

Research Paper

Social Support and Its Association With the Quality of Life (QoL) of Amputees



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ABSTRACT

Objectives: Social support is an essential source of psychological support that a disabled person needs in daily life. Social support and level of satisfaction affect how the patient perceives the various stresses of life. Because of few studies on amputees, it is necessary to study social support and its impact on their quality of life (QoL). This study investigates social support and its relationship to QoL among amputation cases living in Kut City, Iraq.

Methods: This correlational study was conducted on 150 participants attending the Prosthetics Center in Kut. We investigated the relationship between social support and the QoL of amputees. The study questionnaire's reliability was assessed through a pilot study, and it was subsequently presented to experts for validation. The information was collected through interview techniques and evaluated using descriptive and inferential statistical analysis.

Results: The Mean age of the participants was 38 years. They were mostly married males and unemployed with low economic status. Findings show that 68% of the participants expressed poor social support. Their social status, residents, and income had been influenced the social support (Mean±SD: 34.18±14.978), and 62% expressed a poor QoL (Mean±SD: 85.37±21.008). There was a significant correlation between social support and QoL (P=0.000), and social support significantly affected the QoL for amputation cases (P=0.000).

Discussion: There is a strong significant positive correlation between social support and QoL. The QoL among amputated cases was dependent on their social support. If family, friends, and community members provide embellished social support for amputees, they can face adversity and crises and lead their lives more effectively.

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Highlights

- Amputation cases included in the present study expressed a poor quality of life (QoL) due to low social support.
- There was a strong positive association between the QoL and the level of social support people received.
- QoL was significantly influenced by social support for amputation cases.

Plain Language Summary

Losing one of the body parts has devastating effects on a person's mental, emotional, physical, and social well-being. It is widely accepted that social support is the most influential force for coping with stressful events, enabling patients to endure difficult situations. A patient's self-esteem and physical well-being suffer greatly after an amputation. The quality of life (QoL) of amputees is commonly believed that is benefited from rehabilitation programs. Based on the findings, there is a strong significant positive association between social support and QoL for amputation patients.

1. Introduction

Humanity has known disability since man was found on the earth. It is an old and persistent problem in all developed and underdeveloped societies. No society is without the presence of disabled individuals. However, the societies' views of the disabled and their care differ from one era to another, as did societies' aspects of providing psychological and rehabilitative services to them [1, 2]. Disability is a human and social problem with multiple and overlapping dimensions, including medical, psychological, social, and rehabilitation [3].

The number of disabled people has increased in the modern era despite the significant progress in medicine [4]. This outcome results from pollution, epidemics, disasters, and wars that created large numbers of physically handicapped people, who suffer from skeletal, muscular, or neurological deficits, or an injury that prevents them from using their bodies normally [5]. Among the motor disabilities that face acute and complex problems are amputations and the accompanying loss of the organ. In these cases, the individual's senses are disrupted, and the organ cannot carry out its functions, which constitutes a triple problem (physical, psychological and social) that affects the individual and his surroundings [6]. All societies suffer from the problem of amputation cases, but the causes differ from one society to another. There are many causes, including wars, road accidents, work injuries, diseases, surgeries, and congenital defects [7].

Amputation is a disability in which the individual loses one, some, or all of his limbs, either by surgery, accidents, or congenital incomplete formation. There is also a type of induced and associated disability [8] caused by mechanization or machinery at present and some methods of treatment. Amputation causes a movement disability that affects the social functions of the amputee [9].

Hence, professional, social, and psychological rehabilitation is necessary to restore the amputee's social and psychological compatibility in the family, work, and society. The family has a significant role in psychological and social rehabilitation [10]. Social support is defined as receiving help and support from others, particularly important people. According to some research, social support may play a mediating role in adaptation style. If social support reduces the impact of life's high stress and mood disorders, it is a win-win situation [11].

