

Role of Resilience in Promoting Health Related Quality of Life : A Study Among Women Cancer Survivors.

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Abstract : Positive health behaviors are necessary to fight any illness. In this paper, psychological resilience, a modifiable human skill; “the ability to recover relatively stable psychological and physical functioning when faced with traumatic life experiences and challenges” (Bonanno2 G A 2011) is viewed as a positive health behavior in cancer survivors. This research qualitatively identified the resilience characteristics in women cancer survivors and discussed the impact of resilience in their survival and quality of life.

Research methodology and results: Content analysis has been carried out with the help of QDA miner v2.0.9; total of 140 statements were analyzed through the priori coding method. The codes are adopted from the Canon-Davison resilience scale. The data for the study was collected from both primary and secondary sources. 5 direct interviews, 10 online available interviews, and a Facebook page of cancer survivors from Kerala were chosen for the analysis. The study discussed the strong resilience characteristics in women cancer survivors, how they maintained high quality of life through coping strategies and attained survivorship.

Key Words: Resilience, Quality of Life, Coping Strategies, Women cancer survivors minor, CD-RISC

Introduction and Review of Literature

Survival is the basic instinct of all creatures. It is the fundamental element that keeps humans on the planet. When facing adversity, we transcend it, and our concerted effort helps us survive. The ability to recover relatively stable psychological and physical functioning when faced with traumatic life experiences and challenges is referred to as resilience (Bonanno GA, 2011). Cancer is known as such an event as it relates to trauma and challenges on both physical and psychological levels. Being resilient in the phases of chronic illness like cancer improves the chances of survival and leads to a new normal life. The most important factor is that resilience can be learned and improved through constant effort.

There are many cancer survivors living with good quality of life. The possibility of surviving cancer and moving beyond it is higher than it has ever been. In India, the facilities of early diagnosis, awareness about symptoms and treatments are assessable in all most in all states. Even while receiving treatment, those who have cancer can maintain active lives. We can see that there is a strong correlation between cancer and psychology. It can be discussed in terms of: a) the onset and development of cancer; b) the psycho-social effects of cancer; c) coping with the trauma and effects of cancer and promoting longevity and disease-free intervals. (Jane Ogden-Health Psychology, 2007). Positive health behaviors have an important role in surviving and dealing with cancer. Cancer not only affects the physical health of people; it also causes stress and emotional trauma. Here, psychological resilience is viewed as a positive health behaviour to discuss the psychological impacts of cancer survivorship. This study tried to examine the occurrence of the resilience characteristics of cancer-surviving women to promote health through a methodology of qualitative content analysis.

Theories of Psychological Resilience

Resiliency theory in medicine refers to the ability to recognize pain, accept it, and cope with it until things begin to normalize (Flach, 1988; O'Leary & Ickovics, 1995). According to Rutter (1979), it consists of the capacity to function under stress and overcome disadvantage (Rutter, 1979). It is the ability to regenerate power to respond to the internal or external environment to survive, grow, or develop (Jones, 1991).

According to Henderson & Milstein (1996), resilience is the ability to overcome negative life experiences and gain strength in the process. Recently, it has been used to conceptualize studies in educational administration. According to Geocaris (2004), resilient principals are better equipped to deal with difficult situations.

Resilience is closely associated with mental health outcomes in cancer patients. The resilience outcome of cancer survivors is linked to their interaction with adversities and protective factors at the biological, personal, and social levels (Seiler and Jene Wein 2019). This path varies from person to person.

Women and Resilience

According to a Science Daily story, women's life expectancy is currently higher than men practically everywhere in the world; some countries have shown this trend for more than a decade. Three centuries' worth of historical evidence demonstrates that women not only outlive males in times of peace but also have a higher chance of surviving even the most dire situations, such as hunger and pandemics. WHO's world health reports also give evidence of this scenario.

When it comes to resilience, women have been found to possess a natural capacity for thriving in the face of adversity. In response to stress and trauma, studies have shown that women are more tending than men to develop coping mechanisms, and they are also more likely to seek out social assistance when they need it. Women not only tend to endure higher amounts of stress on average than men do, but also fare better in terms of their mental and physical health. This is probably because women are more likely to seek help when they need it and have a solid social support system. There are certain fundamental theories that can explain why women are so resilient, even though every woman is unique. Dr. Angela Duckworth's "grit theory" is one such hypothesis. She

learned that intelligence, luck, good health, the ability to learn quickly and easily do not define success. Instead, great achievers, according to Duckworth, are those who are passionate about what they do, persistent in their learning, and willing to bounce back from setbacks. Success is fueled by realizing that you are the one in charge of your own motivation and results. The "resilience theory", proposed by Dr. Susan Kobasa, is another important notion. In accordance with this concept, individuals with high senses of self-efficacy (confidence in one's own talents) and social support systems are better able to recover from challenging events

