Compassion Fatigue and Adopted Coping Strategies of Mental Health Service Providers Working In A Regional Psychiatric Hospital In Nigeria

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ABSTRACT:

Background: Mental health service providers sometimes suffer burden resulting from their care of mentally ill individuals, and this burden could be modulated by the coping mechanisms they adopt.

Objective: This study aimed to investigate the relationships between gender, coping strategy and compassion fatigue of mental health service providers in a mental health facility in Nigeria

Method: This was a cross-sectional study which recruited 234 mental health service providers working in a mental health facility in Nigeria, and they completed questionnaires (the Coping Strategy Inventory modified by Addison, Campbell-Jenkins & Sarpong and the Compassion Fatigue subscale of the Professional Quality of Life developed by Stamms.

Results: majority of the mental health service providers surveyed were at risk of compassion fatigue (75.2%), gender did not significantly impact on compassion fatigue (t =-0.111; p>0.05), and coping strategies jointly predicted compassion fatigue (F = 11.927; p<0.05; r=0.417). However, when analyzed separately, only the subgroup of emotional focused engagement coping and emotional focused disengagement coping strategies independently predicted compassion fatigue, (β =0.246, t= 3.3.511, p<0.05) and (β =0.226, t= 3.698, p<0.05) respectively.

Conclusion; Mental health service providers have high risk of compassion fatigue and the emotional based coping strategies are associated with this. Measures are suggested to mitigate compassion fatigue among this professionals, to reduce the effect on them and their patients.

Introduction

Offering help or being involved in the care of traumatized patients usually places health professionals at risk of developing psychological problems, which could be related to their helping profession (Figley, 1995)[14]. When exposed, these professionals are not immune to psychological harms, but are just as likely to develop psychological complications. A body of literature reveals that frontline mental health service providers (such as psychiatrists, psychiatric nurses, psychiatrist trainees, clinical psychologists, and clinical social workers) occasionally feel burdened from the efforts they put into helping their patients, (Figley, 1995, Huggard & Dixon, 2011, Yoder, 2008).[14,21,22]

This burden primarily arises from their care of traumatized individuals and may be symptomatically expressed as feelings of depression, fatigue, worthless-ness, disillusionment and emotional exhaustion (Figley, 1995; Stamm, 2010). [14, 34]; These problems can be detrimental to the health of these professionals by reducing their ability to sustain focus, increasing self-doubt and incompetence, a gradual lessening of compassion over time and eventually leading to a decrease in productivity (Adams, Boscarino, & Figley, 2006)1. These range of symptoms in these health professionals have been sometimes referred to as Compassion Fatigue. Compassion fatigue is a syndrome consisting of depletion in carers' emotional, physical and spiritual states and is in association with their role of taking care of patients in considerable physical and emotional pain (Anewalt, 2009; Figley, 1995). [4, 14]

Compassion fatigue is two-tiered into Burnout and Secondary traumatic stress. Burnout is a condition of unhappiness or a sense of disconnection from work because the professional helpers feels bogged down, overwhelmed or overloaded about working conditions. Similarly, Secondary traumatic stress is described as psychological duress which arises in health professional as a result of their exposure to the firsthand experiences of trauma by the patient, and can be characterized by symptoms similar to that of PTSD such as fear, sleep difficulties, intrusive images or avoiding reminders of the traumatic experience, (Stamm, 2010). 34

Compassion fatigue is an occupational hazard which has been found to affect about 50% of physicians and one-third of other cancer care professionals, (Grunfeld, 2000). 17Estimate ranges between 16 and 85% for health care workers in various fields, (Hooper, Craig, Janvrin, Wetsel, & Riemels, 2010) 20

Some studies have suggested that 50% of health professionals may be considered to be at high risk of compassion fatigue (Injeyan, Shuman, Shugar, Chitayat, Atenafu, & Kaiser, 2011); Wee & Myers, 2002). Kabunga, Japheth, Disiye, Mwirotsi & Shikanga (2015) [22, 23, 41]in their study of 61 professional therapist in Kenya observed that 70% of professional therapists presented with compassion fatigue and that professional therapist with high levels of compassion fatigue had almost four times increased risk of having their performances affected compared to their counterpart with average composition fatigue. Worldwide, there is an increasing trend of natural and man-made violence and so mental health service providers are at increasing risk of developing compassion fatigue.

