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Original Article

Personality Subtypes and Attachment Styles in Women Survivors of Breast and Gynecologic Cancer

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Abstract

Introduction: Gynecologic and breast cancers are among the types of cancer that are still highly prevalent with high rates of mortality due to lack of early diagnosis. However, these two types of cancer can be controlled by screening programs and the individual can be survived. Also, both cancers have gained the attention of mental health specialists because of impairing sexual function and issues related to body image, and fertility status among affected individuals in which, have direct effects on their adjustment and quality of life. Consequently, the aim of the current research is identify of personality subtypes and attachment styles in women who have survived from breast and gynecologic cancers.

Methods: The current study is a qualitative. The participants were selected through purposive sampling method, which continued until data saturation from January to March 2018. For the data collection, the Shedler-Western Assessment Procedure (SWAP) and the Adult Attachment Interview (AAI), and for the data analysis Q-Sort scaling and comparative content analysis were used.

Results: The study's findings showed that high-functioning depressive traits and dissociation were high. However, 9 of the participants had psychological health. Also, secure attachment and preoccupied attachment patterns were the most frequent ones.

Conclusion: These findings can provide clinical implications for mental variables that are involved in the remission process or the advancement of the disease in women with breast and gynecologic cancer.

Declaration of Interest: None

Key words: Breast cancer, Gynecologic cancer, Survivors, Attachment, Personality.

Introduction

Gynecologic and breast cancers are among the types of cancers that are still highly prevalent with a high rates of mortality due to lack of early diagnosis particularly in developing countries (1). However, these two types of cancer can be controlled by screening programs and, thus, the individual can be treated; because these two types of cancer are among 5 top cancers with the highest rates of survivors in terms of survival rate (2). Furthermore, gynecologic and breast cancers have gained the attention of mental health specialists because of impairing sexual function and issues related to body image, fertility status in which have direct effects on individuals adjustment and quality of life (3–6).

Meanwhile, one psychological factor affecting longevity and recovery from cancer is the individual's personality (7). In this regard, various efforts have been conducted to determine the effect of personality as a characteristic or personality disorders on cancer (8,9). Despite the contradictory results in the data related to the variable of personality in the development of cancer (10), it appears that there are stronger pieces of evidences regarding the effect of this factor on the process of cancer and its treatment (7,11). In fact, the role of safety care on controlling metastasis or growth of tumors in nonsolid tissues have been most logical and acceptable which shows that personality characteristics are affective on the process of treatment, recovery or poorer therapeutic results (12,13). As Mols and colleagues (14) have suggested when examined the relationship between personality type D with quality of life and mental health in 3080 survivors of cancer, 19% of these individuals had type D personality who, compared to other survivors, had significantly lower levels of general health, social function and mental health. Also, in another study aimed to investigate the relationship of personality with health condition and its effect on cancer among Melanoma survivors, the negative effect of type D personality on the recovery process of individuals with cancer was shown (15). On the contrary, in a longitudinal study conducted by Nakaya and colleagues in Japan (16), 41442 individuals completed the research questionnaires, among which, 890 cases were diagnosed with cancer from 1993 to 1997. These 890 individuals were investigated up to March 2001, among which totally 356 cases had died. However, the results of this longitudinal research did not support the hypothesis of the relationship between personality and survival of individuals with cancer. In addition, Nakaya (17) in a descriptive study in which the data obtained from two big longitudinal studies (the Miyagi cohort study and Swedish twin cohort/Finnish twin cohort) have been used, concluded that the effect of personality characteristics and depression on the risk of developing cancer and survival from cancer is low. As a result, according to the existing contradictory results in this ground, the need for further research is still felt.

One of the main concepts in explaining the structure and pathology of personality is the concept of attachment (18). According to Bowlby's theory, early attachment experiences have long-term effects which tend to continue during lifetime and are among the factors determining the personality traits and mental disorders (19). Also, this concept can be used for understanding underlying psychological factors in the development and progress of disease and the type of physician-patient relationship (20), therapeutic compliance (21), pain perception (22,23), and finally, the recovery process from various diseases including cancer. In this regard, numerous studies have investigated the role of attachment in patients with cancer and in most

studies, the attachment style of individuals with cancer has been reported to be anxious (24,25). Furthermore, the result of the research conducted by Andersen (26) aimed to investigate the relationship between attachment and delay in the diagnosis of cancer in primary care, indicated that high scores in avoidant attachment increase the duration of the disease from the initial presentation of symptoms until the patient's first physician consultation; and this increase has been reported to be more in women than in men.

