and 54(45%) from the urban areas. Subjects who were in their first trimester of pregnancy were 72(60%), while 25(20.8%) were in their second trimester and 23 (19.2%) in the third. Of the total, 80(66.66%) were educated women and 40 (33.34%) were illiterate. Subjects with a history of physical illness were 76 (63.30%) while 60 (50%) suffered from psychological illness too. There was a significantly positive relationship between social support and health-related quality of life among the pregnant subjects (p<0.05).

Conclusion: More social support can increase the health-related quality of life of pregnant women.

Keywords: Social support, Health related quality of life, pregnant women.

Introduction

Pregnancy is the time when women need encouragement and support from family members. The environment and surroundings of pregnant women affect their child's prenatal development immediately after conception. During pregnancy the care, warmth, support and comfort given by societal members influence her physical and mental health while the nutrition, medication, treatment and stress-free environment enhances her health-related quality of life (HRQoL). Those pregnant women who receive continued care and support from their spouse and family would be less affected by problems like mental stress, depression and anxiety disorders. (1) The social support during pregnancy is correlated with fetal growth and birth weight of the neonate. During the prenatal development the biological and behavioral factors may also accord the correlation between social support and fetal growth (2). There is an increased risk of depression among women who have had unwanted pregnancy, but the increased social support can potentially play a positive role in dealing with it. Positive plans towards pregnancy and a high level of social support during pregnancy enhances women's mental health (3). Quality of life is the well-being of the individual while fulfilling most of the needs that are possible (4). It is increasingly recognised that psychological and biological factors are highly associated with HRQoL. The psychological resources like self-esteem, sense of coherence and perceived control and psychological risk factors like depressed mood independently relate to the HRQoL (5). It has been observed that economically and racially diverse group of women with early pregnancy have depressive symptoms (6). Women in the second trimester of pregnancy who had an unplanned pregnancy or who were divorced, younger, separated, cohabiting, meagrely-educated, and those who work longer with poor physical or psychological health had a higher level of perceived stress (7). During the study it was observed that pregnant women who receive treatments regarding their physical health enjoy a higher HRQoL than those who do not receive any treatment (8). In the first trimester of pregnancy 78.5% women reported that they suffer from nausea and vomiting which are significantly associated symptoms with the quality of life (9). Most of the pregnant women, 35.3% were satisfied with their sex lives and had a good quality of life while 15.7% of pregnant women were very satisfied with their sex lives and their

quality of life was excellent (10). Women who got pregnant early and live in a racially or economically diverse group are significantly affected by depressive symptoms which makes it important to recognise and acknowledge the depressive symptoms during early pregnancy. Depressive symptoms and the HRQoL are independently and negatively correlated to each other (11). The current study was planned to investigate the relationship between social support and HRQoL among pregnant women.The current study was planned to investigate the association between social support and HRQoL among pregnant women. We hypothesised that there is a positive relationship between social support and HRQoL among pregnant women.

Subjects and Methods

This cross-sectional study was conducted at Nishtar Medical University Hospital Multan, Pakistan. The duration of study was from January to March2017. After obtaining approval from the Department of Behavioural Sciences, Nishtar Medical University Multan, pregnant women were approached for data collection and informed consent was obtained. Subjects in either earlier or late pregnancy, having age range of 15-35 years were selected using purposive sampling technique. Women who were married but not pregnant were excluded.The sample size was calculated using the following formula: ss =Z 2 * (p) * (1-p)/ c (12). The power of the study was investigated by putting effect size of 0.33. It was found that the sampling power of the current study was 0.9506 which is acceptable (13). Demographic sheet and two questionnaires regarding social support and HRQoL were given to the participants initially.The demographic sheet was used to get information related to the pregnant women. It included chronological age, age of pregnancy, education, family income, history of physical and psychological illness. Multidimensional scale for perceived social support (MSPSS) was used to measure family/social support among the subjects. This scale has been used for clinical and non-clinical samples which is brief, easy-to-administer self-reported instrument containing 12 items. Factor analysis confirmed the subscale structure of the measure: family, friends and significant other (14). Medical outcomes study (MOS) questionnaire Short Form-36 (SF36) was used to measure the HRQoL among pregnant women. The scale, developed by MOS or research and development (RAND) health insurance experiment, is an indicator of overall health status. It measures general health, physical functioning, role limitation due to physical health, role limitation due to emotional problems, energy/fatigue, emotional wellbeing, social functioning, pain, and health change (15). As the questionnaires were in English and the participants reported that it was difficult for them to understand, researchers used explanatory language for better comprehension. Descriptive statistics, like mean, standard deviation, range, and skewness were applied on all study variables. Frequency and percentages were computed for demographic characteristics. Pearson correlation was applied to study the relationship between social support and HRQoL.