Hence it is necessary to provide social support to amputees. Also, the speed of their adaptation depends on the acceptance and support provided by their families, friends, and community members. It is obvious that their condition calls for support from others [12]. Large social networks can give the individual frequent positive experiences and a set of roles that are rewarded by society. This result can be related to pleasure, as it provides a positive state of conscience and a sense of stability and recognition in life situations of self-importance [13]. The present study aimed to investigate social support and its association with the QoL among amputation cases in Kut City, Iraq.

2. Materials and Methods

A correlational study was conducted in Kut City, Iraq, among amputation cases to investigate their social support and quality of life (QoL). By a purposive sampling method, 150 subjects who attended the Prosthetics Center to receive health services were selected.

Study tools

The study instruments were as follows:

Socio-demographic questionnaire

This questionnaire collects information about the age, gender, marital status, occupation, and income of amputees.

Social support questionnaire

Zimet et al. (1990) adopted the multidimensional scale of perceived social support (MSPSS-12). The questionnaire items are scored on 7-point Likert scale (1=strongly disagree, 2=moderately disagree, 3=slightly disagree, 4=undecided, 5=slightly agree, 6=moderately agree, and 7=strongly agree) [14].

Quality of life questionnaire

The authors created a specific tool based on extensive literature analysis, the opinions of professionals who work with amputees, and a preliminary investigation of a group of 10 patients who were asked open-ended questions. Three domains make up the assessment instrument:

Physical problems with 20 items

Psychological problems with 20 items

Social problems with 15 items

Each item had three options: never=1, sometime=2, always=3.

Validity

Fifteen experts in the Nursing field validated the QoL questionnaire. They were asked to offer their opinions and suggestions about the study questionnaire regarding language appropriateness, association with the dimension of study variables to which it was assigned, and suitability for the study population.

Reliability

To assess the reliability of the QoL questionnaire, data were collected from amputees, and the test was administered to 15 patients, approximately 10% of the study population, who were not part of the original sample. The Cronbach α was estimated as 0.82 in the test and 0.87 in the retest.

The reliability of the scale increases over time among the study population. In the first test, it was stable, and after 2 weeks, it also achieved higher stability.

Statistical analysis

The SPSS software v. 20 was used to conduct statistical analysis. The data were normally distributed. One-way analysis of variance, correlation coefficient, and simple linear regression were used to examine the study variables. For continuous variables, descriptive data were reported as mean and standard deviation, and for categorical variables, they were reported as number and percentage. Statistical significance was defined as $P \leq 0.05$.

3. Results

According to Table 1, the Mean \pm SD age of the participants was 38 \pm 9.384 years, and most (n=69; 46%) belonged to an age range of 40-49 years. The amputation in this age group may be due to conditions such as diabetic foot. Regarding gender, the male was predominated (n=124; 82.7%) because men are more prone to accidents and wars. In terms of marital status, the majority of patients were married (n=101; 67.3%) due to old age. Regarding the occupation, most amputees were unemployed (n=115; 76.7%) because of their physical limitations. A low income was expressed by most amputees (n=123; 88%) because of their unemployment and need for support from others.

According to Table 2, most amputees (n=102; 68%) expressed a poor level of social support (Mean \pm SD: 34.18 \pm 14.978), followed by those with fair support (n=34; 22.7%), and finally, good support (n=14; 9.3%).

According to Table 3, many amputees (n=93; 62%) expressed a poor level of QoL (Mean \pm SD: 85.37 \pm 21.008), followed by those with moderate QoL (n=50; 33.3%) and those with good QoL (n=7; 4.7%).

