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Cross-sectional investigation of the effects of the war in Gaza on quality-of-life of breast cancer patients

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Abstract

Background: The current conflict in Gaza has had a major impact on the residents, especially those with chronic illnesses such as breast cancer.

Aim: To evaluate the impact of the war in Gaza on the quality-of-life of breast cancer patients.

Methods: This cross-sectional study used the European Organization for Research and Treatment of Cancer Quality-of-life Questionnaire-Core 30 (EORTC QLQ-C30) and the Breast Cancer-Specific 23-Item (BR-23) questionnaires to obtain data from 300 breast cancer patients (residents and refugees) in Rafah, Gaza, between 1 February and 1 May 2024. The data were analysed using SPSS version 25 and statistical significance was established at $P < 0.05$.

Results: The participants had a mean age of 52 years, 70% were married and 60% had children. Significant relationships were found between exposure to war-related events and lower quality-of-life across all measured domains ($P < 0.01$). Exposure to conflict was associated with significantly lower cognitive, role, emotional, and physical functioning scores. Fatigue (70%), pain (60%) and financial difficulties (55%) were the most common problems. Significant decreases in quality-of-life were observed in conjunction with conflict exposure. Individuals displayed deficits in their social, emotional and physical welfare. There was a strong link between low quality-of-life and issues such as violence, displacement and disruption of health care services. Physical functioning was a critical domain in the assessment of quality-of-life.

Conclusion: The war in Gaza has significantly reduced the quality-of-life of breast cancer patients, indicating that conflict negatively affects social, emotional and physical health. This study highlights the need for focused treatment and comprehensive support to address these complex issues.

Keywords: breast cancer, EORTC-C30, EORTC BR-23, quality-of-life, Gaza

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Introduction

Gaza spans a total of 365 km², measuring 41 km in length and 6–12 km in width. It is home to nearly 2 million Palestinians, making it one of the world's most densely populated regions (1–5). Gaza is facing a severe humanitarian crisis because of ongoing conflict, which severely affects its healthcare system and the wellbeing of its residents. The most vulnerable people are those with continuous and life-threatening situations together with breast cancer. Sociopolitical instability, characterized by violence, displacement and widespread destruction, increases the physical and mental burdens faced by these patients (6–11). Breast cancer is a significant issue for women globally, requiring prompt clinical care, mental support and social stability for effective management. In conflict zones, such as Gaza, the connection between cancer and external stressors poses serious challenges that affect quality-of-life. Quality-of-life in cancer patients is a multidimensional concept encompassing bodily health, emotional well-being, social interactions, and practical status. Bodily health relates to physical symptoms such as pain, fatigue, and the ability to perform daily activities, often impacted by cancer and its treatment. Emotional

wellbeing involves mental health aspects such as anxiety, depression and hope, and cancer can trigger psychological stress related to mortality and treatment effects. Social interactions focus on relationships and maintaining social roles, which may be strained by the disease and its challenges, leading to isolation. Practical status addresses the ability to manage daily responsibilities, including work, finances and access to resources, which are often disrupted by the financial and logistic burdens of cancer care. Holistically addressing these dimensions enables tailored interventions that not only improve survival but also enhance the overall wellbeing and satisfaction of patients throughout their cancer journey (6).

The effects of sociopolitical conflicts on health are recognized; however, the specific impact on cancer patients in conflict zones is still largely unstudied. This study used the European Organization for Research and Treatment of Cancer Quality-of-life Questionnaire-Core 30 (EORTC QLQ-C30) and Breast Cancer-Specific 23-Item (BR-23) questionnaires to assess how breast cancer patients' quality-of-life was affected by the violence, displacement and healthcare disruption caused by the Gaza war. The results provide important insights for healthcare providers, policymakers and humanitarian

organizations, and identify areas for targeted strategies to enhance patient care in conflict-affected regions.