Resilience and Cancer in Women

According to cancer statistics (cancerindia.org.in), in India, one woman dies every 8 minutes because of cervical cancer. According to GLOBOCAN estimates for 2020, in India, one woman dies for every two newly diagnosed breast cancer cases. The rural incidents are high according to those data. Late diagnosis, tobacco, a high fat diet, treatment costs and limited access to health care systems in rural areas are reasons for cancer incidents in India, as per reports. According to Globocan 2018 reports, in India, women are hit by cancer more than men, but the survival rate is higher in women here. Women are more exposed to medical attention than men on account of pregnancy and childbirth. In India, there are a lot of women and child-oriented health care initiatives and awareness programs to help monitor health. Women should be motivated themselves to make use of it and get the benefits.

In a study conducted by Di Giammo et al. among 82 breast cancer patients, on resilience, they found that young women seemed to be highly resilient. The study also recognized that women transform negative emotions into personal growth and overcome physical difficulties. Some clinical studies have demonstrated that cancer patients have a good level of resilience to the consequences of the disease, which is much more associated with a substantial compliance level during treatment. In certain other studies, development and resilience processes lead to greater psycho-physiological adaptation and reduced levels of psychological discomfort in the long term (Scheier MF, 2006; Taylor 2000). Psychologically resilient women with early diagnosed breast cancer are found to have fewer physical symptoms compared to women with other distress. (Lam et al.).

Cancer and "Survival"

The accumulation of genetic and epigenetic alterations in cells leads to the complicated illness of cancer (Baylin SP). These modifications enable cancer cells to develop and multiply in the presence of healthy cells, eventually invading and destroying surrounding tissues. Despite significant advancements in cancer therapy, the disease continues to be the top cause of death globally. The main ideas of survivorship should be better understood, which could lead to more effective cancer prevention and treatment methods. Most of the cancers are difficult to cure, particularly in cases of late diagnosis whereas in certain types of cancer, the survival goes beyond leading a disease-free life.

Researchers have explored the ability of survival extensively as it is a crucial life-span concept. It deals with people and communities' capability to sustain hardships and difficulties, frequently despite substantial loss and pain. In the face of adversity, survivors frequently display resilience and the fortitude to surmount challenges and accomplish goals despite them. In oncology, the term "survivorship" is frequently used to characterize the experiences of cancer patients who have undergone therapy and are now cancer-free. However, the idea of survival can also be used in many different situations where people or groups go through loss or difficulty, like survivors of natural disasters, abuse etc. One of the most significant areas of research in the field of psychology focuses on the psychological and social aspects of resilience and coping. The bio-psycho-social elements that support resilience and thriving after bad experiences have been addressed in some of the most important theories of survivorship that have been established in recent years.

Concerning what it needs to survive, there are a wide range of theories. Some claim that it's about mental strength, while others assert that intelligence is. But what did the study find? The notion of "differential survival" is one of the most important theories of survival. According to this hypothesis, certain people have a higher chance of surviving than others because they have qualities or attributes that make them more likely to do so. The theory of "opportunity cost," which contends that people are more likely to survive if they have less to lose, and the theory of self-preservation, which contends that people are more likely to survive if they are more concerned with their own survival, are two other important theories of survivorship.

The concepts of health-related quality of Life

It is possible to say that a person's health behaviour is connected to their overall health. Any medical state can be treated more quickly and with a higher quality of life if the patient adopts the right attitude. Kasl, S.V., & Cobb, S. (1966) defined "health behaviour aimed to prevent disease" and also defined health protective behaviors, also known as "behavioral immunogens". Health protective behaviors promote a healthy lifestyle, lower risk factors, and lessen adverse health effects. Individual, familial, and community-level health protective behaviors contribute to the elimination of risk factors that negatively affect health. Having favorable self-perceptions, exercising good self-control, and having strong social skills are examples of positive character traits that are individual attributes. Maintaining a positive self-image can lower mental health hurdles and boost self-assurance. Self-control improves health and well-being by reducing the likelihood of unhealthy practices.