Table 1. Demographic characteristics of the study samples (n=150)

Characteristics	Rating	No. (%) / Mean±SD
Age (y)	<30 years	33(22)
	30-39 years	27(18)
	40-49 years	69(46)
	50-59 years	21(14)
		38±9.384
Gender	Male	124(82.7)
	Female	26(17.3)
Marital status	Single	34(22.7)
	Married	101(67.3)
	Divorced	15(10)
Occupation	Unemployed	115(76.7)
	Employed	35(23.3)
Income	Not enough	132(88)
	Partially enough	11(7.3)
	Enough	7(4.7)

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Table 2. Social support among amputees

Social Support	M	No. (%)	Mean±SD
Poor support	12-36	102(68)	34.18±14.978
Fair support	37-60	34(22.7)	
Good support	61-84	14(9.3)	
Total		150(100)	

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Table 3. QoL among amputees

Quality of Life	M	No. (%)	Mean±SD
Poor	55-91	93(62)	85.37±21.008
Moderate	92-128	50(33.3)	
Good	129-165	7(4.7)	
Total		150(100)	

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Table 4. Correlation between social support and QoL for amputees (n=150)

Social Support vs QoL	
Spearman's rho	0.317**
Sig. (2-tailed)	0.000

** Significant at the 0.01 level (2-tailed).

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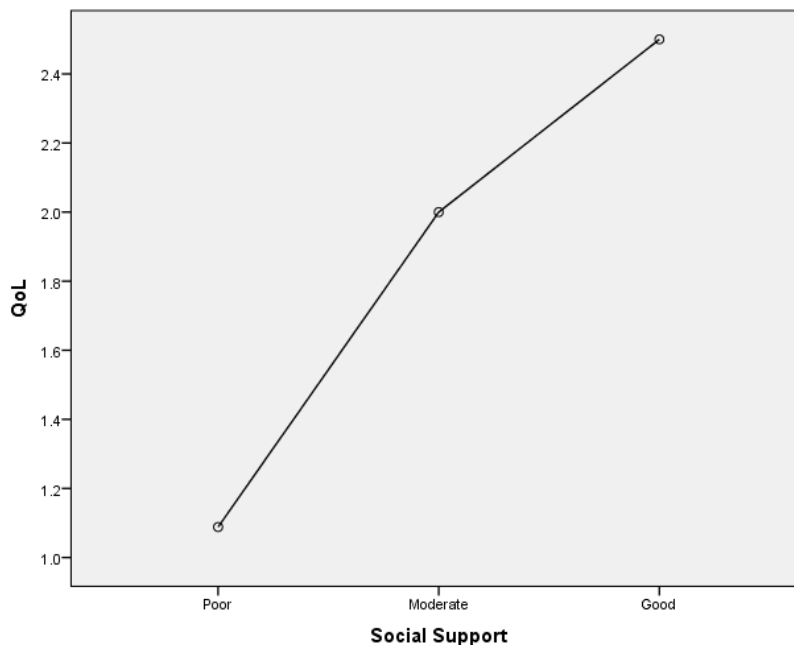


Figure 1. Distribution of QoL according to social support

According to Table 3, findings demonstrated that the breast cancer women expressed a poor level of social support (n=68; 45.3%).

According to Table 4, there is a significant and positive correlation between social support and QoL among amputees (r=0.317, P=0.000).

According to Table 5, the simple linear regression test indicates that significant effect of social support on QoL among amputation cases (P=0.000).

4. Discussion

This work is the first study in our country to assess social support among amputation cases and its relationship to the QoL. The sample size was large (roughly corresponded to the total number of cases attending the rehabilitation center). Our hypothesis states a significant correlation between social support and QoL. Also, social support significantly affects the QoL in amputation cases (Figure 1).

We believe that the low level of the social support scale for a sample of amputations in Wasit Governorate is due to the nature of the conditions experienced by the Iraqi people. The Iraqi people have experienced a certain share of suffering. There are those whose sons or brothers were martyred, those who lost a dear person or a friend, and those who lost a part of their body, not to mention the spread of poverty and unemployment. The Iraqis are accustomed to suffering in various areas of life until they no longer care about disabled individuals, even if they are their family members.

According to study findings, the amputation cases expressed poor social support (Mean±SD: 34.18±14.978; Table 2) and poor QoL (Mean±SD: 85.37±21.008; Table 3). There are many problems in all aspects of the lives of amputees. Psychological problems ranked first for amputee patients. In comparison, the physical and social areas come successively in terms of the problems that occur during the lives of amputees [15].

