Predictive Factors Contributing to Strain and Burden among Jordanian's Caregivers in Chronic Disease

Abstract

Background: It is well known that caregivers are at risk of suffering from diseases, including chronic ones, which might increase the burden of the healthcare worker. **Materials and Methods:** A cross-sectional study was conducted in Jordan on 143 caregivers who were randomly selected to participate in self-administered Quality of Life in Life-Threatening Illness—Family Carer Version (QOLLTI-F) questionnaire. The variables were tested using simple linear regression analyses in the SPSS. **Results:** Male Jordanian caregivers who provide unpaid care, reported lower quality of life than their female counterparts ($p = 0.028$), ($p = 0.077$), respectively. A high statistically significant result was found between unshared and shared care ($p = 0.009$). Statistically significant results were determined between single caregivers compared with those who were married or divorced ($p = 0.894$ and $p = 0.041$, respectively). **Conclusions:** This study concludes that gender, care status, type of care, and marital status are direct predictors of quality of life among Jordanian caregivers.

Keywords: *Caregiver, caregiver burden, health-related quality of life*

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Introduction

The family is the main social factor that contributes to health promotion. This is particularly true among caregivers who are highly involved in the healthcare support system, making decisions about their patients and providing ongoing care.[1] Several scholars have analyzed the predictive importance of certain socio-demographic variables,[2] whereas earlier caregiving work concentrated mainly on such variables as caregivers' socio-demographic features and chronic patients' health status.[3] Caregivers are at risk of suffering from diseases, including chronic ones, which might increase the load on the caregiver. Past studies have reported that the combination of potential displacement, chronic anxiety, and physical caregiving demands may jeopardize physiological functioning and raise the likelihood of physical and mental health issues for caregivers. This, in turn, may contribute to increased morbidity and mortality.[1] Consequently, this study was designed to identify the contributing factors that affect the quality of life among Jordanian caregivers of cancer patients.

Materials and Methods

This cross-sectional study was conducted on 143 caregivers over eight months from February to October 2018. A simple random sampling technique using randomly generated numbers was used to include any individual who assumed responsibility for patient care of chronic cancer patients. However, caregivers with chronic disease were excluded. To assess the caregiver, the Quality of Life in Life-Threatening Illness—Family Carer Version (QOLLTI-F) questionnaire was administered. The QOLLTI-F covers 16 components including seven domains: state of carer, patient well-being, and quality of care, outlook, environment, finances, and relationships. The questionnaire uses an 11-point response scale and a numerical rating scale (range from 0 through 10). Validity was confirmed by arbitrators and experts, and the reliability was confirmed by Cronbach's alpha method, which amounted to (0.88). IBM

SPSS Statistics Version 23.0 (IBM Corp, Inc., Armonk, NY, USA) program was used in data analysis with simple linear regression.

Ethical considerations

The Ethical Committee for Scientific Research (ECSR) from Zarqa University approved this project with code number 6/6/1/24 on February 1, 2018. Informed consent was signed by all the participants before completing the QOLLTI-F questionnaire, which clearly stated the purpose of the study and that there were no risks from participation beyond those of everyday life.

Results

In total, 143 participants completed the questionnaire. The mean age was 35.78 years; 82 were females and 61 were males. The majority of the caregivers were married (59.10%), and most were unemployed (84.90%), although they had a secondary school degree. To evaluate the correlation between the study variables, a simple linear regression was performed. As shown in Table 1, type of care, gender, marital status, employment, and level of education were all considered to be significant variables that impacted the overall quality of life among Jordanian caregivers. The male caregiver who provided unpaid care in Jordan reported significantly lower score of quality of life ($p = 0.028$), while a non-significant correlation was detected compared with paid males ($p = 0.077$).

Table 1: Predictive variables based on QOLLTI-F* domains

Variable	b (95% CI)	*p*
Gender (Female)		
Male	-5.63 (-10.634,-0.63)	0.028
Age	-0.09 (-0.26,0.09)	0.331
Living arrangement (with recipient)		
Separately	1.34 (-4.56,7.23)	0.655
Description of care (formal-paid)		
Informal-Unpaid	-5.95 (-12.55,0.66)	0.077
Care status (shared)		
Unshared	-7.54 (-13.17,-1.90)	0.009
Monthly income (satisfied)		
Dissatisfied	-1.45 (-6.48,3.59)	0.570
Marital status (single)		
Married	-0.34 (-5.42,4.74)	0.894
Divorced	-10.35 (-20.27,-0.43)	0.041
Employment		
Part time	-2.04 (-8.39,4.32)	0.528
Unemployed	-0.36 (-5.35,4.64)	0.888
Retired	7.62 (-0.51,15.76)	0.066
Duration of care	-0.03 (-0.20,0.14)	0.713
Education level		
High school	3.95 (-1.02,8.91)	0.118
No formal education	4.18 (-5.39,13.75)	0.389

*Quality of Life in Life-Threatening Illness-Family Carer Version

The domains of the QOLLTI-F are environment, patient condition, carer's own state, carer's outlook, relationships, quality of care, and financial worries. All seven domains were influenced by particular factors, as shown below in Table 1.

Discussion

A meta-analysis of differences among male and female health professionals found the following: Women health professionals had a lower QOL than males.[4] To the contrary, Jordanian male caregivers recorded lower QOL scores in this study [adjusted b (95% CI) -5.63 (-10.64, -0.63)]. Females preferred to remain at home more so than males; while male caregivers appeared to feel "stuck" in the role of caregiver and, therefore, had lower stress monitoring levels than females ($p = 0.028$). Consequently, patients were more likely to embrace support from female caregivers.[5] However, the male caregiver preferred to be alone, and this is why the caregivers who provided shared care reported a lower quality of life ($p = 0.009$). Therefore, males might need to spend more time with friends and noticed a decline in time commitment and primary obligations. Caregivers who actively provided home care recorded less subjective pressure regardless of the number of tasks needed or their health status.[6]

This current study is not without limitations. It is possible that because all caregivers were Jordanian, this could prevent generalizability of results across the Middle East countries due to cultural differences between the countries.

Conclusion

In conclusion, this study suggests that gender, informal-unpaid, and unshared are considered important factors that could negatively affect the quality of life among Jordanian caregivers. The same experience of patients and family caregivers was negatively and substantially associated with quality of life. Furthermore, future research into these factors should aim to find ways by which to alleviate caregivers' strain and burden, so as to help them focus on their own needs as well as the needs of the chronic cancer patients under their care.

Conflicts of interest

Nothing to declare.

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