Health related quality of life can be defined as "one's perceived wellbeing relating to mental, physical, and social aspects of health" (Hayas RD, 2010) Resilience has been linked to health outcomes in people with and without health issues. Furthermore, resilience has consistently been linked to better mental health outcomes in cancer patients (Matzka M, 2016). Doll, R., & Peto, R. (1981) explained the impact of behavioral factors on the causes of cancer. Health-promoting behaviors and resilience in patients with chronic kidney disease were studied by Ma, L. C., and Chang (2013). They discovered that these variables are positively correlated with one another. As resilience is a modifiable psychological factor, interventions for training resilience in cancer patients, like chronic disease patients, help to improve the treatment outcomes and related quality of life.

Study objectives:

This study perceives resilience as a behavior that supports survivorship while promoting both physical and mental health. The main objectives of this study are summarized as

1. To learn about the presence of resilience characteristics in cancer survivors
2. To understand the role of resilience characteristics in promoting cancer survivorship and quality of life.

Methodology

The study design and population: A qualitative content analysis was chosen for the study. The population considered for the study is women from the age group of 30 to 60.

This study fundamentally intended to learn about resilience and its impact to promote health related quality of life in cancer survival. So, the study chose cancer survivors who were resilient to cancer experiences. Women with good resilience were only recruited for the study.

The research data was collected from both primary and secondary sources. Unstructured interviews with five cancer survivors (a minimum of five years of survivorship) with an average duration of 75 minutes were conducted. For the face-to-face interview, the subjects were selected by initial interaction, observations, and resilience screening by the BRS (Brief Resilience Scale). The women with high resilience scores (4.31-5.00) were selected for the study. Those participants were chosen from a palliative care NGO in Trivandrum- Kerala; Rajagiri Foundation. Cochin Cancer Society, Kerala; Bharath Cancer Centre, Mysore, and a personal contact. The secondary data selected for the study were from a social media group of cancer survivors in Kerala; named, "Kerala Cancer Fighters and Supporters". The study analyzed this Facebook page's content about cancer survival stories/Post (10 women's profiles). a minimum of 5 years of survivorship). The YouTube and website interviews (5) of female survivors were also included in the study. The inclusion of these data was based on priori coding, the posts and interviews with the content matched with the codes of resilience characteristic and until the saturation of data needed for the study.

Recording and Data transformation

Interview data were recorded, transcribed and translated to English. Facebook posts were documented with web addresses and were translated. Online video interviews were also transcribed. Each dataset is filed separately and uploaded to QDA miner software.

Data analysis:

This qualitative descriptive study adopted a content analysis procedure. The Priori coding system was followed. Priori coding is systematic qualitative data coding with a prior set of valid codes adapted from existing literature. These codes are collected from the resilience scale of Connor- Davidson. This scale was used in several resilience studies among cancer patients and is a sound tool for measuring resilience. The psychometric properties of the scale are closely related to quality of life and positive mental outcomes (Velickovic et al., 2020).

The collected statements were analyzed with 24 codes under 6 categories from THE CONNOR-DAVIDSON RESILIENCE SCALE (CD-RISC 25). The Facebook profile posts were purposefully selected in reference to the prior coding (deductive coding/priori coding).

The categories are

1. Personal Competence
2. Acceptance of Change
3. The Secure Relationship
4. Strengthening effect of Stress
5. Control
6. Belief in God.

5.RESULT AND DISCUSSION

Category	Code	Count	% Codes	Cases	% Cases
Personal Competence	able to adapt change	6	4.30%	2	28.60%
Personal Competence	You can achieve your goals	5	3.60%	2	28.60%
Personal Competence	I dont give UP	12	8.60%	2	28.60%
Personal Competence	Prefer to take lead in Problem competence	4	2.90%	1	14.30%
Personal Competence	Not easily disadvantaged by failure	9	6.50%	3	42.90%
Personal Competence	think of self as a strong Person	5	3.60%	2	28.60%
Personal Competence	Strong sense of Purpose	6	4.30%	1	14.30%
Personal Competence	Like Challenges	4	2.90%	3	42.90%
Personal Competence	Work to attain GOALS	2	1.40%	2	28.60%
Acceptance of Change	Can deal with whatever Comes	6	4.30%	4	57.10%
Acceptance of Change	See the humerous side of the thing	6	4.30%	3	42.90%
Acceptance of Change	Things happen for a reason	6	4.30%	3	42.90%
Secure Relationship	Family bond	9	6.50%	3	42.90%
Secure Relationship	bond with Friends	9	6.50%	4	57.10%
Secure Relationship	commitment towards kids	4	2.90%	4	57.10%
Strngthening effect of stress	Past sucess give strength and confidance for new challenges	1	0.70%	1	14.30%
Strngthening effect of stress	coping with stress strengthen	6	4.30%	3	42.90%
Strngthening effect of stress	tend to bounce back after hardships	8	5.80%	4	57.10%
Strngthening effect of stress	Best effort no matter what	3	2.20%	2	28.60%
Strngthening effect of stress	Pride in achievements	7	5.00%	3	42.90%
Control	Know where to turn help	1	0.70%	1	14.30%
Control	Focus and think clearly under stress	4	2.90%	1	14.30%
Control	Can handle unpleasant feeling	6	4.30%	3	42.90%
Control	In control of your life	3	2.20%	1	14.30%
Belief in God	Trust in God helps	7	5.00%	2	28.60%

