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Comparative study

Comparative study of depression and resilience among male and female caregivers of cancer patients

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ABSTRACT

Resilience may be defined as the ability to bounce back from tough situations and Depression may be defined as a mood disorder characterized by sadness and feelings of dejection and hopelessness. Caregiver is an individual who provides direct care to a person who is ill. The aim of this research is to compare the level of resilience and depression among male and female caregivers of cancer patients. The sample size for this research is 100 adults, 50 female and 50 male caregivers of cancer patients. The scales used were Beck's Depression Inventory formulated by Aaron Beck in 1961 and Brief Resilience Scale formulated by Smith et al in 2008. The results suggested that there was no significant difference of depression among male and female caregivers of cancer patients, there was a significant difference of resilience among male and female caregivers of cancer patients, and there was a negative relationship between depression and resilience among male and female caregivers of cancer patients.

Keywords: *Resilience, Depression, Caregivers, Cancer, Chronic illness, Caregiver Burden*

Mental illnesses often accompany prolonged physiological conditions, both, for the patient and the caregiver. Chronic diseases do not just develop in individuals, it develops in families too. Caregivers of patients with chronic illnesses are often ignored due to ample focus being placed on the patient itself. It is of prime significance that the well-being of the caregiver is taken into consideration, as they are co-sufferers of the physical sickness of their patient. Cancer and heart ailments are progressively becoming a chronic ailment, which brings substantial number of problems, for the patient and the caregiver. There are several psychological health issues that accompany cancer, one of them being depression. Most often, depression is viewed as a direct consequence in patients; however, the link of depression with patient's caregiver is not taken into consideration.

A primary change brought about by long lasting ailments were an augmented dependence of the patient on the caregiver, thereby increasing the responsibilities on them. Consequently, roles within the family change and they feel that their lives are out of control. The burden of increased responsibilities and changing dynamics may put caregivers at the risk of

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developing psychological disorders. They themselves may require treatment, however, owing to caregiving demands, and lesser importance being placed on mental health, especially in the Indian setting, they may ignore their mental illness.

It is essential to understand depression in this relation, not only for the distress it produces but also because it has an influence on the symptoms experienced and the effectiveness on the overall aspects for rehabilitation or recovery by the caregiver for the patient. Thus, this study aims to study the level of Depression and Resilience among male and female caregivers of cancer patients.

Depression

Depression is a mood disorder described by strong feelings of sorrow, hopelessness and worthlessness. Factors affecting depression could be both biological and psychosocial. Imbalance in certain neurotransmitters in the brain such as serotonin, dopamine and norepinephrine may be a risk factor for the individual to develop depression. Furthermore, family history of mood disorder may pose as a predisposition to develop the disorder. Hormonal changes in women could put them at risk of depression. Further, environmental stressors and life events have an impact on the development of depression. Individuals who face traumatic life events and how they cope with it, owing to their personality factors is an important marker for depression.

Resilience

Another important factor of research is Resilience. It is described by the American Psychological Association as "the process of adapting well in the face of adversity, trauma, tragedy, threats and even significant sources of stress, such as family and relationship problems, serious health problems, or workplace and financial stressors". There are certain factors that project resilient responses when faced with hardships that also act as foundations of resilience in adulthood and later life *(Ryff et al, 2002)*. They are self-acceptance, purpose in life, personal growth, autonomy, environmental mastery and positive relations with others. An important element of resilience is Post-Traumatic Growth. At first, traumatic experiences can be frightening, and pose a great challenge to the individual. However, over time, individuals may learn new things about their capabilities and this can be an opportunity for personal growth. The individual may go through changes in perception, changes in relationships and changes in life priorities *(Ryff & Singer, 2003)*.