Methods

Study design

This cross-sectional study investigated the effect of the Gaza war on the quality-of-life of breast cancer patients. The study included 300 breast cancer patients with a mean age of 52 (SD 11.4) years; 70% were married and 60% had children. About 68% were undergoing treatment for breast cancer. The duration since diagnosis ranged from 6 months to 12 years, which reflected diversity in experience, treatment history and disease progression.

Data collection

Data were collected between 1 February and 1 May 2024, from residents and refugees in Rafah before Israeli forces entered the city. The European Organization for Research and Treatment of Cancer Quality-of-life Questionnaire-Core 30 (EORTC QLQ-C30) assesses health-related quality-of-life in several areas, such as physical and emotional functioning, work performance, cognitive and social functioning, pain, fatigue, nausea, breathlessness, insomnia, appetite loss and financial concerns. EORTC QLQ-BR23 is a breast cancer assessment tool that evaluates symptoms, treatment-related issues, body image, sexual function and side effects of therapy. We added questions to assess exposure to violence, displacement, healthcare disruption, access to medical facilities, social support, mental health effects, financial impact and coping strategies.

Data were gathered through interviews. The questionnaires were translated into Arabic and responses were scored according to the EORTC guidelines. The interview technique ensured readability and accuracy in responses. Exposure to conflict was assessed via self-reported accounts of violence, displacement and damage to property. Assessment of healthcare disruption was primarily based on reports of disruption of medical services and treatment. Social support included assistance from family, friends and network resources. Quality-of-life scores derived from EORTC QLQ-C30 and BR-23 reflected physical, emotional and social wellbeing. These scores highlighted the diverse dimensions of wellbeing that individuals experienced. Understanding these factors provided invaluable insight into the overall impact of social and environmental challenges on quality-of-life.

Statistical analysis

Descriptive information was used to summarize demographic and scientific characteristics. Inferential information with *t* tests assessed the effect of public struggle on quality-of-life scores; that is, the relationship between public awareness or exposure to an individual's struggles, such as hardship, conflict or health challenges, and their reported quality-of-life. Public struggle can influence various aspects of quality-of-life, such as

physical health, emotional wellbeing, social interactions, or practical functionality. For instance, increased public recognition of struggles may lead to greater social support, empathy, or access to resources, potentially improving quality-of-life scores. In contrast, excessive publicity may cause stress, stigma or emotional burden, with a negative impact on these scores. Statistical significance was established at < 0.05 . SPSS version 25 was used to analyse the data.

Ethics approval

Ethics approval was obtained from the Institutional Review Board, Faculty of Pharmacy, Arab American University, and permission to conduct the study was obtained from the Acting Director of the Health Program in the Gaza Strip, Director of the United Nations Relief and Works Agency for Palestine Refugees in the Near East Clinic, and Director of the European Hospital, Rafah, Gaza.

Results

The results of EORTC QLQ-C30 and EORTC QLQ-BR23 are presented in Table 1. The analysis indicated varying levels of health-related quality-of-life among the patients. There was a significant correlation between the duration of cancer treatment and psychological wellbeing.

The analysis revealed a significant relationship between exposure to war-related events and lower quality-of-life across all measured domains, including physical functioning. Specifically, patients who experienced violence and displacement reported notably reduced physical functioning, indicating greater challenges in performing daily physical activities or maintaining bodily health. The finding that this relationship was significant ($P < 0.01$) suggested a strong and reliable connection, highlighting that the stress and trauma associated with such exposure had a profound negative impact on overall wellbeing and physical health in particular. Role functioning: disruption of healthcare services was related to impaired functioning ($P < 0.01$). Emotional functioning (ability to manage emotions, maintain emotional stability and cope with stress) was significantly affected by exposure to war-related events. Specifically, greater exposure to war situations, such as violence, displacement or trauma, was associated with increased emotional misery, such as heightened feelings of sadness, anxiety, fear or distress. This relationship was significant ($P < 0.01$), indicating a strong and reliable link between the level of war exposure and decline in emotional functioning, suggesting that individuals exposed to such hardships are more likely to experience severe emotional distress. Social functioning: reduced availability of social guidance (support or advice to navigate social situations, build relationships and adapt to societal norms, communication, conflict resolution, and understanding behavioural expectations) was correlated with poorer social functioning ($P < 0.01$). This highlighted the diminished capacity for social engagement and guidance resulting from the ongoing conflict. Increases in

