



# Effectiveness of Group Support in Alleviating Anxiety, Depression, Stress Among Amputees in Gaza Strip

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Received: 📅 March 31, 2021

Published: 📅 April 20, 2021

## Abstract

**Background:** According to Ministry of Health since the beginning of the great marches return (GMR) in March 2018, the number of injured people 35.703, who had amputated limbs was 157 The amputees may experiences body images disturbances, stress, depression, and anxiety, Many reviews and studies done to define the psychological burden of amputations, Social supports received by different amputees is vital in structuring effective treatment plan as a holistic approach in treating these physically disabled patients.

**Aim:** the objective of current study is to examine the efficacy of peer support group in alleviating the emotions state of Depression, Anxiety and stress among amputees in Gaza strip.

**Method:** Using semi-experimental (pre, post and follow-up) design, 60 Amputees after assessment using DASS , assigned to Peer Group Support (PGS). and its effect measured on the dependent variable, Emotional state of Depression, Anxiety and Stress.

**Result:** The prevalence of depression in the amputee is estimated to be (%59), anxiety is (59.6%), and stress is (%65.5), The mean score of the patients' depression, stress and anxiety before intervention was 1.8424 after the intervention of the peers group support in the post test measurements was reduced to 0.8668 compared to that of pretest measurements which is significant in value of ( $p < 0.05$ ).

**Conclusion:** The results of this study showed that utilizing the peer group support is effective for alleviating the emotional state of depression, stress and anxiety among patients with amputation.

**Keywords:** Depression; anxiety; stress; peer group support; DASS

## Introduction

Most of human being are born as complete whole, mind and body is connected. Unfortunately, this system is sometimes disintegrated by disease or unfortunate accidents. An amputation is a significant loss and can cause many lifestyle changes. Whether the limb is removed as a result of trauma or disease, patients experience a change in their wellbeing, mobility and ability to perform activities of daily living like dressing, toileting and bathing. Amputation is defined as-the surgical or spontaneous partial or complete removal of a limb or projecting body part covered by skin and is one of the most common acquired disabilities [1-4]. In Gaza strip during the last Thirty years ago approximately 1543 were living with amputations through the wars launched by the occupation on the Gaza Strip, and after the start of the Great Marches Return (GMR), which left 157 cases of amputations [5,6], whether it is upper or

lower, Individuals with amputations comprise a diverse clinical population, with significant heterogeneity observed in the level, cause, gender, and age distribution of this condition, as well as the degree of disability experienced, both physical and psychosocial [7]. The researcher during work with the amputation as supervisor of Psychosocial support unit in community mental health directorate note a various types of psychological complications among the patient who had amputation.

The amputees may experience body images disturbances, anxiety, depression, and post-traumatic stress disorder (PTSD). Many reviews and studies done to define the prevalence of such problems, especially on depression [8]. Unresolved adjustment problems are long-term issues following limb amputation and it may progress into depression if it is not treated adequately [5], The

prevalence of depression in the amputee and the general population is estimated to be 28% and 3.6-10.6%, respectively [9-15]. Risk factors for depression among amputees include higher levels of pain as well as anxiety. Pedras reported up to 64% amputees experienced anxiety symptoms following the amputation. When depression is accompanied by anxiety disorders, such as post-traumatic stress disorder (PTSD), higher levels of symptomatic distress and higher rates of suicidal behavior are reported [16,4]. This drew the attention of researchers to study some variables on these individuals and try to find a competent therapeutic models fit for Palestinian culture and overcome the challenges of staff shortage, The study used the quasi-experimental approach, and the quasi-experimental approach is related to doing Practical experiments, which are defined an evidence-based measures, are prepared by researchers and linked to the circumstances surrounding specific phenomena,

helping to draw some conclusions from the relationships between the variables that affect phenomena [17-19]. The importance of the study is in the aspect that the study deals with, as this aspect carries great importance in both scientific and practical terms, current study aimed to examine the effectiveness of peer support groups on alleviating the emotions state of depression, anxiety and stress among amputees in the Gaza Strip.

