

The relationship between social support and life stress coping strategies for breast cancer patients

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Abstract:

Breast cancer is classified as one of the most dangerous cancers affecting women in both developed and developing countries. Given the seriousness of this disease and its association with the mortality risk, contracting this disease is linked to many social challenges. The study aims to determine the relationship between social support and life stress coping strategies among breast cancer patients. It belongs to the type of descriptive study using the social survey method that includes a comprehensive enumeration of 140 breast cancer patients. The findings indicate a positive, statistically significant relationship between social support and coping strategies for life stress among these patients across all dimensions, with a level of significance 0.01. Additionally, there are statistically significant differences between working and non-working breast cancer patients on both scales of the study, with a significance level of 0.01, favoring working women.

Keywords: social support, life stress coping strategies, breast cancer patients.

Introduction

Health is regarded as a fundamental goal of development and is crucial for the social and economic advancement of countries. It is a basic right for all individuals and serves as an essential means to achieve the desired well-being of both people and society. Health embodies freedom from disease or disability (Bashir et al., 2001, p. 164).

The human element is considered one of the most important resources that must be nurtured to enable effective contributions to development. Therefore, the success of any development effort relies on the physical, mental, and psychological well-being of individuals. Diseases affecting the human element are among the most significant and complex social problems, influenced by a multitude of factors and causes that contribute to their emergence. This complexity also highlights the far-reaching consequences of such diseases, impacting individuals, families, and society as a whole (Awad & Al-Jumaili, 2009, p. 256). Chronic diseases, which are particularly dangerous and widespread, are characterized by their long duration and slow improvement. These include conditions such as cancer, diabetes, heart disease, and kidney failure (Abdel-Moneim, 2017, p. 32)

Cancer is regarded as one of the most challenging modern diseases, with recovery often being difficult and frequently resulting in death. Even if a patient recovers, the experience of cancer can significantly impact her social status and relationships with those around her. The rising incidence of cancer raises concerns, as it leads to profound changes for both the patient and their family. These changes often include difficulties in coping with the situation, accompanied by feelings of hopelessness, depression, low self-esteem, and various fears (Gharaba, 2008, p. 68). This is further supported by Muharram's study (2005), which identifies that common fears among cancer patients include the fear of death, sleep disturbances, concerns about infertility, and challenges in adapting to the disease. The study also highlighted significant issues faced by working individuals who are diagnosed with cancer, including anxiety about job loss and difficulties in maintaining family roles.

Cancer continues to be a subject of intense interest for doctors, scientists, and researchers, both past and present, as they seek to understand its complexities. Despite significant advancements in various medical fields, cancer remains perplexing, particularly regarding the mechanisms of cell division and proliferation. It is a terrifying disease for humanity, one that has never been as shrouded in mystery, fear, and misunderstanding as this condition, which devastates the body's cells (Mukhtar, 2023, p. 733).

Cancer is one of the most serious diseases affecting many individuals, with its incidence rising in recent years. According to the World Health Organization (2021), cancer is the second leading cause of death globally, responsible for one in every six deaths. The burden is particularly significant in low-income and middle-income countries. A study by the National Cancer Institute predicts that cancer cases in Egypt could increase approximately threefold over the next thirty years. The study estimated cancer incidence and mortality rates by sex and age for 38 cancer sites across 185 countries or territories worldwide. In 2020, there were an estimated 19.3 million new cancer cases and approximately 10 million cancer-related deaths globally, with female breast cancer being the most commonly diagnosed cancer, accounting for 2.26 million cases (WHO, 2021). Projections indicate that by 2040, the total number of new cancer cases and deaths could reach nearly 28 million and 16 million, respectively (Mao, 2022, pp. 144-145).

Breast cancer is classified as one of the most dangerous cancers affecting women in both developed and developing countries, impacting one in twenty women worldwide (Britt, Cuzick & Phillips, 2020, p. 418). Its incidence continues to rise, particularly in Africa (Sharma, 2021, p. 765). According to statistics from the Egyptian Ministry of Health, the percentage of women affected by breast cancer is 34% (The Egyptian Ministry of Health, 2018). This malignant cancer causes abnormal growth of breast cells, typically originating in the milk glands but potentially spreading to surrounding breast tissues or other organs in the woman's body (American Cancer Society, 2014).