Table 1. Results of EORTC QLQ-C30 and EORTC QLQ-BR23

Dimension	Mean score (SD)	Severe problems (%)	Moderate problems (%)	No problems (%)
Results of EORTC QLQ-C30				
Physical functioning	62.5 (21.2)	40	30	30
Role functioning	55.3 (22.7)	45	25	30
Emotional functioning	45.2 (20.9)	50	30	20
Cognitive functioning	53.7 (18.6)	23	25	40
Social functioning	50.5 (20.1)	55	20	25
Pain	34.2 (25.6)	60	25	15
Fatigue	62.3 (22.3)	70	20	10
Nausea/vomiting	20.1 (15.2)	20	10	70
Dyspnoea	18.4 (16.5)	25	15	60
Insomnia	45.6 (22.8)	50	25	25
Appetite loss	32.7 (24.3)	40	30	30
Financial difficulties	40.5 (28.2)	55	20	25
Results of EORTC QLQ-BR23				
Body image	45.6 (18.9)	60	25	15
Sexual functioning	32.1 (22.5)	65	20	15
Systemic therapy side effects	53.4 (21.6)	50	30	20

Summary statistics for each quality-of-life dimension, including mean scores and percentages indicating severity levels across domains. Mean scores reflect the aggregate score in each dimension, with higher percentages indicating more severe impairment. EORTC QLQ-BR23 = European Organization for Research and Treatment of Cancer Quality-of-life Questionnaire Breast Cancer-Specific 23-Item; EORTC QLQ-C30 = European Organization for Research and Treatment of Cancer Quality-of-life Questionnaire-Core 30.

pain and fatigue were related to intense exposure to war-related events and interruptions in healthcare services ($P < 0.01$). Interruption of treatment combined with the stress of the conflict led to exacerbation of symptoms. EORTC QLQ-BR23 revealed a significant decline in body image and sexual functioning. Exposure to battle and related stressors negatively affected patients' self-belief and capacity for intimacy ($P < 0.01$).

Tables 2 and 3 show the association between conflict exposure and quality-of-life. These findings emphasize the urgent need for targeted support for patients facing health decline and the psychological effects of conflict. Addressing physical and emotional needs is essential for improving overall wellbeing in this population. Low conflict exposure referred to individuals with limited experience of war-related activities, including violence, displacement or healthcare disruption. High conflict exposure referred to individuals who experienced significant exposure to war-related activities. $P < 0.05$ indicated significant differences between low and high war exposure groups. These differences had profound implications for mental health outcomes, coping mechanisms and community resilience. Understanding these variations is crucial for developing targeted interventions to support those most affected by conflict.

Table 4 shows how the Gaza war affected breast cancer patients' healthcare access, emotional wellbeing and financial stability. About 60% of the patients experienced direct violence, and 70% felt unsafe in their neighbourhoods, with a majority changing daily routines. Forty percent of the patients were displaced,

and 33% experienced difficulties accessing health care. Over half of the patients (60%) experienced treatment delays, 50% had trouble scheduling appointments and 40% reported drug shortages. Half of the participants (50%) struggled with treatment costs, and 60% had trouble accessing psychological support services. A high percentage (80%) of patients reported increased stress, anxiety or depression.