## Methodology

### Study population

The study population includes all Amputees enrolled in Healing the wound program in mental health directorate in Gaza governorate; Figure 1 shows the distribution and percentage of the amputees according to Age.

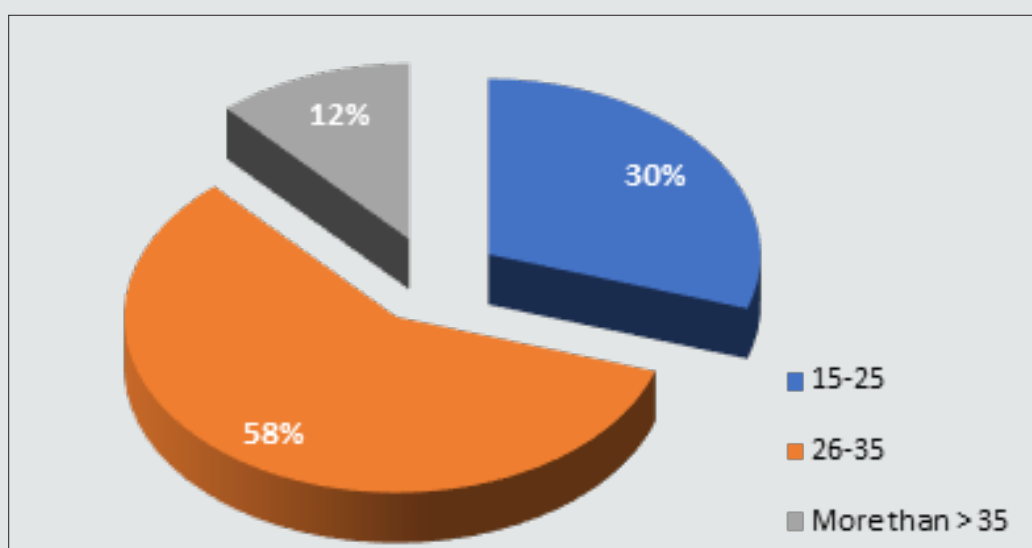


Figure 1: The Distributions of participants according to age.

### Sample

The sample consisted of (60) Amputees, the sample assigned to Peer Group Support (PGS), in the cycle three 2018 of the Healing the wound program, All of them assigned to Peer Group Support.

### Questionnaire design and PGS protocol

After reviewing the literature and after interviewing experts who were dealing with similar subject at different levels, all the information that could help in achieving the study objectives were collected, reviewed and formalized to be suitable for this study. After many stages of brain storming, consulting, amending, and reviewing executed by the researchers, DASS scales was adopted to assess the emotional state of depression anxiety and stress, and Protocol of PGS and Socio- demographic questioner were developed.

## Results and Discussion

Figure 1 shows. The Distributions of participants according to age, as the age ratio "15-25" equals 30%. The largest percentage

was between the ages of "26-35" years, and the lowest percentage was more than "35 years" equal to 11.7%. A paired sample t test was used to detect the differences between the mean scores of the semi-experimental group on (the pre and posttest) and (post and follow up test) on the overall degree of feelings related to (anxiety, depression, and psychological stress) at a level of significance equal to  $p < 0.05$  after applying the program. Table 1 illustrates that the level of significance in a measure of feelings related to (anxiety, depression, and stress) in the pre and posttest is less than 0.05, and the results showed that the t value is greater than the critical value of 2, so there are statistically significant differences in the pre and posttest for anxiety, stress, and depression at the level of significance  $p < 0.05$  where the value of the statistical significance in all scales equals 0.000 less than 0.05, this result reflect the effectiveness of program in alleviating the emotional state of depression, anxiety and stress, also regarding the level of significance in a measure of feelings related to (anxiety, depression, and psychological stress) in the post-test and follow up test is less than 0.05, and the results showed that the t value is greater than critical value which is equal

to 2, That is, there are statistically significant differences in the post-test and follow up test of emotional state of anxiety, stress, and depression at the level of significance  $p < 0.05$  where the value of the statistical significance in all scales equals 0.000 less than 0.05, which means, there is a statistical indication that the effectiveness of the program is reduced in alleviating feelings of anxiety, stress and depression in the long run from the implementation of the program.