Table. I

The Table.I shows the frequency of resilience characteristics in study participants. (Analysis Table from QDA miner Software)
 People who successfully battle cancer and live as survivors can teach us many positive lessons. We can't see their spirit and outlook on life anywhere else. It becomes apparent from reading the coded texts that the survival instinct of those resilient women ultimately promotes both their mental and physical health. The key characteristics that need to be discussed regarding their survival and health-related behaviors are their acceptance of their disease condition, control determination to battle against their circumstances, self-efficacy, and attitude to bounce back. Let's examine some resilience characteristics that are linked to survival by supporting health in its broader sense.

Personal Competence

The ability to adapt to change, the aptitude to achieve the goal they set, the attitude of not giving up in front of the cancer, preferring to take their own stand on problems, not easily disadvantaged by the challenges related to the illness and treatment are some of the reasons of their survival. In their self-reported statements, they demonstrate a strong sense of purpose for the life they fought for and won, as well as confidence in their ability to handle challenges and concern about their health care.

Some of the statements are quoting below,

"For human beings, there is nothing in life that we can't conquer. Make a confidence to face anything and avoid complaints"

"The sea of life is ravaged by tornadoes, storms, and waves. The only way I can overcome all this is to become a Pirate"

"It's easy to give advice, it's hard to experience. That is why I am giving you my own life experiences as an example"

"Maybe you must experience a lot of good and bad experiences, the world around you with sympathy. It includes all the family, relatives, and children. Welcome them all with a small smile"

"We have to decide whether we need sympathy or not. It's enough if there is an incredible smile on our face"

"So we must accept the disease condition. Then only our fighting can begin. "

"If cancer is diagnosed, first tell your mind, this is not the end of life"

"I understand cancer germs can only enter my body. He did not even get an entry in any corner of my mind. So, I beat him twice."

These attitudes toward illness and treatment help women to make the right decisions about choosing a healthy lifestyle and maintaining balanced mental health.

Acceptance of change:

Cancer affects the bio-psycho-social system of the person in total. The fear and stigma associated with the illness cause a lot of internal and external emotional stress. In the study, there are instances of women who are separated from their partners and became single parents after being diagnosed. Some mothers are compelled to be away from their children, even their newborns. One young woman shares that she was diagnosed with breast cancer after delivery and became unable to feed her baby. Another resilient woman's story with a specially abled child who became unable to attend to his special needs during her treatments is also included.

If a woman in a family with multiple responsibilities falls ill suddenly, the treatments often drive her out of her hometown and she stays in the hospital for months on end, causing apparent anxiety in her life. As they shared, the treatment was physically draining, causing pain and disfigurement. However, through this learning experience, we witnessed that these women are empowered and fighting to establish peace around them. Resilience pathways differ in each individual case, but they are successful in their battle against the widespread adversity of cancer.

The resilient characteristics could figure out from some of their statements like,

"Do what you have to do, Cancer, and we will do what we have to do"

"When cancer came into my life, I got a lot of enlightenment. The own people in my life left me, and I understood there are people in this world who can love me and care me more than them. I explore more meaning to life. The life I have seen was not the real"

"Don't scare cancer, Instead, cancer should be scared of us and should runaway"

"It's been years since I found out that cancer lived with me. Now I think I will celebrate with him by preparing sweets. "

"I Maintain the proper diet, follow the doctor's directions, that is helping me to avoid spread cancer "

"Cancer cells can only enter my body. He did not even get an entry in any corner of my mind. So, I beat him twice"