The analysis indicated significant differences in quality-of-life between groups with low and high conflict exposure. There was a significant difference ($P < 0.01$) in physical functioning between low and high levels of conflict exposure. In comparison to individuals with little conflict exposure, those with high conflict exposure reported worse physical functioning ratings. People with high conflict exposure had significantly lower role functioning ($P < 0.01$). Significant variations in emotional functioning ($P < 0.01$) indicated worse emotional wellbeing among patients who experienced more conflict. Similarly, social functioning significantly declined in those with increased conflict exposure ($P < 0.01$). Cognitive performance was significantly worse in the high-conflict group ($P < 0.01$). This suggested that being exposed to conflict negatively affected several different aspects of quality-of-life.

Patients in the high-conflict exposure group reported more weariness ($P < 0.01$) and pain ($P < 0.01$) than those in the low-exposure group. There was a marginally significant difference in nausea and vomiting between the groups ($P = 0.05$). The high-conflict group also had significantly worse rates of sleeplessness and dyspnoea ($P = 0.01$ and $P < 0.01$, respectively). Appetite loss and

Table 2. Association between conflict exposure and quality-of-life domains (European Organization for Research and Treatment of Cancer Quality-of-life Questionnaire-Core 30)

Quality-of-life	Sample size	Mean score (SD) for low conflict exposure	Mean score (SD) for high conflict exposure	P value
Physical functioning	21	70.2 (18.6)	52.1 (23.4)	< 0.01
Role functioning	20	65.7 (20.1)	45.2 (25.6)	< 0.01
Emotional functioning	19	55.3 (22.4)	36.1 (20.3)	< 0.01
Cognitive functioning	37	60.2 (19.8)	46.9 (21.2)	< 0.01
Social functioning	14	63.4 (21.0)	40.8 (22.1)	< 0.01
Pain	26	28.7 (22.5)	47.8 (26.3)	< 0.01
Fatigue	25	54.5 (20.7)	72.1 (23.8)	< 0.01
Nausea/vomiting	115	18.2 (14.7)	23.9 (16.2)	0.05
Dyspnoea	57	14.9 (13.8)	23.2 (17.6)	0.01
Insomnia	32	38.6 (20.2)	53.8 (23.4)	< 0.01
Appetite loss	70	28.1 (22.0)	39.4 (25.6)	< 0.01
Financial difficulties	42	35.4 (26.2)	52.7 (30.1)	< 0.01

Results from t tests comparing quality-of-life scores between groups with low and high conflict exposure.

Table 3. Association between conflict exposure and quality-of-life domains (European Organization for Research and Treatment of Cancer Quality-of-life Questionnaire-Core 30)

Quality-of-life	Mean score (SD) for low conflict exposure	Mean score (SD) for high conflict exposure	P value
Body image	55.3 (19.0)	34.2 (18.7)	< 0.01
Sexual functioning	38.6 (23.1)	23.7 (21.5)	< 0.01
Systemic therapy side effects	47.8 (22.3)	63.9 (20.8)	< 0.01

Results from t tests comparing quality-of-life scores between groups with low and high conflict exposure.

financial troubles were more severe ($P < 0.01$) in the group with high conflict exposure. Concerning the EORTC QLQ-BR23 domains, patients with high conflict exposure had significantly worse body image ($P < 0.01$). There was a significant decline in sexual functioning in the high-conflict group ($P < 0.01$). Patients with high conflict exposure had significantly more side effects of systemic therapy ($P < 0.01$), suggesting that conflict exposure may have made the side effects of cancer therapy worse. Higher scores in areas such as role, emotional and physical functioning indicated that exposure to conflict significantly affected patients' experiences in these domains.

Discussion

This study evaluated the quality-of-life of breast cancer patients living in conflict-affected Gaza. The results showed a marked decline in several quality-of-life domains, including physical, emotional and social well-being. The significant contrast between aggressive marketing and a declining quality-of-life highlights the profound impact that external stressors have on individuals living with chronic illnesses. The Gaza war has intensified the physical and emotional challenges faced by breast cancer patients. Research shows a steady decline in physical functioning, especially in conflict

zones with weak healthcare systems and increased stress. These factors significantly contribute to the deterioration of overall physical fitness (12, 13). The increased pain and fatigue reported by participants were consistent with findings from other war-affected areas, where patients often experienced disruption in treatment and increased mental stress (14, 15).