Several factors have been found to accompany the development of compassion fatigue amongst mental health professionals. These include poor training, history of personal trauma, identification with the patients, lack of workplace/social/family support, previous negative coping skills (such as bottling up or avoiding emotions)

and overly conscientious, perfectionistic, and self-giving individuals. Another factor identified to modulate compassion fatigue in health professionals is the coping strategies employed by the professional helpers. Coping strategy is a process, either internal or external, of responding to a stressor. It comprises of the disbursement of conscious effort in the resolution of personal and interpersonal problems, and involves an attempt to minimize, master or tolerate conflict or stress.(Weiten & Lloyd 2008, Snyder 1999, Zeiden & Endler 1996). [44, 41, 36]

In other words, it is a process of adopting a strategy in executing a response to a perceived threat, (Lazarus, 1996). Folkman & Lazarus (1985)[15,25] distinguished between problem-focus coping strategy and emotion-focus coping strategy. While the former employs a problem-solving strategy or doing something to change the stressor, the latter is aimed at reducing the emotional distress related to the stressor. Problem-focus coping reduces stress more than emotion-focus coping (Endler, 1997) 13because people using problem-focused strategies try to deal with the cause of their problem or eliminate the source of their stress either by obtaining information or obtaining better skills to manage the problem.

Emotion-focused coping strategies involve an attempt at alleviating distress by reducing, minimizing, or preventing, the emotional components of a stressor (Carver, 2011).6   Folkman and Lazarus (1988)16 identified five emotion-focused coping strategies namely escape-avoidance, disclaiming, exercising self-control, accepting responsibility or blame, and positive reappraisal.

Coping strategy can also be divided into Engagement (approach) strategy which is targeted at

reducing stress by confronting it, -which has been found to work better for long-term physiological or psychological presentations of stressors- and Disengagement (avoidance) strategy which is employed in order to limit exposure to the stressors -which has also been found to be effective as a short-term coping strategy- (Levine, Warrenburg, Kern & Scharwtz, 1987, Suls & Fletcher, 1985) [35, 28]. Engagement-Disengagement focus of coping involves getting involved to find solutions to a stressor or creating a distance between self and the stressor, (Connor-Smith & Flachsbart, 2007).7 So, there can be engagement problem-focused coping; engagement emotion focused coping; disengagement problem focused coping; disengagement emotion focused coping. The study of Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth (2001)8 revealed that engagement problem-focused strategies work better.

There has been mixed results in studies that have explored the relationship between gender and compassion fatigue. Stamm (2010) 34reported that no significant relationship existed between gender and compassion fatigue, while Kearney, Weininger, Vachon, Harrison, & Mount (2011) 24reported female gender to have a higher risk of compassion fatigue. Some studies have also reported differences in gender utilization of coping mechanisms though these differences were not significant.

There has been a recent upsurge in violent crimes such as terrorism, and kidnapping in Nigeria. There is a dearth of mental health service providers required to take care of the expected increase in psychological problems in the populace. Nigeria has a ratio of 4 psychiatric nurses per 100,000 patients, 0.09 psychiatrists to 100,000 patients, and 0.02 psychologists and social welfare officers to 100, 000 patients,

(Ayorinde, Gureje, & Lawal, 2004); Jacob, Sharan, Mirza, Garrido-Cumbrera, Seedat, Mari, Sreenivas, & Saxena, 2007).[3,18] This could result in increased compassion fatigue among the available mental health service providers and could subsequently lead to a reduction in their desire to help mentally ill individuals. It is desirable to ascertain the experiences of compassion fatigue amongst mental health service providers, the coping strategies adopted by these professionals, as well as the relationship between the two. The results of this would provide a template for the development of preventive as well as curative programmes to curtail the effects of compassion fatigue on these set of profession-als so that they, and by extension, their patients would enjoy better psychological health.

Methods:

This study adopted the definition of coping strategy similar to that of (Lazarus & Folkman, 1984) Lazarus, 1999); and (Terry, 1994) [27,26,38] which described coping as a cognitive behavioral strategy to deal with stressor. We aimed to ascertain the relation-ship between compassion fatigue and coping strategies of mental health service providers in a mental health facility in Nigeria, and also to seek out the influence of gender on compassion fatigue. We attempted to answer the following research questions;

What is the relationship between compassion fatigue and the various coping strategies developed by these professionals?