RELATIONSHIP

In a challenging situation, the question of what to do to survive is something that may come naturally. From a resilience point of view, the quality of the relationship is a strong factor in determining whether I need to bounce back or not. While considering the research data, we could see that some of the women became single parents during treatment, while others were kept close by their partners and family. In the first case, women spoke of the "turning point effect of cancer" became an adversity for them to consider fighting back when they had that self-efficacy to handle their life on their own. Some of those women battled on their own behalf to protect their children, in which case they thanked the friends and medical professionals who supported them. The marital bond was also evident in a number of cases which gave the strength to be resilient and survive. In their words, it is,

"The person in my life left me, and I understood there are other people in this world to love me more than they are. I explore more meaning in life. The life I have seen was not real"

"I got siblings and loving friends who held me in the time of pain when all my relatives left me among the hardships. Thanks for everything"

"The support and love helped. There is so much more to write. but I can't find the words:

"My husband took care of me like a child."

"I am indebted to him and my mother. Our son is specially abled. He was my biggest worry, but my mother came to take care of him while we were not there for him., that was a great relief"

"I have seen there are men and women who left their partners after cancer diagnosis. In that case, I am blessed, and my husband is a hero. "

"Family can do a lot. Nobody needs sympathy. Instead of that, keep them close, give them the best possible treatment, and be with them with love and support. That is enough to bring them back to life. "

"I'm still fighting and fighting... because I have my two babies, who are like butterflies, in front of me"

STRENGTHENING EFFECT OF STRESS

When stress hits, the resilient one tries to overcome it with the best possible coping mechanisms. It strengthens them gradually. Coping is a critical factor for cancer patients in terms of resilience. Women used more adaptive strategies to face the situation, to bounce back and survive. All these women are exhibiting extraordinary willpower. As someone stated, "Cancer made me strong." Every woman tries to keep the balance of homeostasis by taking the best psychological preparation. They call themselves "fighters and survivors." They are more interested in motivating other cancer patients as they believe their mental strength helps them bounce back to their more self-sufficient, confident self.

"When cancer came back in February 2020, I was not afraid when I found out that many parts of my body were sprained and you only gave me losses through two surgeries, but I never frightened"

"My survival is the effect of confidence, To a certain extent, we are the medicine for this disease. It will be like the courage and will power of our mind to overcome"

"If cancer is diagnosed, first tell your mind, this is not the end of life"

"I've been hit by cancer, and now I'm a cancer SURVIVOR."

"An art I learned during this illness has enabled me to stand on my own two feet today."

"I want to say, we got cancer not because none of us sinned. Even newborn babies are affected by it. Do not break the mental state of the patients due to such superstitions. Also, do not let the fake doctors ruin your health suddenly. It can make your illness worse and cause death"

CONTROL OVER LIFE

The thrive for maintaining quality in their life by minimizing the negative effect of Cancer was highly evident in the data. Getting control of life after a tiring cancer experience is found to be the best characteristic of resilient women. They become capable of handling the unpleasant feelings and know where to turn for the help they need. It's reflected in

"But I never really had an issue with having my breasts removed. To me, it was: "Just get rid of it. I do not want it if it is cancer ridden. I never really looked at it as an object of beauty unlike some people and I suppose that would be more of a problem for people like that"

"A friend of mine told me that she's sick. So, her sister is going to look after her children, as she's going to die. Who will die first? Is he the one who has cancer? I asked her."

"We have to decide whether we need sympathy or not. It's enough to handle them if there is an indelible smile on our faces. But not everyone like that"

DISCUSSION

Resilience helps to promote quality of Life of in Cancer survivor

No matter what kind of adversity we face, what determines our survival is how we react to it. When faced with hardship, misfortune, or frustration, resilience allows us to recover. It allows us to endure, recuperate, and even thrive in the face of adversity, but that's not all it does.

Seek appropriate medical attention on time and neglect false information. Maintaining a stress-free mental state, adhering to proper dietary guidelines, having faith in the medical system, and making every effort to reduce the chances of relapse established the health behaviors in these resilient cancer survivors. Their "perceived well-being relating to mental, physical, and social aspects of health" can be mentioned as "Post traumatic Growth". They are concerned to maintain and assure their quality in their physical and psychosocial levels. Furthermore, the various resilience factors are modifiable. If we understand the area that needs to be modified to increase resilience, we can intervene in the individual psycho-social system.

Individuals' resilience pathways may differ, as may their adversities, in addition to cancer and their support systems. However, to survive cancer, an individual must be prepared with protective measures such as a stress-free lifestyle and a clear mind in order to receive proper medical care.