We found that emotional functioning was significantly compromised in breast cancer patients during the Gaza War. The mental strain related to exposure to violence and displacement contributes to heightened hysteria and depression (16, 17). The emotional turmoil associated with chronic illnesses, such as breast cancer, can significantly exacerbate the challenges faced by patients, ultimately diminishing their overall wellbeing and quality-of-life. Our study revealed that breast cancer patients who were exposed to war-related issues such as violence and displacement tended to have lower quality-of-life (18, 19). This emphasizes the need for focused interventions to support cancer patients during conflicts. Interventions should focus on ensuring continuous healthcare access, providing psychosocial support, and tackling the broader social and economic challenges caused by violence and displacement.

The breakdown of social support networks and job functionality is especially alarming. In conflict zones, weakened social systems and lack of guidance can

Table 4. Impact of the war in Gaza on quality-of-life of breast cancer patients

Category	Subcategory	No. of patients
Violence exposure	Direct exposure to violence (bombings, shootings)	180
	Family affected by violence (injury, death)	90
	Felt unsafe in the neighbourhood	210
	Changed daily routine due to violence	180
Displacement	Displaced from home due to war	120
	Experienced multiple relocations	75
	Difficulty accessing healthcare during displacement	100
	Impact on cancer treatment (chemotherapy/radiation)	90
Healthcare disruptions	Delays in cancer treatment due to war (clinic closures, etc.)	180
	Difficulty scheduling appointments due to conflict	150
	Medication shortages (chemotherapy, pain management)	120
	Healthcare professionals unavailable (doctors, nurses)	90
Access to medical facilities	Difficulty reaching medical facilities (road closures, bombing)	150
	Healthcare facilities damaged or destroyed	60
Social support and healthcare	Caregiver unable to accompany due to conflict	90
	Difficulty accessing emotional or psychological support	180
Mental health impact	Increase in stress, anxiety, or depression	240
	Coping with emotional distress due to conflict	120
Financial impact	Financial difficulty paying for cancer treatment	150
	Increased healthcare costs due to war	100
Coping with healthcare disruptions	Used alternative treatment options due to conflict	60
	Adjusted care plan to handle healthcare challenges	90

Results from *t* tests comparing quality-of-life scores between groups with low and high conflict exposure.

lead to increased feelings of isolation and diminished effectiveness. Our study highlighted the crucial role of social support in maintaining quality-of-life, emphasizing the need for robust support systems in conflict-affected areas. Patients with breast cancer frequently depend on continuous hospital treatment to control their condition effectively (20, 21). The cessation of these services, combined with the challenges faced, leads to diminished job performance and increased difficulty in managing daily activities.

The EORTC QLQ-BR23 is designed to assess the quality-of-life of breast cancer patients, specifically highlighting challenges related to body image and sexual functioning. This may address how cancer treatment (e.g. surgery, chemotherapy or radiotherapy) affects how individuals perceive their physical appearance, often leading to feelings of distress or self-consciousness. Changes in libido, sexual satisfaction or intimacy may arise from the physical or emotional impacts of cancer and its treatment. These challenges can significantly affect overall wellbeing and quality-of-life, making them important areas of assessment in the context of breast cancer recovery and care. The ongoing war has worsened issues related to how people see themselves, as individuals may experience increased pressure about their appearance and self-image in a volatile environment (22, 23). War-related

stressors have a negative impact on sexual functioning as well as intimacy, making it more difficult for them to maintain healthy sexual relationships. These stressors, such as trauma, anxiety and displacement, can lead to physical or emotional difficulties that affect sexual desire, performance and overall intimacy (24, 25). This analysis indicated that high conflict exposure was associated with significantly lower physical, emotional, cognitive and social aspects of quality-of-life, as well as an increased burden of symptoms, negative body image and worse sexual functioning.