The Cabinet Media Center reported on the achievements of the President's initiative to support Egyptian women's health within the *100 Million Health campaign*, noting the discovery of 25,000 new cases of breast cancer. The incidence of breast cancer in Egypt is estimated at 50 cases per 100,000 women, with approximately 10,000 new cases of breast tumors diagnosed each year (*100 Million Health Initiative*, 2024).

Social factors such as age, education, gender, and social class contribute to the incidence of tumors. Breast tumors can develop at any age, starting from adolescence, due to defects in the regulatory mechanisms governing cell growth, leading to the formation of a primary cancerous tumor in the breast (Priestman, 2007, p. 144). A study by Kuteyi & Victor (2020) find that women are more likely to cope with breast cancer and its consequences if they have at least one supportive friend. Additionally, AlMazeed (2010) indicates that individuals who suppress their emotions—particularly anger and tension—who prioritize the needs of others over their own, or who adopt a helpless mindset, may be more susceptible to developing cancer, often referred to as the "cancer-prone personality."

Malignancy significantly impacts female mental health, with various side effects arising during treatment, including direct toxic effects on the heart (RAG et al., 2022, p. 23). Watson's study (2023) finds that cancer patients often endure numerous physical and psychological symptoms, both occasional and long-term, during treatment. The seriousness of breast cancer, combined with its association with mortality risk, can lead patients to succumb to fears and isolation. This situation is exacerbated by societal attitudes toward the disease and the lengthy, costly treatment process, which can disrupt patients' ability to fulfill their social roles. Consequently, their relationships with family, friends, neighbors, and others may deteriorate, leading to increased isolation.

Moreover, the removal of a body part can profoundly affect the patient's identity and social life (Van, 2017, p. 212). Yusof et al. (2023) show that breast cancer causes changes in body image and functionality, while Kleponis (2013) notes that patients often face social challenges, including the inability to cope with the pity of others. These factors can generate feelings of fear, anxiety, inferiority, and helplessness. Ebid and Assi (2020) indicate that the disease negatively affects women's abilities to make and maintain social relationships, often leading to feelings of shyness and embarrassment due to the removal of one or both breasts.

These negative reactions can result in a range of psychological issues, including pain, fatigue, sleep disturbances, anxiety, depression, perceived stress, cognitive dysfunction, and fear of recurrence (Liu et al., 2022, p. 12). Atallah (2017) reports that breast cancer patients frequently experience ongoing anxiety and thoughts of death, compounded by financial stress related to treatment. The emotional journey typically involves three stages: shock and disbelief, fear, and ultimately confrontation, which includes overcoming physical, psychological, and social challenges.

Mukhtar (2023) confirms that breast cancer patients struggle with adjustment and adaptation across physical, psychological, social, and familial dimensions. El Amir et al. (2023) find a decline in patients' ability to adapt to their life circumstances. This sentiment is echoed in studies by Novin et al. (2014) and Shah et al. (2015), which also note negative impacts on patients' sexual desire and fears of infertility. According to Panjari et al. (2011), 70% of participants reported experiencing sexual problems, contributing to significant mental strain during the identification of malignant tumors and throughout treatment (Mahalq, 2023, p. 599).

The emotional state of cancer patients profoundly influences their families and daily activities. Negative emotions and depression not only affect the entire family (Ammar et al., 2023, p. 78) but also hinder patients' cooperation with healthcare providers, ultimately reducing their quality of life (Sung et al., 2021, p. 65).

Women with breast cancer often require additional support to navigate the challenges associated with the disease and its treatment, including both physical and psychosocial effects. This can be particularly difficult for patients who have not yet established strong social support networks within their families (Froude et al., 2017, pp. 1489-1491). The need for robust social support is crucial during the

diagnosis and treatment phases, drawing from various sources such as relatives, immediate family, spouses, places of worship, friends, and neighbors (Adejoh et al., 2024, p. 4).