Compared with the past qualitative research, the current study supported the positive findings regarding the use of peer support with amputation. Recurring themes of decreased loneliness and increased emotional support were previously reported as benefits of peer support which is supported by the findings of the current study, that the emotional state of ( depression, anxiety and stress) was 61.4% in pretest and become 28.8 % (Table 1) this indicates. That is, there are statistically significant differences in the pre and posttest in a measure of feelings related to (anxiety, depression, and stress)., The important role of increased social support in post amputation rehabilitation was commonly identified and was also reported in the current study. Whilst social support increased following participation in a peer support program, it was also an important mediating effect on reduced psychological distress [20]. Previous qualitative research and the findings from the present study suggest that there is an important relationship between peer support, and emotional state of amputees, this result reflect the effectiveness of Peer Group Support in alleviating the emotional state of depression, anxiety and stress, However processes associated with attending the Peer Group Support (as measured by follow up test) The results of the comparison between the post-test and the follow-up test show that the measurement of feelings related to depression, anxiety and stress increased slightly on the

follow-up test, but compared to the pre-test we can say that the effectiveness of the program is still ongoing and this rise expresses the need for social support on an ongoing basis [21], which participants found in peer support groups and this is evidence that Peer Group Support are effective in address these feelings. This finding may suggest that the personal benefits obtained, which also indicated by the verbal feedback that the researcher receive it from participant, and the social relationships formed during the group may have continued (and developed) after the intervention ended, And the best evidence for this is that a group of people with amputation who participated in these groups have formed a club of their own in order to continue to provide support to each other. This represents one of the most prominent success stories that this program has achieved. This finding indicates that facilitating Peer Group Support (PGS) may have beneficial implications for amputees [22-27].

## Conclusion

Current study showed that the clinician should pay more attention to detect early symptoms psychological distress. also the findings suggest that there are many factors are associated with psychological co morbidity, Compared with the past qualitative research identified in the review, the current study supported the positive findings regarding the use of peer support with amputation [28,29]. Recurring themes of decreased loneliness and increased emotional support were previously reported as benefits of peer support which is supported by the findings of the current study, that the emotional state of ( depression, anxiety and stress) was 61.4% in pretest and become 22.8 % (Table 1), this result reflect the effectiveness of Peer Group Support in alleviating the emotional state of depression, anxiety and stress.

**Table 1:** Test results illustrate the mean differences in feelings related to (anxiety, depression, and stress) in the quasi-experimental group in the pre and posttest.

Test	Mean	SD	Weight Mean	T- value	Sig.
Pretest Anxiety	1.7906	0.809	59.60%	7.897 -7.81	*0.000
Posttest Anxiety	0.8128	0.648	27%		
Follow up test Anxiety	1.7738	0.821	59.10%		
Pretest Stress	1.9655	0.72	65.50%	7.724 -7.852	*0.000
Posttest Stress	0.9823	0.696	32.74%		
Follow up test Stress	1.9595	0.711	65.30%		
Pretest Depression	1.7709	0.739	59%	7.915 -7.852	*0.000
Posttest Depression	0.8054	0.6696	26.80%		
Follow up test Depression	1.7595	0.736	58.60%		
Total of Pre-test	1.8424	0.711	61.40%	1.8 -7.852	*0.000
Total for post test	0.8668	0.6041	28.80%		
Total for follow up test	1.38	0.81	46%		

## Recommendations

### Practical implications

The findings from this study suggest that peer group support program may be an effective intervention for improving the psychosocial wellbeing of Amputees. These findings have implications for service-users, clinicians, guidelines and organizations.

### Further study

- Randomize control trial to support the efficacy of Peer Group Support and to compare the result with other type of intervention [6].
- study to determine the psychological burden of amputations among general amputees population
- long term study to understand the dynamic of social support and its relation to reengage the amputees in the society.
- Run study include female with amputation to have more representative result.
- study the personal treat which may play role in amputees reengagement.

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DOI: [10.32474/SJPBS.2021.05.000203](https://doi.org/10.32474/SJPBS.2021.05.000203)



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