Caregivers

Caregivers are individuals who look after people with illnesses. They provide direct care to the ill person. There are various factors that could affect the well-being of the caregivers, such as the fear of the disease and its spread – The nature of unpredictability of the disease may lead to the caregiver feeling helpless and anxious of the possible future outcomes. Secondly, assisting the patient – By focusing on the emotional and physical needs of the patient, the caregiver may ignore their own well-being. The emotional needs of other family members other than the patient may also cause challenges for the primary caregiver. Finally, family routine and daily living – There are several disruptions in the daily living of caregivers and family routine. There are new responsibilities that family members undertake for a smooth functioning of the house. This may lead to disturbances in the well-being of the caregiver.

REVIEW OF LITERATURE

Depression

A study explained the concept of unmet needs of caregivers and the growing need for their assessment *(Sklenarova MA, 2015*). Caregivers experience immense amount of stress, which could be termed as caregiver burden. Several studies show the ill effects of caregivers.

A study to understand the weight of caregiving among family members of old cancer patients *(Lkhoyaali, S. et al, 2015)* identified the emotional influence of cancer on the family caregivers and the results indicated that 62.7% of participants reported at least one symptom of depression and 22.7% were found to have depression according to DSM – IV.

A clinical review on caregiver burden *(Adelman RD, 2014)* assessed identified the risk factors for caregivers as low mood, depression and social isolation among others.

Research 'Gender differences in depression' *(Karger, 2014)* implies that usually females are diagnosed with depression twice as often as males and the course is chronic in nature. A study on caregivers of critically ill cancer patients and their psychological symptoms of anxiety and depression (*Oechsle et al, 2013*) analyzed the physical plus psychological burdens, which found moderate to severe depression among 36% male caregivers and 14% female caregivers.

Caregivers of cancer patients have more needs that are not met than the patient itself. Therefore, who report greater unmet needs are also the ones reporting caregiver distress and depression *(Soothill et al, 2001)*. The research indicated that 26.5% of caregivers screened positive for depression.

A study established that borderline or clinical depression was reported by 17% of caregivers, and maximum reported anxiety at month 6 and month 12 after patient diagnosis *(Lambert et al, 2012).*

A study on quality of life, requirements and factors of anxiety and depression of caregivers (*Friðriksdóttir et al, 2011*) used the Hospital Anxiety and Depression Scale (HADS), which indicated a positive connection between cancer caregivers and symptoms of depression. The occurrence of symptoms was found out to be as high as 41%. Furthermore, it was observed that caregivers who experienced symptoms of anxiety and depression reported poor quality life than those who reported no such symptoms.

The study on Chinese caregivers and aspects of their depressive symptoms (*Yang Xiaoshi, 2011*), suggested that the occurrence of depressive symptoms in caregivers was 63.5%. The probable cause of a high rate of depressive symptoms could also be attributed to the collectivist nature of the country. Just as India, or any other Asian country, China is a collectivist country, which values familial structures and may therefore be attached to their families. Being a caregiver to a family member thus may lead to greater burdens and higher rate of depressive symptoms.

Another study on the comparison between caregivers of heart failure who presented depressive symptoms and those who did not (*Misook, 2010*). Symptoms of depression were associated with caregiving distress, perceived control and functional status. 27.5% caregivers with depressed symptoms had lower perceived control, poor functional status and

higher perceived caregiving distress. Such individuals invested more time in tasks that involved caregiving than those individuals who did not present symptoms of depression.
Research on lung cancer patients and their caregivers focusing on the effect on the environment and their depressive symptoms (*Siminoff A., 2010*) indicated that caregivers who blamed patients for their illness had a higher rate of depressive symptoms. Furthermore, it was observed that a weak family cohesion and expressiveness coupled with higher instances of conflict remained linked with advanced intensity of depression amongst caregivers.

In a research focused on women with ovarian cancer and their caregivers based on the occurrence and forecasters of depression and anxiety *(Price A Melanie, 2010*) aimed to match or differentiate the intensity of depression with community norms. This indicated a higher level of depression (21.1%) compared with norms. The significant predictor of depression in caregivers was lower social support and optimism.