According the importance of personality characteristics and attachment styles in health psychology, studies have been consistently emphasized on the risk of developing physical disease, maintaining and improving quality of life, mental health and adjustment among patients. However this issue is not clear in the literature among Iranian population. In fact, with a review on the existing literature in the field of psycho-oncology, although we witness multitude of domestic and foreign researches which have investigated the personality of individuals with cancer, mainly self-report questionnaires have been used in the present research (27–29). Due to inconsistency of the results in many studies on the individuals' evaluations about themselves and the evaluations of clinicians about patients, caution is needed when interpreting results gained from self-report questionnaires (30,31). Therefore, conducting the current research can be an important step towards using Shedler-Westen Assessment Procedure (SWAP) for personality and the Adult Attachment Interview (AAI) in the field of psychology to facilitate more robust conclusion and developing effective therapeutic programs among individuals with cancer.

Method

The population of present study consisted of all women who survived breast and gynecologic cancer with no apparent evidence of active disease. From January to March 2018, the participants were selected through purposive sampling method, which continued until data saturation.

The inclusion criteria consisted of the individuals with Iranian nationality, being married for at least one time, and ages between 30 and 60. Patients with a history of psychotherapy were excluded. SWAP-200 and AAI assessment tools were employed in this study.

Shedler-Westen Assessment Procedure: SWAP-200 is a 200-item personality pathology Q-sort assessment tool designed to be used by clinically experienced observers based on longitudinal information over the course of treatment or clinical diagnosis interview (32). The SWAP-II is a set of 200 personality-descriptive statements, each printed on a separate index card. To describe a patient using the SWAP-II, the clinician sorts the statements into 8 categories based on their applicability to the patient, from those that are least descriptive (assigned a value of 0) to those that are most descriptive (assigned a value of 7). Statements that apply to a greater or lesser degree are placed in intermediate categories. Then the SWAP-200 scoring software generates three personality score profiles. This document is a guide to interpreting these score profiles. The three personality score profiles are as follows (33):

1. *DSM-IV Personality Disorders (PD T-Scores)*. This profile provides a score for each DSM-IV personality disorder and can be used to derive a formal DSM-IV axis II diagnosis. The profile includes a *Psychological Health Index* that assesses personality strengths. A strong match with a PD prototype (T > 60) indicates that the patient would be given the PD diagnosis by a consensus of knowledgeable clinicians. A moderate match (T > 55) means that the patient has "features" of the disorder but is

subthreshold for diagnosis. If two or more scales have scores above T=60, the highest score provides the primary axis II diagnosis. A score of T=50 on the Psychological Health Index indicates an average level of functioning relative to a sample of patients with DSM-IV Axis II diagnoses. The low score (T=40) indicates relatively severe personality pathology, a standard deviation below the mean in a reference sample of patients with personality disorders. Scores above T=60 indicate significant psychological capacities, such as the ability to sustain meaningful relationships, to use talents and abilities effectively and productively, to recognize alternative perspectives, to respond to others' needs and feelings, to find meaning and fulfillment in life.

2. *SWAP Personality Syndromes (Q-Factor T-Scores)*. This profile provides scores for an alternative set of personality syndromes that were identified empirically. This alternative diagnostic system addresses limitations of the DSM-IV diagnostic system and is designed to capture personality patterns and syndromes seen in clinical practice. Where categorical diagnosis is desired, T-scores> 60 indicate that a diagnosis applies and T scores> of 55 indicate the presence of clinically significant "features." If more than one scale has a T-score above 60, the highest score provides the primary personality diagnosis. The *Psychological Health Index* (High-Fx) is included in the score profile as well.

3. *Factor T-Scores*. This profile provides scores for twelve personality factors (trait dimensions) identified via factor analysis of the SWAP-200 item set. These scores are supplement for diagnosis by highlighting specific areas of psychological functioning.

The SWAP-II shows considerable evidence of reliability and validity (32–34).

Adult Attachment Interview: AAI is a semi-structured interview that evaluates people's mental representations of attachment and perceived family experiences associated with attachment. To do so, individuals were divided into four attachment styles: secure, dismissive, preoccupied and unresolved (35). The psychometric properties of AAI were first evaluated by George et al. (36). Also, AAI classification stability was shown (37). The related literature also confirms that AAI has both a satisfactory validity and an appropriate discriminated validity (38,39). Moreover, the content validity of this interview was examined in a study by Lorito and Scrima (40). The AAI consists of 20 questions and on average lasts for 60 minutes.