A study by Sun et al. (2024) finds that patients with gynecological cancers, including breast cancer, are particularly vulnerable to depression, underscoring the importance of psychological and financial support interventions. Furthermore, research by Hongyan et al. (2024) indicated that fear of cancer recurrence in breast cancer patients is significantly associated with the level of social support they receive.

Social support plays a crucial role in helping individuals identify and effectively manage their problems. Community support provides individuals with a sense of self-empowerment, serving as a vital source of security in their lives. Poon and Zait (2013) identify various types of community support, including tangible assistance, informational help, emotional support, and financial aid. These forms of support are fundamental variables in individuals' lives, closely linked to health, psychological well-being, and social happiness (Afifi, 2024, pp. 126-127).

El Deeb (2019) further confirms that social support positively impacts an individual's health and psychological happiness. It enhances their ability to adapt to challenges and mitigates the effects of daily stressors. This finding is supported by numerous studies, including those by Knobf (2011), Trevino et al. (2013), You & Lu (2014), and Salina et al. (2016).

Life stress refers to an individual's inability to effectively manage the circumstances surrounding them in their social environment. Severe or persistent stress can lead to psychological and physiological changes, as well as alterations in social interactions. This stress impacts relationships with oneself and others, hindering the ability to achieve personal goals (Elizabeth, 2017, p. 215).

Lopez et al. (2008) note that the nature of a stressful situation often determines the coping strategies employed. Individuals tend to use emotion-focused strategies when faced with situations beyond their control, such as health issues, while problem-focused strategies are used in situations they can manage (Nady & Hosny, 2024, p. 107). When situations exceed a person's coping capacity, they must employ various strategies to navigate these challenges (Idris & Badzis, 2017, p. 226).

Bailey and Smith (2000) emphasize that the goal of coping strategies is to enhance family resources, reduce sources of stress and negative feelings, and achieve balance in family functioning. Strategies targeting the stress source directly, such as problem-solving and information-seeking, are generally more effective than those that involve denial or minimization of the situation (Bonab, Motamedi & Zare, 2017, p. 12).

Billings and Moos (2005) distinguish between active coping strategies, which involve cognitive and behavioral efforts to address problems and their consequences, and passive coping strategies, which consist of cognitive attempts to avoid confronting issues and behaviors aimed at indirectly reducing emotional stressors. Negative coping strategies are often employed by individuals who feel that their circumstances cannot be changed, leading them to accept the situation as it is (Indiana & Fichera, 2021, p. 1424).

Mishra, Nair, and Sharan (2024) find that the use of various coping mechanisms—such as self-control, problem-solving, avoidance, and taking responsibility can mitigate the effects of physical and psychological stress in breast cancer patients. Similarly, Getahun (2022) identifies that breast cancer patients frequently resort to negative coping strategies in response to the stress they face.

Breast cancer is undoubtedly one of the most dangerous and prevalent chronic diseases, drawing significant attention from medical professionals, specialists, and researchers focused on prevention strategies. The disease has profound effects and consequences for patients, their families, and society at large (Azouz & Huwaisi, 2020, p. 5). The study by Qaoud (2018) highlights the efforts made to address the needs of breast cancer patients, emphasizing the importance of providing services that identify strengths and weaknesses, alongside a continuous commitment to service improvement (Mahmoud, 2023, p. 46).

Social work in the medical field aims to provide comprehensive care and services through the efforts of social workers who operate at various levels. They deliver integrated services and programs to female patients, both as individuals and in groups. Social workers in hospitals play a crucial role in guiding and counseling female patients during their treatment. While there are various specializations within the profession, social work is particularly focused on addressing the needs of female patients from a holistic perspective (Marting, 2008, p. 98).

In the medical context, social work specifically targets issues related to social adaptation and emotional challenges that can impact the treatment process. The goal is to help patients maximize the benefits of their treatment while facilitating their adaptation to both their family and broader social environments after discharge from the hospital (Gharaba, 2008, p. 154). Abbott (2017) further emphasizes that social work plays an effective role in overcoming barriers to the early detection of breast cancer, including patients' concerns about the confidentiality of their medical information.

Casework is a fundamental method within social service, encompassing various theories and models that help explain different phenomena and problems. In this context, the researcher will utilize ecological theory to elucidate the relationship between social support and coping strategies for life stress among breast cancer patients.