Physiological and Psychological Health Effects of Family Caregiving *(Schulz et al, 2008)* indicated that psychological distress such as experiencing depression is more intensive than physical effects of caregiving. Individuals who lower economic status, and a restricted social support have poorer psychological health. Despite the psychological impacts of caregiving and meeting the diagnostic standards for a mental illness, caregivers do not take psychiatric help (*Vanderwerker, 2005*).

Caregivers of cancer patients at the last stage of life go through a different worry and depressive features *(Given B, 2004).* One such research indicated that caregivers between the age of 45 to 54 testified for the highest level of depression. Furthermore, for caregivers whose patients passed away soon after their diagnosis had high levels of depression and a negative psychological impact.

Resilience

A study was conducted to identify if there existed an association between the burden caregivers experience and their resilience *(Senturk et al, 2018).* The results indicated that there was a strong negative relationship between caregiver burden and resilience. As the scores for psychological resilience increased for caregivers, it was found that their burden was significantly reduced.

Research to grasp the gender difference of levels of resilience among soldiers indicates that men have higher levels of resilience than women *(Portnoy et al, 2018).*

"Factors of Resilience in Informal Caregivers of People with Dementia from Integrative Data Analysis" *(Joling, K.J. et al, 2016)* identified that there was a negative relationship between care burden and resilience. Thus, with high caregiver burden, resilience was low. Furthermore, high resilience was less prevalent in cases where behavioural and mood problems were reported. A study to understand resilience and psychological consequences of being a caregiver to a child with cancer (*Rosenberg R. Abby, 2013*) indicated that parents who had poorer resources of resilience had greater mental pain when compared to population standards. Lower resilience was linked to greater suffering, and poorer societal backing along with poorer family function. Another study by described that caregivers of chronic Lung Disease had incidence of resilience (*Rosa et al, 2016*).

The idea of resilience in caregivers of children with long-lasting illnesses found out that resilience allows caregivers to attain stability, personal strength and focus on their child's illness *(Lin et al, 2013)*. Furthermore, resilient caregivers are active in gathering knowledge and creating a healthy social network and maintain balanced relationships.

A research on resilience and it's association with depression and emotional problems *(Ziaian et al, 2012)* indicated that higher levels of resilience acted as a protector against future onset of mental health problems. Further suggesting that there was a negative relationship between resilience and emotional/behavioural problems such as negative mood, emotional and conduct problems etc. The study to understand if resilience has a buffering effect on depression *(Catalano, 2011)* indicated an inverse association of resilience characteristics with depressive symptoms. Further the protective factors of resilience "buffer" how an individual perceives stress on depressive symptoms.

Research on the association of resilience and different psychological disorders (*Hjemdal et al, 2010)* took into focus both protective factors such as resilience and risk factors such as depression and anxiety. The study suggested that the high levels of resilience projected low levels of psychiatric symptoms like depression, anxiety and obsessive – compulsive symptoms.

A study on regulating consequences of resilience on depression *(Wingo et al, 2010)* led to the conclusion that resilience regulates the severity of depressive symptoms. Resilience comprises of protective factors such as skills, resources and competencies required to deal with the traumatic experience *(Charney, 2004)*. Thus, it tends to act as a safeguard between the traumatic experience and depression or risk factors *(Luthar & Cicchetti, 2000).*

MATERIALS AND METHODS

Aim

To study the level of depression and resilience among male and female caregivers of cancer patients.

Objectives

1. To study the difference in levels of depression among male and female caregivers of cancer patients.
2. To study the difference in levels of resilience among male and female caregivers of cancer patients.
3. To study the association between depression and resilience among male and female caregivers of cancer patients.

Hypothesis

1. There will be a significant difference of depression among male and female caregivers of cancer patients.
2. There will be a significant difference of resilience among male and female caregivers of cancer patients.
3. There will be a significant relationship between depression and resilience and depression among male and female caregivers of cancer patients.