To improve the quality-of-life for breast cancer patients in war zones, guidelines should focus on increasing healthcare access and ensuring consistent availability of treatment and supportive care. Provision of mental health services to address emotional distress is crucial. This includes counselling, support groups and programmes specifically designed for war-affected individuals. Strengthening social support networks can help reduce feelings of isolation and improve overall quality-of-life. This involves building network resilience, providing practical support to affected families and addressing specific needs. Tailoring interventions for issues related to body image and sexual functioning can improve the overall wellbeing of patients.

We identified the aspects of quality-of-life that are most affected by conflict, with the aim of guiding

treatment to mitigate those effects. Exposure to the conflict resulted in variation in each quality-of-life measure. This variability was greater in groups with than those with low conflict exposure. Exposure to conflict had a significant negative impact on emotional, physical and role functioning and overall quality-of-life but a less severe effect on social functioning, fatigue and pain. Dyspnoea, sexual functioning and nausea/vomiting were also affected by conflict exposure, but the impact was less significant than in other domains.

This study was conducted in the Rafah district before the Israeli military entered the area and took control of the Palestinian side of the Rafah crossing. More than 1.5 million displaced Palestinians in Gaza had taken refuge in Rafah because of the ongoing Israeli incursion. During the study, it was challenging to access healthcare services and medication. Although living conditions were difficult, they could be considered acceptable to some extent. Therefore, after the Israeli military entered Rafah, it is likely that the quality-of-life of breast cancer patients has deteriorated. Further studies are needed to confirm our results, to determine the longitudinal consequences of war on quality-of-life, and to establish how those effects evolve. Investigating effective interventions to reduce the impact of war on cancer patients could improve patient care in conflict zones. Research should also focus on investigating the experiences of other demographic areas and groups within the conflict zone to provide a more nuanced

understanding of the unique challenges faced by breast cancer patients.

There were several limitations to this study. First, the cross-sectional design precluded making causal inferences about the connection between war and quality-of-life. Second, sole reliance on convenience sampling inadequately captured the diverse experiences of breast cancer patients in Gaza. Third, self-reported symptoms are susceptible to reaction bias and do not completely describe the complexity of the sufferers' situation. Longitudinal studies with diverse sampling methods could provide better insights to the long-term effects of war on quality-of-life.

Conclusion

The Gaza war has had a major negative effect on the quality-of-life of breast cancer patients. The significant decline in physical, emotional and social wellbeing highlights the compound challenges faced by individuals living with chronic illnesses in conflict zones. Addressing these challenges requires a comprehensive approach that enhances healthcare access, provides psychosocial support, strengthens social networks, and meets specific needs related to body image and sexual functioning. Implementation of targeted interventions and support strategies could significantly enhance the quality-of-life of breast cancer patients affected by conflict, providing vital assistance during crisis.

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Conflict of interest: None declared.

Étude transversale des effets de la guerre à Gaza sur la qualité de vie des patients atteints d'un cancer du sein

Résumé

Contexte : Le conflit actuel à Gaza a un impact considérable sur les habitants, en particulier ceux vivant avec des maladies chroniques telles que le cancer du sein.

Objectif : Évaluer l'impact de la guerre à Gaza sur la qualité de vie des patients atteints d'un cancer du sein.

Méthodes : La présente étude transversale a utilisé les outils de l'Organisation européenne pour la recherche et le traitement du cancer (EORTC QLQ-C30) et le questionnaire spécifique au cancer du sein (BR-23) pour recueillir des données auprès de 300 patients atteints de cancer du sein (résidents et réfugiés) à Rafah dans la bande de Gaza, entre le 1^{er} février et le 1^{er} mai 2024. Les données ont été analysées à l'aide du logiciel SPSS version 25 et la signification statistique a été établie avec un seuil de $p < 0,05$.