According to Table 4, the QoL has been correlated positively with social support. This finding agrees with Kolivand et al. finding. They found a significant

Table 5. Simple linear regression between support and QoL for amputees (n=15)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
MSPSS-12 vs QoL	0.823	0.117	0.475	7.030	0.000

MSPSS: multidimensional scale of perceived social support; QoL: Quality of Life.

positive correlation between social support and QoL among amputees [16]. Because life is based on cooperation and solidarity, especially in times of adversity and crises, the person who suffers from amputation needs the support of others.

We can confirm that social support significantly impacts the QoL for amputation cases. The more acceptable social support there is, the higher the QoL for those experiencing body part loss. Those findings were confirmed by Dunn and O'Brien (2009), who confirmed by their findings that the QoL for disabled patients depends on their support [17].

This result is logical in light of the importance of social support that individuals with amputees receive, the degree of their satisfaction with it, and its quantitative and qualitative perception. The importance of support also lies in helping individuals solve their problems and make appropriate decisions, which promotes their ability to face life and its challenges, as well as what support includes providing material and in-kind supplies necessary for the life requirements that he needs.

Also, Liu et al. pointed to the importance of social support in helping the individual summon his psychological powers to solve his problems. Social support contributes to the tasks required of the individual, provides the individual with material resources and multiple skills, and the ingredients for guidance and counseling in order to confront stressful life events. Social support helps the person with social strategies appropriate for the situation he is exposed to and protect him from adverse psychological effects [18].

It may be related to the mechanism of providing social support for amputees, which is based on understanding the psychological characteristics of this group and dealing with them with flexibility, patience, generosity, and understanding of their circumstances away from pity and kindness. Social support deals with the availability of skills and the ability to direct them to better coexist with the reality imposed on them and achieve sufficient amount of mental health. Godlewska and Harmer reported that dealing with difficult life events positively coexisted if social support was provided for the individual [19]. Lakey and Orehek added that social support is an essential source of security that a person lives in from the world in which he lives [20].

The researcher attributes this to the importance and feasibility of social support for cases of amputation, as circumstances impose on them the loss of parts of their bodies. This condition leads to their sense of inferiority,

social isolation, lack of interaction and social integration, and loss of job work. However, when the elements of social support are available in their various dimensions and mere realization. Individuals see that other individuals help and care for them and that in itself will alleviate the pain and pressures experienced by these individuals. The social support helps them to play their role according to their abilities and potential and thus enjoy psychological health and happiness that helps them to continue the path of life despite its cruelty and to achieve their goals, which makes their lives meaningful and of value. This issue is confirmed by Molino, that the individual who enjoys social support from others becomes self-confident and able to provide social support to others, and is less prone to psychological disorders and more able to overcome frustrations. The person can solve his problems positively and soundly, so we find that social support increases from the individual's ability to resist frustration and reduce a lot of psychological suffering [21].

Study limitations

It was challenging to recruit study samples because many amputees refused to participate because of their urgency and lack of concern for the researchers.

5. Conclusions

There is a strong significant and positive correlation between social support and QoL due to QoL among amputated cases was dependent on their social support. Providing strong social support by family, friends, and community members for amputees helps them face adversity and crises and lead their lives more effectively.

Ethical Considerations

Compliance with ethical guidelines

The ethical approval was obtained from the Research Ethics Committee of College of Nursing, University of Thi-Qar (720 in 9/3/2021).

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Authors' contributions

Concepts and supervision: Gossoon Juma Elywy, Mohammed Malih Radhi, and Qasim Abbas Khyoosh Al-Eqab; Data collection: Gossoon Juma Elywy; Data analysis: Mohammed Malih Radhi; Investigation, Writing-original draft, Writing-review and editing: All authors.

Conflict of interest

The authors declared no conflict of interest.

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All experimental protocols were approved by the Health Directorate, Wasit, Iraq, and all experiments followed approved guidelines.

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