Sample

The researcher selected cancer caregivers who further circulated the questionnaire to other caregivers. The inclusion criterion of the research consists of adults who are caregivers to cancer patients from the age group of 20-50. The exclusion criterion consists of adults who are caregivers to any other physiological or mental condition and/or they themselves have a psychiatric condition. The study researched 100 caregivers of cancer patients (50 males, 50 females). The study was conducted at Artemis Hospital, Gurgaon. The centre is equipped with treatment modalities to treat cancer patients and thus has caregivers present.

Tools Used

Beck's Depression Inventory (BDI) - formulated by Aaron Beck in 1961. The 21-item, self-report rating inventory measures typical indicators of depression (Beck et al, 1961). The responses are on a scale of 0-3. It takes about 10 minutes to complete the test. Totaling the responses of all the 21 items does the scoring. The lowest score on the test is 0 and the uppermost score is 63. Result between 0-10 may be understood as ups and downs interpreted as normal, 11-16 as slight mood disruptions, 17-20 as borderline clinical depression, 21-30 as moderate depression, 31-40 as severe depression and over 40 as extreme depression. The internal consistency of the test ranges from .73 to .92 with a mean of .86.

Brief Resilience Scale (BRS) - formulated by Smith, B.W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J in 2008 is used. The scale assesses the ability of an individual to recover or bounce back from the stressors faced in his/her life. The scale consists of 6 items on a 5-point scale, ranging from strongly disagree to strongly agree. Items 2, 4 ad 6 are reversed scored. The scoring is done by adding the value of all the six items and dividing the sum by 6. Score between 1-2.99 is interpreted as low resilience, 3-4.30 as normal resilience and 4.31-5.0 as high resilience. Internal consistency of the test ranges from .80 to .91.

The statistical methods used in the research were Independent t-test and Pearson r correlation test on SPSS.

Variables

Independent Variable

Depression - Depression is a serious medical condition in which a person feels very sad, hopeless, and unimportant and often is unable to live in a normal way *(Merriam-Webster, 2015).*

Dependent Variable

Resilience - The process of adapting well in the face of adversity, trauma, tragedy, threats and even significant sources of stress, such as family and relationship problems, serious health problems, or workplace and financial stressors *(American Psychological Association,2020*).

Procedure

After the identification of the topic and criteria for sample selection, different hospitals were contacted. The researcher connected with a psycho-oncologist and an oncologist at Artemis Hospital, Gurgaon. The participants included male and female caregivers of cancer patients in the OPD and IPD of Artemis Hospital, Gurgaon. Consent to conduct the research was undertaken after which the participants were debriefed about the resilience and depression scale. Identity of all participants was anonymous. The scales were completed within 15 minutes. The participants and supporting doctors were thanked for their cooperation. A few

Google Forms were also circulated on cancer support groups to reach a wider base of caregivers of cancer patients. The researcher duly followed APA guidelines and took informed consent from all the participants of the study.

Since the subject matter of this research is sensitive and involves the measurement of emotional capacities of the caregivers of cancer patients, special care is being taken in order to make the participants comfortable as well as keep the study as ethical as possible. Informed consent will be taken from the participants. Thus, there will be no forceful participation. Apart from this, the scale will be administered through an anonymous online form, keeping the identity of each respondent hidden. Hence, the researchers will not be aware of which participant corresponds to which set of responses. Even for face-to-face administration of the scale, the identity of the participant remains hidden. Finally, all data gathered will be entirely confidential and will be used solely for the purpose of this study.