Résultats : Les participants avaient un âge moyen de 52 ans, 70 % étaient mariés et 60 % avaient des enfants. Des relations significatives ont été établies entre l'exposition à des événements liés à la guerre et une dégradation de la qualité de vie dans tous les domaines mesurés ($p < 0,01$). L'exposition au conflit était associée à des scores significativement plus faibles en termes de cognition, de rôle, d'émotions et de fonctionnement physique. La fatigue (70 %), la douleur (60 %) et les difficultés financières (55 %) figuraient parmi les problèmes les plus fréquents.

Des dégradations significatives de la qualité de vie ont été observées en parallèle à l'exposition au conflit. Les participants présentaient des déficits dans leur bien-être social, émotionnel et physique. Un lien étroit a été établi entre une qualité de vie dégradée et des facteurs tels que la violence, les déplacements et les perturbations des services de santé. Le fonctionnement physique s'est révélé être un domaine clé dans l'évaluation de la qualité de vie.

Conclusion : La guerre à Gaza a considérablement altéré la qualité de vie des patients atteints d'un cancer du sein, démontrant que les conflits affectent négativement la santé sociale, émotionnelle et physique. La présente étude met en lumière le besoin d'un traitement ciblé et d'un soutien complet pour faire face à ces problématiques complexes.

استقصاء مقطعي لآثار الحرب في غزة على نوعية حياة مريضات سرطان الثدي

حاتم حجاز

الخلاصة

الخلفية: لقد كان للنزاع الدائر في غزة تأثير كبير على السكان، لا سيما أولئك الذين يعانون من أمراض مزمنة مثل سرطان الثدي.

الأهداف: هدفت هذه الدراسة إلى تقييم تأثير الحرب في غزة على نوعية حياة مريضات سرطان الثدي.

طرق البحث: استخدمت هذه الدراسة المقطعية استبيان نوعية الحياة للمنظمة الأوروبية لبحوث السرطان وعلاجه واستبيان سرطان الثدي المكون من 23 بنداً لجمع البيانات من 300 مريضة بسرطان الثدي (من السكان المقيمين واللاجئين) في رفح بغزة، في الفترة من 1 فبراير/ شباط إلى 1 مايو/ أيار 2024. وحُللت البيانات باستخدام الإصدار 25 من برمجية SPSS، وتحددت الدلالة الإحصائية عند حد أدنى لقيمة الاحتمال > 0.05 .

النتائج: كان متوسط عمر المشاركات 52 عاماً، وكان 70% منهن متزوجات و60% منهن لديهن أطفال. وتبين وجود علاقات يُعتد بها بين التعرض للأحداث المرتبطة بالحرب وتردي نوعية الحياة في جميع المجالات الخاضعة للقياس (قيمة الاحتمال > 0.01). كما ارتبط التعرض للنزاع بانخفاض ملحوظ في درجات الأداء المعرفي والوظيفي والعاطفي والبدني. وكان التعب (70%) والألم (60%) والصعوبات المالية (55%) أكثر المشكلات شيوعاً. ولوحظ انخفاض كبير في نوعية الحياة بالتزامن مع التعرض للنزاعات. وعانى الأفراد خصوصاً في رفاههم الاجتماعي والعاطفي والجسدي. وكانت ثمة صلة قوية بين تدني نوعية الحياة وظهور مشكلات مثل العنف والنزوح وتعطل خدمات الرعاية الصحية. وكان للأداء الوظيفي البدني دور بالغ الأهمية في تقييم نوعية الحياة.

الاستنتاجات: أدت الحرب في غزة إلى انخفاض كبير في نوعية حياة مريضات سرطان الثدي، مما يشير إلى أن النزاع يؤثر سلباً على الصحة الاجتماعية والعاطفية والبدنية. وتشدّد هذه الدراسة على الحاجة إلى العلاج المركز والدعم الشامل للتصدي لهذه القضايا المعقدة.

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