Accordingly, the problem of the study was identified in the question: "Is there a fundamental relationship between social support and life stress coping strategies for breast cancer patients?"

Theoretical Guidelines of the Research: Ecological theory:

Ecological theory, also known as ecological systems theory and later called the bio-ecological systems theory, is a psychological and sociological framework developed by Urie Bronfenbrenner. Ecological theory is the human development theory which elucidates the process of socialization as the means by which an individual acquires membership within a given society (Härkönen, 2007, P.4), it focuses on the person in the environment and the ongoing interactions and transactions between people, families, groups, and communities. The social worker seeks to achieve a full understanding of the complex interactions between the client and all levels of social and physical systems, as well as the meaning that the client assigns to each of these interactions (Teater, 2014, p.23),

Being diagnosed with breast cancer is one of the external life pressures. According to the circular relationship outlined in the environmental theory, these external life pressures can lead to internal pressures for the patient including psychological, physical and mental stress. This can amplify external pressures and vice versa, which may affect the patient's family adaptation, as the environmental theory emphasizes the relationship between the patient and their social environment. Thus, it is crucial to assess the coping strategies employed by breast cancer patients since these strategies can affect their personal resilience and social adaptation.

Study Objectives:

1. Determine the nature of the relationship between social support and life stress coping strategies for breast cancer patients.
2. Determine the nature of the relationship between some demographic variables and social support for breast cancer patients.
3. Determine the nature of the relationship between some demographic variables and life stress coping strategies for breast cancer patients.

Study Concepts

1. Social support concept: are defined as "instrumental and informational support that addresses basic needs and immediate goals, as well as emotional support, which includes having someone to talk to or to provide encouragement" (Vengas & Gilmer, 2022, P.8), it is also comprehensive process that provides assistance to everyone in need through a professional person. This assistance may be tangible, emotional or informational (Julies, 2008, p.71). (Julies, 2008, p.71).

Social support concept: Social support concept in theory is "What a breast cancer patient perceives as the assistance she receives from others in terms of care, attention, love, advice, and information from members of her family or her broader social circle. Such social support enables her to overcome challenges and pressures. It contributes to reduce feelings of illness and distress, enhances her ability to cope and leads to increased happiness and overall well-being".

As for the procedural definition of social support as perceived by children: it is the sum of the responses of breast cancer patients on the scale of social support". It encompasses three key dimensions: information assistance, emotional support, financial support.

2. Life stress coping strategies concept: are defined as "Stress coping strategies are defined as what people do to manage stressful events and the negative feelings associated with them in their lives (Daud, et al,2013,p.319), also defined as psychological efforts to reduce, endure, minimize, or control stressful events(Nady&Hosny,2024,P.106)

Life stress coping strategies concept refers to" the means and methods used by breast cancer patients to manage and reduce life stresses and crises. They aim at helping patients to adapt to their circumstances in order to improve their life".

As for the procedural definition of Life stress coping strategies, it is the sum of the responses of breast cancer patients on the scale of Life stress coping strategies. It involves several key dimensions: planning method to solve the problem, responsibility method, reevaluation method, self-control method, method of belonging to others).

Methodology: This study belongs to the pattern of descriptive and analytical studies that determine the relationship between two variables, social support and Life stress coping strategies for breast cancer patients, This study relied on Social survey method by comprehensive inventory of breast cancer patients in institutions specified for application the study.

Study hypothesis:

1. There is Positive statistically significant relationship between social support and Life stress coping strategies for breast cancer patients.
2. There is statistically significant relationship between some demographic variables and social support for breast cancer patients.
3. There is statistically significant relationship between some demographic variables and Life stress coping strategies for breast cancer patients.
4. There are statistically significant differences between working and non-working breast cancer patients on the social support scale.
5. There are statistically significant differences between working and non-working breast cancer patients on the Life stress coping strategies scale.

Population: The study is conducted at the National Cancer Institute, focusing on a population of 1864 cancer patients in general. From this group, a sampling frame of 702 breast cancer patients is established. A simple random sample of 20% is drawn, resulting in a sample size of approximately 140 breast cancer patients.

Time domain: The research took approximately four months to implement from (1/9/2023 until 30/1/2024AD).