RESULTS AND DISCUSSION

Table 1 Mean, SD and t-test score for depression among male and female caregivers of cancer patients

Variables	Gender	N	Mean	SD	t-test
Depression	Male	50	14.28	8.96	.770
	Female	50	14.78	8.09	

Table 1 represents the mean, SD and t-test scores for depression among male and female caregivers of cancer caregivers. The mean that was observed for males was 14.28 and for females was 14.78 with a standard deviation of 8.96 and 8.09 respectively. There was no significant difference between the mean levels of depression among male and female caregivers at $p > 0.05$ (.770). Hypothesis 1 states that there will be a significant difference of depression among male and female caregivers of cancer patients. The results indicated that there was no significant difference of depression among male and female caregivers of cancer patients. The level of depression for males and females was almost equal, with a difference of just 0.5 in the mean score. Research suggests otherwise, in which, women report high levels of depression than males *(Albert, P.R, 2015)*. As few researches suggest that women tend to have higher levels of depression than men, in the present study, women may have felt a bias and not responded accurately. Furthermore, due to the anonymous nature of the research, men must have felt comfortable in giving true responses. Therefore, the difference in levels of depression may have narrowed down. Moreover, there could be a negative relationship between depression and resilience since opposite dimensions could not increase or decrease together.

Table 2 Mean, SD and t-test score for resilience among male and female caregivers of cancer patients.

Variables	Gender	N	Mean	SD	t-test
Resilience	Male	50	3.01	.609	2.004
	Female	50	2.75	.660	

Table 2 represents the mean, SD and t-test scores for resilience among male and female caregivers of cancer caregivers. The mean that was observed for males was 3.01 and for females was 2.75 with a standard deviation of .609 and .660 respectively. There was no significant difference between the mean levels of resilience among male and female caregivers at $p > 0.05$ (2.004). Hypothesis 2 states that there will be a significant difference

of resilience among male and female caregivers of cancer patients. Results indicate that there is no significant difference of resilience among male and female caregivers of cancer patients. It also indicates that the mean level of resilience for males was slightly higher than that of females. Research on gender differences in levels of resilience indicate that men have superior levels of resilience than women *(Portnoy et al, 2018).* There could be social reasons attached to this. Historically, men have been treated to be the stronger and tougher gender, therefore, they tend to portray more resilience than females and lesser levels of depression.

Table 3 Correlation between resilience and depression among male and female caregivers of cancer patients

Variables	Resilience	Depression
Resilience	1	-.390**
Depression	-.390**	1

**p < 0.01

Table 3 represents the relationship between both the variables, resilience and depression. The above table signifies that there is an inverse correlation between the two variables (r = -.390) at p = 0.01 Therefore, when an individual may have higher levels of depression, he/she may have low resilience, or, when the individual has high levels of resilience, he/she may have low levels of depression. The hypothesis 3 states that there will be a significant relationship between depression and resilience among male and female caregivers of cancer patients. The finding suggests that there is a negative relationship between depression and resilience. The statistical results indicated that the level of correlation was -.390. Thus, when the levels of depression increased in participants, their level of resilience decreased. Similarly, when the levels of resilience were found to be high, their level of depression was low. It may be understood that resilience acts as a protecting element for depressive symptoms *(Goldstein et al, 2013)*. Resilience comprises several shielding elements such as resources and skills that are further enhanced with social support *(Charney, 2004)*. This could be the possible reason for the inversely proportional relationship between the two scale variables of depression and resilience.

CONCLUSION

The aim of the research was to compare the level of depression and resilience among caregivers of cancer patient. It was observed that there was no significant difference of depression among male and female caregivers of cancer patients; there was no significant difference of resilience among male and female caregivers of cancer patients; and that there was a negative relationship between depression and resilience.

Research in the area suggests that females report higher levels of depression than males. Furthermore, studies based on gender differences in resilience report that males have higher levels than females. Thus, they may be able to tackle difficult situations in a much better manner. Finally, several researches report that resilience is a protecting factor against depression, therefore, the two are negatively associated. Resilience comprises of shielding elements against depression.

Patients with chronic illness and their caregivers go through severe psychological plight. Therefore, it becomes essential to understand the mental health of caregivers as much as it is for the patient.