At the beginning with regards to the inclusion and exclusion criteria, the participations were selected through a purposive sampling among survivors of breast and gynecologic cancer. Prior to interviewing, explanations were given about the confidentiality of the issues discussed, the purposes of the study, and audio file preservation and the participants were ensured that the information would only be used for the purposes of study without mentioning the identity of the participant. The rights to leave the interview at any time and to withdraw from the research were other ethical considerations. Data collection continued to reach relative saturation. Finally, 10 people were interviewed as the participants of this study.

Initially, the recorded interviews were transcribed in Word software. Then, they were reviewed several times in order to gain an insight into the feelings and experiences of the participants and the key phrases from each interview that represented specific codes were identified. For analyzing the attachment data, content analysis was employed.

The credibility and dependability were enhanced by member checks and the peer review were. Following the completion of the individual data analysis, the findings were checked with the participants, and the data

were also analyzed one more time by two psychologists who were expert in this subject and compared with the results of the researcher.

Results

In this study, 10 women survivors of breast and gynecologic cancers who were qualified for participation in the study with regards to the research criteria were interviewed. The average age of the participants was 50.4 years; the youngest and oldest participants were 37 and 60 years old respectively.

The findings of the study showed that women who have survived breast and gynecologic cancers, in the SWAP Personality Syndromes gained the most scores in high functioning depressive personality syndrome. Also, 9 of the participants had a psychological health. In personality Q factors, 6 participants in the dissociation gained high scores. (See table 1)

Table 1: Comparison of SWAP among participants

		T > 55	T > 55	T > 60	T > 60
		Frequency	Percentage %	Frequency	Percentage %
DSM-IV Personality Disorders	Histrionic personality	-		1	10
	Obsessive personality	1	10	-	-
	Dependent personality	1	10	-	-
Psychological Health Index				9	90
SWAP Personality Syndromes	Paranoid Personality	1	10		10
	Obsessive Personality	5	50	-	-
	Histrionic Personality	1	10	4	40
	High Functioning Depressive Personality	2	20	8	80
	dependent-victimized Personality	1	10	-	-
Factor T-Scores	Hostility	1	10	-	-
	Narcissism	1	10	-	-
	Emotional dysregulation	1	10	3	30
	Dysphoria	-	-	1	10
	Schizoid orientation	-	-	1	10
	Obsessionality	1	10	1	10
	Thought disorder	1	10	1	10
	Dissociation	3	30	3	30
	Sexual conflict	-	-	1	10
Psychological Health Index		-	-	10	100

Next, based on adult attachment theories, each type of attachment was divided into two categories of narrative coherence and narrative content (experiences related to attachment). Then, for each type of attachment, specific open codes were considered. Finally, the key phrases for each interview in accordance with the mentioned model were presented and each individual's attachment was clarified based on its frequency. In tables 2 and 3, the coding of the participants' attachment styles is explained.

Secure Attachment Style:

- Reported both positive and negative content simultaneously.

Case 2: "Dad was so harsh, he'd especially beat my brother too much but he used to help us in studies. He was so patient in teaching us. Whatever I know in math, I've learned it from my dad. He had some good in himself, too (with laughter and humor)"

- Stating positive memories

Case 1: "Every holiday (Norouz) and once in summers, all of us would certainly go on a trip. It was not possible to cancel the trips. It was such a fun".

- Having enough resources for coping with distress

Case 3: "Mom, despite having many children and having to cook and run the household stuff all the time, took care of us. My brothers and sisters took care of me".

- Awareness of the effect of early relationships and valuing them

Case 5: "The way I grew up and the joyful and safe atmosphere that I had always vitalize me. I am so happy and so proud of such parents, especially for those early years. This means a lot to me".

- Consistent and intimate relationships

Case 4: "I met my most intimate and closest friend in first grade. Our friendship got a little faded, but when I broke up from him (from her husband), we started our friendship again and she is my best friend and companion". (See table 2)

Table 2: Secure Attachment Style

Theme	Category	Open code	Frequency
Secure Attachment	Narrative coherence	Easy access to memories and remind them	5
		understandable and logical connections while expressing statements	
		Mentioning both positive and negative things at the same time	
		Responses relevant to the topic	
		Expression of experiences in a concise and integrated way	
		Use of the wide range of emotional and influential words	
	Narrative content	Expressing good memories	
		Creative problem solving	
		Looking for others' support	
		Having sufficient supportive sources to deal with distress	
		Awareness of the impact of initial relationships of attachment and appreciating it	
		Use of the high-level defense mechanisms (such as humor and sublimation)	
		Stable intimate relationship	

Preoccupied Attachment Style:

- Reported inconsistent and confusing narratives.