Tools: The tools of the study are as follows:

1. **Social support scale (Abd-Salah, 2019):** The scale consists of 30 items, originally designed with five responses. Nevertheless, it has been modified to three responses to accommodate a sample of illiterate breast cancer patients. The scale items are answered within three alternatives -always, sometimes, rarely- and scores are obtained from (3,2,1) respectively for the positive expressions. All items are positively framed, except for item 27, which is negatively framed. Hence, total score of the social support scale ranges from 30 to 90 points while using the Pearson correlation coefficient.

Scale reliability: The researcher has re-codified the scale and conducted a reliability procedure by applying it to a sample of 15 single breast cancer patients. The sample has then been retested after 15 days, especially from October 15, 2023, to October 30, 2023.

Table (1) reliability at social support scale by Pearson coefficient (n=15)

The whole scale	The value R
social support scale	.947**

Table (3) indicates that the reliability for the tool as a whole is acceptable at significant (0.01).

Validity of scale: The researcher evaluated the validity of the entire scale by applying it to 15 single breast cancer patients. The results show that the internal consistency of the study scale is valid 0.859 at significant level 0.01. The internal consistency validity of the scale's statements has also been assessed, yielding coefficients that ranged from 0.592 to 0.846, and all of these coefficients are significant at 0.01 level.

2- The Life stress coping strategies scale as referenced by Daena, 2018: consists of 39 items, including 9 negative items identified as follows 15, 20, 21, 22, 23, 24, 27, 37, 38. The remaining items are positive, distributed into five distinct strategies according to the table:

Table (2) Distribution of statements of Life stress coping strategies scale

N	Tool dimensions	phrases	statements number
1.	Planning method to solve the problem	1-8	8
2.	Responsibility style	9-19	11
3.	Self-control style	20-27	8
4.	Reevaluation method	28-33	6
5.	Style of belonging to others	34-39	6
The whole scale		1-39	39

The researcher has replaced the word “divorce “with “after I became ill” in the phrases. Moreover, the scale has been modified from five options to three options, accommodating a sample of illiterate breast cancer patients. Responses are re-codified using the Pearson coefficient, with scale items answered on a three-point scale. Scores are assigned as follows: 3, 2, and 1 for positive statements, and the reverse for negative statements. Thus, the total score on the scale ranges between 39 to 127.

Scale reliability: The researcher has re-codified the scale and conducted a reliability test with single 15 breast cancer patients. The sample has then been retested after 15 days from October 15, 2023, to October 30, 2023.

Table(3) Reliability at stress coping strategies by Pearson coefficient (n= 15)

N	Serial Number	Tool dimensions	The value R
1	The first dimension	Planning method to solve the problem	.795**
2	the second dimension	Responsibility method	.932**
3	the third dimension	Self-control method	.901**
4	the fourth dimension	Reevaluation method	.890**
5	the fifth dimension	method of belonging to others	.812**
The whole scale			.866**

Table (3) shows that the internal consistency of the study scale is valid at significant (0.01).

Validity of Life stress coping strategies scale:

A. Internal consistency of dimensions

Table (4) the correlations of the dimensions and the total score of Life stress coping strategies using the Pearson correlation coefficient (n = 15)

Tool dimensions	Planning method to solve the problem	Responsibility method	Self-control method	Reevaluation method	method of belonging to others
Planning method to solve the problem	1	.911**	.824**	.755**	.591**
Responsibility method	.559**	1	.632**	.709**	.848*
Self-control method	.563**	.641**	1	.586**	.732**
Reevaluation method	.879**	.593**	.664**	1	.598**
method of belonging to others	.695**	.949**	.900**	.805**	1
The scale	.674**	.774**	.755**	.714**	.821**

The previous table illustrates that the internal consistency of the study scale is valid at significant (0.01).