The present research has scope for further research. It can extend to caregivers of other patients. Other attributes, such as post-traumatic growth, anxiety, caregiver's burden etc. that influence caregivers can be studied. Therapeutic measures can be identified for the field of psycho-oncology, and health psychology.

Furthermore, a larger sample can help in generalization of results.

REFERENCES

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.

Beck, A. T. (1967). *Depression: Causes and treatment*. Philadelphia: University of Pennsylvania Press.

Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: critique and reformulation. *Journal of abnormal psychology, 87(1)*, 49.

Ryff, C. D., & Singer, B. (2002). From social structure to biology: Integrative science in the pursuit of human health and well-being. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of Positive Psychology* (pp. 541-555). New York: Oxford University Press.

Ryff, C. D., & Singer, B. (2003). Flourishing under fire: Resilience as a prototype of challenged thriving. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 15-36). Washington, DC: American Psychological Association.

Nanna Friðriksdóttir, Þórunn Sævarsdóttir, Svandís Íris Halfdánardóttir, Arndís Jónsdóttir, Hrefna Magnúsdóttir, Kristín Lára Ólafsdóttir, Guðbjörg Guðmundsdóttir & Sigríður Gunnarsdóttir (2011) Family members of cancer patients: Needs, quality of life and symptoms of anxiety and depression, Acta Oncologica, 50:2, 252-258, DOI: 10.3109/0284186X.2010.529821

Siminoff, L. A., Wilson-Genderson, M., & Baker, S. (2010, November 25). Depressive symptoms in lung cancer patients and their family caregivers and the influence of family environment. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1002/pon.1696.

Karin Oechsle, Kathrin Goerth, Carsten Bokemeyer, and Anja Mehnert.Journal of Palliative Medicine.Sep 2013.ahead of print http://doi.org/10.1089/jpm.2013.0038

Adelman RD, Tmanova LL, Delgado D, Dion S, Lachs MS. Caregiver Burden: A Clinical Review. *JAMA*. 2014;311(10):1052–1060. doi:10.1001/jama.2014.304

LC Vanderwerker, RE Laff, NS Kadan-Lottick , etal: Psychiatric disorders and mental health service use among caregivers of advanced cancer patients J Clin Oncol 23: 6899– 6907,2005

S Lambert, A Girgis, C Lecathelinais , et al: Walking a mile in their shoes: Anxiety and depression among caregivers of cancer survivors at six and 12 months post-diagnosis Support Care Cancer [epub ahead of print on June 3, 2012]

H., Krümpelmann, A., Haun, M. W., Friederich, H. C., Huber, J., Thomas, M., … Hartmann, M. (2015, February 11). When do we need to care about the caregiver? Supportive care needs, anxiety, and depression among informal caregivers of patients with cancer and cancer survivors. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1002/cncr.29223#.

Yang, X., Wang, L., Ge, C., Chang, Y., Fu, J., Wei, J., … Zhou, Y. (2011, June 21). Factors related to depressive symptoms among Chinese caregivers of cancer patients. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1002/pon.1999

Butow, P. N., Costa, D. S. J., King, M. T., Aldridge, L. J., Fardell, J. E., DeFazio, A., & Webb, P. M. (2010, September 6). Prevalence and predictors of anxiety and depression in women with invasive ovarian cancer and their caregivers. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.5694/j.1326-5377.2010.tb03929.x.

Chung et al, Predictors of Depressive Symptoms in Caregivers of Patients with Heart Failure. (2010). *Journal of Cardiovascular Nursing*. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2924771/

Chung et al, The effects of depressive symptoms and anxiety on quality of life in patients with heart failure and their spouses: Testing dyadic dynamics using Actor–Partner Interdependence Model. (2009). *Journal of Psychosomatic Research*, *67*(1). Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S0022399909000130

Family Caregiver Outcomes in Heart Failure. (2009). *American Journal of Critical Care*, *18*(2). Retrieved from http://ajcc.aacnjournals.org/content/18/2/149.short

Resilience and psychosocial outcomes in parents of children with cancer. (2013). *Paediatric Blood and Cancer*, *61*(3). Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1002/pbc.24854

Soothill K, Morris SM, Harman JC, Francis B, Thomas C, McIllmurray MB. (2001). Informal carers of cancer patients: What are their unmet psychosocial needs? Healthy and Social Care in the Community 9(6): 464–475.