The content analysis with resilience codes, the study consolidated the resilience outcome of the women survivors. In their self-reported statements, they revealed that to survive cancer and its difficulties, women use the best coping strategies, quality of relationship, trust and believes acted as catalysis. That can be explained through the existing theories.

1. Positive reappraisal- They are reconstructing their adverse experiences and finding benefits from them. While some are learned new skill and livelihood, others are attained more self-efficacy, some others

2. Cognitive Adaptation: Taylor's cognitive adaptation theory believes that people's interpretation of events determines how they react to them. As per the data, most women are not scared of their illness; they accept it as a situation that they can overcome and defeat. Some people consider them warriors and fighters.

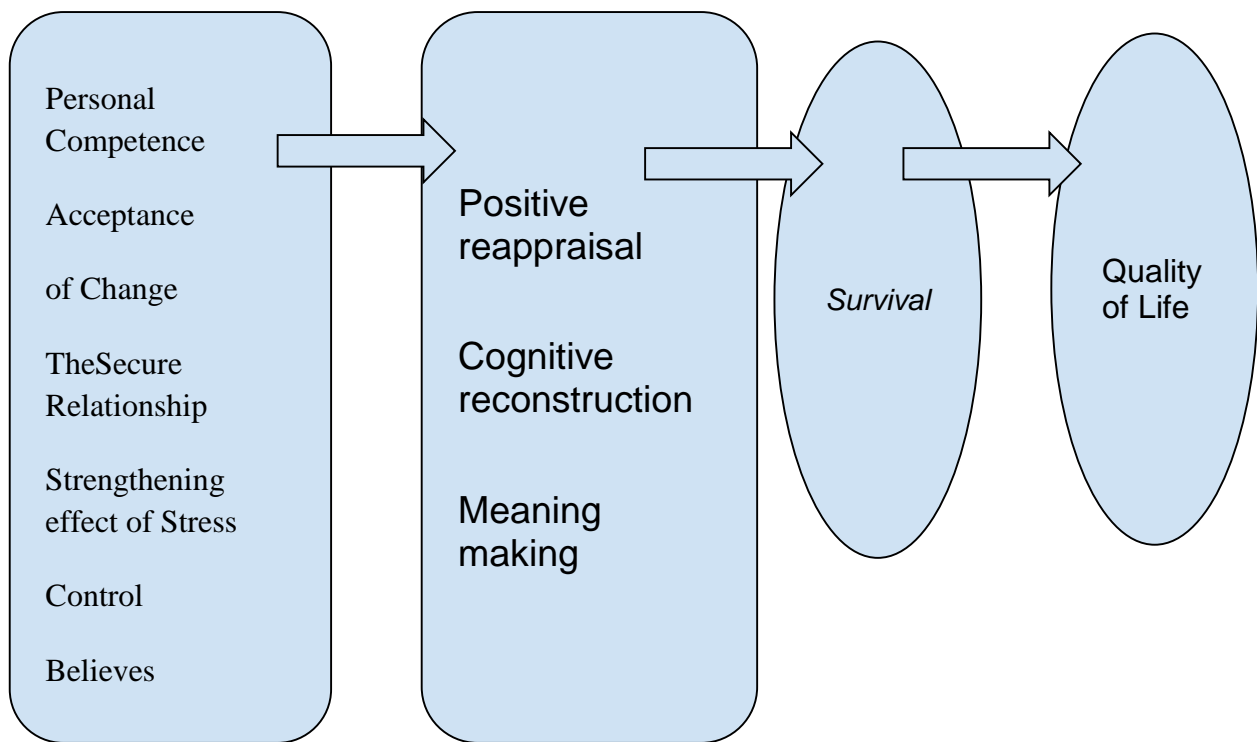
3. Self-developed confidence and finding meaning in one's life: The women wish to call themselves warriors and are keen to inspire others with their lives. They are proud of their battle and won cancer. That is one indicator of finding a new meaning in life.

In this way the psychological resilience facilitates coping strategies and survival with quality of life in people who adjust with cancer.

There are several quantitative studies that support this positive appraisal. Cognitive coping strategies and meaning finding mediate between resiliency and quality of life. (Boehmer S, Luszczynska A, Seiler, A., & Jenewein, J. (2019).

Coping, Survival and Wellbeing pathways in Resilient Cancer survivors. Fig:1

Resilience Characteristic Coping Mechanisms



CONCLUSION:

This study would like to suggest more in-depth case studies among women cancer survivors. The mechanisms of resilience pathways and coping strategies in unique cases must help to plan more effective resilience interventions to enhance quality of life in cancer like distress causing diseases.

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