Results

Of the 120 participants, 66(55%) were from the rural areas of Multan and 54(45%) from the urban areas. The overall mean age was 26.76±4.11 years (range: 16-34 years, Table-1)

The mean duration of pregnancy was 4.10±2.15 months. Subjects who were in their first trimester of pregnancy were 72 (60%), while 25 (20.8%) were in their second trimester and 23 (19.2%) in the third. Overall, 80 (66.66%) subjects were educated and 40 (33.34%) were illiterate. Subjects with a history of physical illness were 76 (63.30%) and 60 (50%) suffered from psychological illness as well. The values of skew were less than 2.00, indicating that the sample was normal (Table-2).

Table-1: Frequencies and percentages of chronological ages among pregnant women.

Chronological age	Frequencies	Percentages
16 years	3	2.5
17 Years	1	0.8
18	2	1.7
19	4	3.3
20	7	5.8
21	15	15.2
22	3	2.5
23	18	15.0
24	9	7.5
25	5	4.2
26	11	9.2
27	10	8.3
28	6	5.0
29	4	3.3
30	9	7.5
31	10	8.3
32	1	0.8
33	1	0.8
34	1	0.8

Table-2: Descriptive statistics of social support and HRQOL

Variables	Range		M	SD	Skew
	Min	Max			
Social support	47	79	67.36	6.25	-0.77
Friend support	4	27	21.25	4.32	-1.48
Family support	12	28	23.26	2.17	-1.21
Significant others	16	28	22.85	1.96	-0.37
Health related quality of life	69	114	98.15	6.85	-1.12
General health	6	18	12.40	2.25	-0.01
Physical functioning	12	30	25.07	3.83	-1.13
Role limitation due physical health	3	8	6.27	1.21	-0.23
Role limitation due to emotional health	4	6	4.92	.79	-0.17
Energy fatigue	9	22	16.34	2.47	-0.26
Emotional wellbeing	13	25	19.62	2.21	-0.32

Social support had significant positive correlation with HRQoL ($p < 0.01$), physical functioning ($p < 0.01$), role limitation due to physical health ($p < 0.01$), role limitation due to emotional health ($p < 0.01$), energy/fatigue ($p < 0.01$), emotional well-being ($p < 0.05$) and significant negative correlation with general health ($p < 0.01$), pain ($p < 0.01$) and health change ($p < 0.01$). There was no correlation of social support with social functioning (Table-3).

Table-3: Correlation matrix between all study variables.

Variables	Social support	Friend support	Family support	Significant other support
Health related quality of life	0.33	0.22	0.27	0.26
General health	-0.31	-0.43	-0.04	-0.01
Physical functioning	0.47	0.45	0.23	0.24
Role limitation due to physical health	0.32	0.45	0.27	0.27
Role limitation due to emotional health	0.38	0.29	0.27	0.29
Energy/fatigue	0.41	0.42	0.16	0.19
Emotional wellbeing	0.19	0.22	0.32	0.24
Social functioning	-0.06	0.05	-0.07	-0.01
Pain	-0.44	-0.42	-0.19	0.28

Discussion

The current findings revealed that social support was positively associated with HRQoL among pregnant women. As we are living in a collectivistic culture where pregnancy is a motivating event, women are encouraged at the occurrence of this event in their life which is a good sign of her quality of life and mental well-being (16, 17). When a woman is pregnant and gets social support from her family and friends who take care of her diet, physical and mental comfort, medication and provide her with adequate moral support she is motivated to take care of herself which is a true indicator of her HRQoL (18-20). Findings of the study revealed that pregnant women with social support have higher levels of energy and social support is negatively associated with the perception of general health. In the current findings, pregnant women who receive social support during pregnancy have a higher level of HRQoL. These pregnant women are healthy in all domains, they are physically active in their day-to-day lives and their life roles are not limited due to their physical or emotional health because they receive a higher level of encouragement, care, attention, love and affection from their family and partners (19, 20). Women need extra care and support during their pregnancy because this is the stage in their life when their physical as well as mental health needs to be carefully treated through social support. There are consistent findings proving that social supports, care, nutrition, love, comfort, warmth and a perfect relationship with the family are independent factors that highly influence the HRQoL of pregnant women (19). The availability of social relations, support and sexuality are considered to be very important predictors of HRQoL in pregnant women. These social relations include family, friends and the spouse. The surrounding environment, care, diet, medication and treatment delivered to a woman during her pregnancy by these social members and a positive sexual relationship from the spouse significantly increases the HRQoL in pregnant women (21). Most of the positive feeling come from the special support received from the husband during pregnancy and this support by the husband and family members is highly associated with the general health conditions and quality of life which is a true predictor of HRQoL (22,23).

Conclusion

There was a positive association between social support and HRQoL among pregnant women. The results are helpful to understand the importance of social care and support during pregnancy. There is a need to draw more attention to the social support and HRQoL of pregnant women.

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