Internal consistency of statements: The results have ranged between 0.592 and 0.927, and all of these coefficients are at 0.01 level

Sample properties and the result of the second and third hypotheses:

Table (5) Characteristics of the research sample and the result of the second and third hypothesis (n=140)

Variables	responses	Frequency	(%)	Social support	stress coping strategies
Age	25-	32	22.9	-0.683**	.842**
	30-	98	70		
	35 and over	10	7.1		
Educational Status	illiteracy	13	9.3	0.507*	0.935**
	read and write	19	13.6		
	Middle Certification	35	25		
	University degree	73	52.1		
Employment status	Working	87	62.1	0.808**	0.799**
	Non-Working	53	37.9		
Duration of the disease	less than one year	55	39.3	-0.641**	0.785**
	1- less than 3 years	48	34.3		
	3- less than 5 years	22	15.7		
	5 years and more	15	10.7		
residence	Urban	98	70	.537*	.301
	Rural	42	30		
Average household income	Less than 2000 pounds	32	22.9	0.836**	0.955**
	2000 -	44	31.4		
	3000 -	42	30		
	4000 and over	22	15.7		
The most commonly used type of treatment	Chemical	79	56.4	0.245	0.032
	surgical	38	27.1		
	Radioactive	23	16.4		

General results of the study: The first hypothesis:

Table (6) The correlation between social support and Life stress coping strategies for breast cancer patients using Pearson coefficient (n = 140)

No	Life stress coping strategies social support scale	social support scale
1	Planning method to solve the problem	.938**
2	Responsibility method	.697**
3	Self-control method	.875**
4	Reevaluation method	.776**
5	method of belonging to others	.912**
	The whole scale	.840**

Table (6) demonstrates the validity of the study's first hypothesis, indicating a statistically significant positive relationship between social support and life stress coping strategies for breast cancer patients with a significance level of 0.01.

The second hypothesis: Table (5) shows the validity of the study's second hypothesis, which is statistically significant at both 0.05 and 0.01. However, the “type of treatment” variable does not show a statistically significant relationship with social support among breast cancer patients.

The third hypothesis: Table No. (5) illustrates the validity of the study's third hypothesis, showing a statistically significant at the level 0.01; However, there is no statistically significant relationship between “type of treatment” and “place of residence” and methods of coping with life stress among breast cancer patients.

The fourth and fifth hypothesis:

Table No. (7) The differences between working and non-working breast cancer patients on the social support scale and Life stress coping strategies scale using a coefficient (T) n = 140

Scale	Indicators	%	Averages	Standard deviation	(t) test Crisis scale
social support	working	62.1	2.53	0.39	6.632 Significant at 0.01
	non-working	37.9	1.79	0.41	
Life stress coping strategies	working	62.1	2.76	0.64	7.983 Significant at 0.01
	non-working	37.9	1.82	0.52	

Table (7) demonstrates the validity of the study's fourth hypothesis, as there are statistically significant differences at level 0.01 between working and non- working on the social support scale. The results favor working individuals with a mean 2.53.

Table (7) confirms the validity of the study's fifth hypothesis, showing statistically significant differences at the level 0.01 between working and non- working on the Life stress coping strategies scale. The results favor of working group, which has a mean of 2.76.

Discussion:

The study confirms the validity of the first hypothesis " at a statistical significance of 0.01 in all dimensions: the higher the level of social support, the greater the ability of breast cancer patients to solve the problem, assume responsibility, self-control, reevaluation, and connect with others. The Research by **Froude et al. (2017)** and **Hongyan et al.'s (2024)** supports the idea that breast cancer patients require additional support to manage the challenges associated with the disease and its treatment. Furthermore, **El-Deeb (2019)** confirms that social support positively impacts the individual's health and psychological well-being, while also enhancing their ability to cope with distress. and reduce the effects of daily stress. Breast cancer causes many changes for both the patient and the family, with one of the most prominent challenges the being the difficulty of coping with the disease in of the context of feelings of hopelessness, depression, and low self-esteem (**Gharaba, 2008, p. 68**). This is confirmed by the findings of **Muharram (2005)** and Van (2017) which identify that the most common fears among breast cancer patients include fear of death, sleep disturbances, concerns about fertility, and difficulty adapting to the disease as well as the inability to perform social roles effectively. Similarly, **Atallah (2017)** and **Yusof et al. (2023)** show that breast cancer patients often experience chronic anxiety and depression. Therefore, receiving social support from others contributes to improve the quality of life for breast cancer patients This is further supported by **Kasparian et al (2009)**, **Knobf (2011)** and **You & Lu (2014)**, who agree on how it positively influences the coping mechanisms breast cancer patients employ to deal with life stress Moreover, **Indiana & Fichera (2021)** and **Getahun (2022)** conclude that social support plays a crucial role in enhancing the well-being of patients. Based on the theoretical framework guiding the study and used to interpret its results (**ecological theory**), the breast cancer patient lives and interacts with the environment surrounding her - family, friends, relatives, or neighbors or the hospital staff - engaging with them psychologically and socially (**the concept of compatibility between the individual and the environment**). If the interaction is positive, her ability to face life pressures increases (**the**