Case 6: "In fact, I've had a very busy life. I used to help a lot. I was an artist, that is, I loved to learn every kind of art and I was always the love of my father and for example if he saw me twice in day, he'd say that I haven't seen you at all."

- Too much preoccupation with past events

Case 7: "What I would never forget and I always tell mom is that I wish you'd never took me to Ardebil for engagement (before the current marriage, the patient was once espoused to her uncle's wife's brother and divorced). I always ask her why did you that while you knew. At many times when I am very happy and I am telling funny stuff, suddenly I remember the past and those times and I get upset."

- Role replacement

Case 9: "Because my mother always used to go into her shell and was stressful, since our childhood, she used to commit suicide; she threw herself into a well once and took pills in another time. We were always anxious and stressful, too. I was always careful not to do something which makes her upset. I didn't want her to get worse."

- Guilt and consistent criticism

Case 8: "I always have a guilty conscience. I always feel guilty that I have bothered others. You know! My mom passed away when I was 11 and my dad got married; my stepmom hurt me so much that I left home and went to live in my sister's; I lived with my sister for about 20 years. I was always careful not to do anything bad. I'm always embarrassed and I have a guilty conscience now. My obsession-compulsion started from that time on. At first, it was just obsession, then, compulsion started (the patient has compulsive washing and checking behaviors)."

present most of the time (the patient's mother is the second wife of the father). She was never okay, especially because of the way she divorced from her first husband; it was a bad disgrace at those times. Then, my grandfather forces her to marry my father because it was considered a shame to have a divorced woman in the house. That's why my mother was never happy. After that, it seems that it was a couple of years that the first wife of my dad couldn't get pregnant. I was his first child from the second wife. That's why they slandered mother which caused my mother to get distressed."Fear of lossCase 9: "I don't want to hurt anyone." (See table 3)

Table 3: Preoccupied attachment style

Theme	Category	Open code	Frequency
Preoccupied insecure attachment	Narrative coherence	Use of the high number of negative emotional words	5
		Incoherent and confusing narrative	
		irrelevant responses	
		Long answers	
		Extreme engagement in past events and bad memories	
		Fluctuations in the evaluation of experiences and contradictions in speech	
		Extreme self-analytic style	
	Narrative content	Rumination and negative repetitive thoughts	
		Use of negative emotion-focused coping strategies that increase tension and distress	
		Displacement of the roles	
		Feelings of guilt and constant criticism	
		Presence of an anxious mother	
		Numerous yet contradictory and clingy relationships	
		The conflict between rebellion and dependency	
		The inability of caregivers to reduce child's tension (Parents who cannot have a supportive role)	
		Fear of losing	
		Inconsistency in parenting and periodic rejection	
		Tendency to magnify their distress	

- Having an anxious mother

Case 10: "Mom was always in her shell. She was always stressful because dad was not

Content analysis results revealed that 5 individuals (50% of the participants) had a secure attachment style and 5 individuals (50% of the participants) had a preoccupied attachment style. The results of the content analysis of the attachment styles are presented separately in Table 4.

Table 4: Comparison of attachment styles among participants

Attachment styles	Patient ID	Frequency
Secure	1/2/8/9/10	5
Preoccupied insecure	3/4/5/6/7	5

Discussion

Results of the findings suggested that, among syndromes of SWAP, the depressed type with high function (100%) is among the most reported types. The notable point regarding the common properties of all the individuals survived from cancer is that they all share depression syndrome with high function.

Also, in T factors of personality, dissociation (60%) had the highest frequency. All 10 participants as the sample of survivor women obtained a high level in the health index. Also, results of the attachment style in individuals showed that secure attachment and anxious-preoccupied attachment each reflect 50% of the attachment style of survivor individuals. The considerable point is that no avoidant attachment style was reported in this sample.

In explaining the bold presence of the personality trait of depression with high function among survived individuals, first, the difference observed in secure and preoccupied attachment styles existing among individuals in the present study should be noted. Regarding the individuals with preoccupied attachment style, it can be said that, the depression of these individuals has overshadowed their life with such an extent that even after having passed a near-death experience, their perspective towards themselves and life has not changed. According to Brandchaft (41), in traumatic attachment systems, the traumatized child feels herself as bad and absorbs the stigma of being bad and she can never cease this suffering anymore. Hence, although the cancer of these individuals has been treated, their main trauma – being tortured by wrath and grudge (41) – has remained intact. By joining bigger groups and with no dependence on particular people who are often not able to meet their needs, these individuals have been able to maintain the main characteristics of this personality syndrome (the role of caring or protector for others and finding meaning and satisfaction in the shadow of guiding or helping others), and they only lead it towards a healthier atmosphere such as public-supportive communities.