Rosa et al, Resilience as a concept for understanding family caregiving of adults with Chronic Obstructive Pulmonary Disease (COPD): an integrative review. (2011). *Nursing Open.* Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5340167/

Charney, D. S. (2004). Psychobiological mechanisms of resilience and vulnerability: Implications for successful adaptation to extreme stress. The American Journal of Psychiatry, 2, 368–391. Doi: 10.1176/appi.ajp.161.2.195

Luthar, S. S., Cicchetti, D. C., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. Child Development, 71, 543-562. doi:10.1111/1467-8624.00164

Lkhoyaali, S., Haj, M.A.E., Omrani, F.E. *et al.* The burden among family caregivers of elderly cancer patients: prospective study in a Moroccan population. *BMC Res Notes* 8**,** 347 (2015). https://doi.org/10.1186/s13104-015-1307-5

Catalano, D., Chan, F., Wilson, L., Chiu, C.-Y., & Muller, V. R. (2011). The buffering effect of resilience on depression among individuals with spinal cord injury: A structural equation model. *Rehabilitation Psychology, 56*(3), 200–211. https://doi.org/10.1037/a0024571

Moderating effects of resilience on depression in individuals with a history of childhood abuse or trauma exposure. (n.d.). *HHS Public Access*. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3606050/

Hjemdal, O., Vogel, P. A., Solem, S., Hagen, K., & Stiles, T. C. (2010). The relationship between resilience and levels of anxiety, depression, and obsessive-compulsive symptoms in adolescents. *Clinical Psychology & Psychotherapy*, *18*(4), 314–321. doi: 10.1002/cpp.719

Behavioral Cancer Research Information. (n.d.). Retrieved from https://www.cancer.org/research/we-conduct-cancer-research/behavioral-research-center/family-caregivers-research.html

Factors of Resilience in Informal Caregivers of People with Dementia from Integrative International Data Analysis. (2016). *Dementia and Geriatric Cognitive Disorders*. Retrieved from https://www.karger.com/Article/FullText/449131#top

The Relationship between Caregiver Burden and Psychological Resilience in Caregivers of Individuals with Dementia. (2018). *International Journal of Caring Sciences*, *11*(2).

Schulz, R., & Sherwood, P. R. (2008). Physical and Mental Health Effects of Family Caregiving. *AJN, American Journal of Nursing*, *108*(Supplement), 23–27. doi: 10.1097/01.naj.0000336406.45248.4c

Given, B., Wyatt, G., Given, C., Sherwood, P., Gift, A., Devoss, D., & Rahbar, M. (2004). Burden and Depression Among Caregivers of Patients with Cancer at the End of Life. *Oncology Nursing Forum*, *31*(6), 1105–1117. doi: 10.1188/04.onf.1105-1117

Ziaian, T., Anstiss, H. D., Antoniou, G., Baghurst, P., & Sawyer, M. (2012). Resilience and Its Association with Depression, Emotional and Behavioural Problems, and Mental Health Service Utilisation among Refugee Adolescents Living in South Australia. *International Journal of Population Research*, *2012*, 1–9. doi: 10.1155/2012/485956

Portnoy, G. A., Relyea, M. R., Decker, S., Shamaskin-Garroway, A., Driscoll, M., Brandt, C. A., & Haskell, S. G. (2018). Understanding Gender Differences in Resilience Among Veterans: Trauma History and Social Ecology. *Journal of Traumatic Stress*, *31*(6), 845–855. doi: 10.1002/jts.22341

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Conflict of Interest

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