concept of compatibility and adaptation), as the patient is exposed to many pressures that hinder her from interacting positively with the environment (**the concept of stress**)

The current study also confirms the validity of the second hypothesis at significant levels 0.05 and 0.01. Within the framework of the ecological theory, it is evident that the breast cancer patient does not live in isolation from the surrounding social environment from which she receives social support, as she interacts with family, relatives, work colleagues, and the hospital and receives social support from them. Thus, there is a relationship between social support and factors such as age, professional status, duration of the disease, average monthly income with a statistical significance level of 0.01. This finding contradicts the results of the **Ebid, & Assy (2020) study** which found no statistically significant differences in social support based on variables such as age, qualification, and treatment stage. However, their study finds statistically significant differences in the duration of the illness with respect to the dimensions of the social support scale. In addition, they found statistically significant differences related to educational status and place of residence at a level of significance 0.05. There are statistically significant differences in the level of social support depending on education and the treatment period.

On the other hand, **Jadidi & Ameri (2022)** report that there is no relationship between age, educational level, stage of illness, level of social support, location, insurance, income or level of social deprivation. Moreover, **Ammar' (2023)** shows that the emotional state of breast cancer patients has a profound impact on the emotional well-being and activities of their families.

The current study also confirms the validity of the third hypothesis at significance level 0.01. Within the framework of the ecological theory and the patient's interaction with her surrounding environment, a breast cancer patient's ability to cope with life's pressures is affected by her educational level, professional status, duration of treatment, average monthly income, and age. Therefore, there is a relationship between social support and factors like age, professional status, duration of the disease and average monthly income. At a significant level of 0.01, while (educational status, place of residence) is at a significance level of 0.05. **Priestman (2007)** shows that some social factors such as age, education and gender have an impact on breast patients.

The current study also confirms the validity of the fourth hypothesis at 0.01. It finds statistically significant differences at between working and non- working on the social support scale in favor of working with a mean of 2.53. **Van (2017)** demonstrates that when breast cancer patients work, their fear of leaving their job increases. This feeling may result from a lack of support provided to them from the workplace and from their colleagues, as well as a decline in their ability to perform tasks effectively.

The current study also confirms the validity of the fifth hypothesis at 0.01 as there are statistically significant differences at 0.01 between working and non- working on the Life stress coping strategies scale in favor of working with a mean of 2.76. **Kleponis (2013)** highlights that breast cancer often leads to changes in body image and triggers feelings of being pitied by others, and thus the inability to adapt and manage these pressures.

Indicators of the role of social workers in developing strategies to cope with life stresses as well as social support for breast cancer patients:

1. **Trainer:** Organizing awareness seminars for breast cancer patients to teach them how to manage their life stresses and plan for their future, in addition to how solve their psychological and social problems.
2. **Supporter:** Providing psychological, spiritual and social support and preventing the development of any psychological issues following the diagnosis.
3. Colleges of social work amend curricula to include the field of oncology in their teaching regulations.
4. Offering training courses for social workers focusing on oncology, particularly breast cancer.
5. Preparing the patient's family to accept her after the diagnosis.
6. Addressing and correcting the family's misconceptions about the disease.
7. Alleviating the severity of problems faced by the families of breast cancer patients.
8. Facilitating communication between the patient and her family while she is in the hospital.
9. Conducting social research for breast cancer patients.
10. Providing the patient's family with guidance on how to effectively support the patient.
11. Conducting an experimental study on breast cancer patients to develop strategies for coping with life stresses.

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