On the other hand, since half of the survived participants with depression syndrome with high function had secure attachment style, it might be said that this finding was due to the role of culture (regardless of the attachment style and the disease condition of individuals). Apparently, this personality syndrome among Iranian women (Iranian mother) is observed as a particular style which consistently receives rewards from society and has been stabilized.

As well, among women recovered from cancer, there is dissociation with sub-threshold levels in T factors of personality which is seen simultaneously with preoccupied attachment style. In explaining this, it can be said that past experiences and insecure attachment style in these individuals have led to the emergence of the dissociation defense in them, but at the present, due to recovery from cancer and lack a factor which requires the emergence of dissociation, this defense stays in hibernation.

Among the other significant findings of the present research was higher capacity and strength of ego. In explaining this finding, multiple functions of ego and their effect on higher mental health index among these individuals can be noted. We know that the function of ego is among the most important

factors of individual's personality which has a high influence on her function; she has stronger ego, higher realism and less primitive defenses; leads to individuals agency and directedness; brings more acceptance and compassion towards one's self; leads to more empathy with others; and makes the life story of individuals more coherent and meaningful. These characteristics which have been considered as indices for mental health (34), can help the individual to have a healthier body and also lead to consideration of pain and physical symptoms, health and self-care behaviors and finally to screening, which are accompanied by early diagnosis of the disease and, consequently, to recovery and more appropriate treatment.

Among other findings of the present research were the results regarding the attachment style of individuals which indicates that secure and preoccupied attachment styles each reflect 50% of the attachment style among participants. The important point is that no avoidant attachment style was found in the present sample. In explaining this finding, repetitive patterns of attachment styles among all the individuals of the sample can be mentioned. Unavailability and lack of sensitivity in the caregivers of these women is quite observable in the conducted interviews for attachment. This high rate of insecure attachment shows the possible effect of this concept the development of cancer which is consistent with prior research (42). The important issue regarding this issue is the presence of preoccupied attachment style in half of the sample, the relationship of which is found with physical diseases and cancer in past (24,25,43). In explaining this finding, mentioning this point is important that insecure attachment styles can be considered as the defenses which help infants or adults to keep anxiety in a managed level and reach security to some average level (44). The participations of the present research have needed to use this defense because of their primary relationships. During their development history, these individuals have tolerated anxiety and negative emotions and we have consistently observed that it has been accompanied by weakening of the immune system. At the same time, one other significant finding of the present research was the presence of dissociation among the sample individuals. Trauma does not happen in a vacuum space. The individuals with preoccupied attachment in the present sample have not found a person who helps them in gaining the capacity for integrating emotions and, therefore, their painful affection has turned into trauma. Without this ground, the individual is forced to dissociate her painful emotions of her experience which leads to aversive mental-physical condition and a gap in the individual's experience of the mind and the body (45).

Also, loss of one parent or both parents in the childhood of 7 individuals out of 10 individuals in the sample is a property quite consistent with the attachment theory that states that early loss of parents leads to depression in adulthood and possibly to more propensity for developing physical diseases. On the other hand, the presence of avoidant attachment style among women with advanced cancer and its non-presence among survived individuals can show screening behaviors which makes the progression of cancer conceivable among this group according to the fact that they don't pay attention to their physical symptoms and ignore it. This finding is consistent with the study conducted by Andersen (26).

There were also a number of limitations in conducting the present research. Limited population variety (the homogeneity of the sample for controlling the possible moderating variables), constrains the possibility of

generalizing the results. Furthermore, it is possible that some personality components have a moderating effect in the participants of the research compared to individuals who did not volunteer to participate in the research. As a result, it is recommended that, for more certainty in generalization, the present research would be replicated with similar and other populations; for example, conducting investigations on survived men, single individuals, and other types of cancer. Also, it is recommended that, according to the results of the present study, two variables of personality traits and attachment styles in case formulation would be considered during the treatment of individuals with cancer. It is recommended that, for the purpose of reducing non-adaptive use of the dissociation among patients with cancer and reducing the complexities caused by insecure attachment style, therapy approaches based on emotional experience such as Intensive Short Term Dynamic Psychotherapy (ISTDP) and attachment-based therapies would be used.

General Editorial Comments:

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