What is the influence (if any) of gender on the compassion fatigue experienced by mental health professionals at the study site?

Setting

The participants were drawn from the Federal Neuropsychiatry Hospital, Benin City, Edo State Nigeria. It is one of the eight stand-alone tertiary psychiatry facilities that Nigeria has with provision of psychiatric services to people of Niger Delta region covering 5 states and with an estimated population of about 21 million people.

Design

The study design was cross-sectional with compassion fatigue considered as the dependent variable while coping strategies and gender were the Independent variables.

Ethical Considerations

The ethical approval was sought and obtained from the Research and Ethics Committee of the FNPH, Benin-City. All study participants were provided with informed consent form as approved by the ethical review committee. Only those who gave a written consent to the research and met the inclusion criteria were recruited into the study.

Study Population

Mental health service providers from Federal Neuropsychiatry Hospital, Uselu, Benin- City who had spent at least six months working in the hospitals were recruited for the study. These included clinical psychologists, medical doctors (psychiatrists and trainee psychiatrists), nurses, occupational therapists, and social workers who had served or as the time of conducting the study, were serving in at least one of the units of the hospital which are Emergency and Assessment Unit (E and A), Forensic and Geriatric Unit, Child and Adolescent Unit and Drug Unit.

Sampling

The study was a whole population study and all the mental health service providers in the hospital who met the research criteria, and consented to participate, was enrolled for the study.

Inclusion/Exclusion Criteria

Mental health service providers working at the Federal Neuropsychiatric Hospital, Uselu, Benin-City for up to six months, and who consented were included in the study. The study excluded mental health service providers working in the hospital who declined to consent and those who were on leave or who were on special training as at the time of data collection.

Instruments

The study made use of a questionnaire divided into three sections:

Section A:

is a semi structured socio- demographic/some work experiences questionnaire. It seeks to elicit variables such as the gender of the participants, age, years of experience, occupation, unit in the hospital, etc.

Section B:

Coping Strategy Inventory: it was originally constructed as a 72 item questionnaire, designed to measure coping strategies from a cognitive behavioral approach but it was shortened by Addison, Campbell-Jenkins & Sarpong (2007)2 to a 15-item questionnaire. This shortened version still retained the original construct of the questionnaire with four item subscale of (a) Problem–Focused Engagement, (b) Problem-Focused Disengagement, (c) Emotion-Focused Engagement, and (d) Emotion-Focused Disengagement, (Tobin, Holroyd,

Reynolds, & Wigul, 1989). 39Respondents are expected to give their answers according to the frequency to which each of the items describe them either Never, Seldom, Often, Sometimes, or Almost always. Problem-focus Engagement is scored by adding coded responses on 5, 6 and 11; Problem-focus Disengagement is scored by adding the coded scores of 1, 2, 8 and 9. Emotion-focus Engagement is scored by adding the coded responses of items 4, 7, 12, and 14 while Emotion-Focus Disengagement is scored by adding up the coded responses of figures 3, 10 and 15. The Cronbach alpha for this study was .746

Professional Quality of Life ProQOL (version 3) is a 30 item pencil and paper questionnaire developed by Stamm (2005). 33It consists of subscales that measure secondary traumatic stress, burnout and compassion satisfaction. Compassion fatigue consists of the subscales of secondary traumatic stress and burnout. There are 10 questions for each subscales scored on a 6 point Likert scale with response options of 'never', 'rarely', 'a few times', 'somewhat often', 'often', and 'very often'. The scales have always had strong internal reliability which improves the chance that comparing across versions will be acceptable. This is particularly true of the Compassion Fatigue scale which has always had an alpha reliability between .84 and .90. (Stamm, 2005).33 High scores indicate that the participant may be at risk from the effects of compassion fatigue. The present study utilized only the subscales that make up the compassion fatigue section of this instrument.

Data Analysis

The researchers made use of Statistical Package for Social Science version 17 (SPSS 17) to analyze the data. Multiple Regression Analysis was employed to identify the level of significance of the relationship

between coping strategies and compassion fatigue; influence of gender on compassion fatigue was tested with Independent t-test and chi-square was used to tabulate the mental health service providers who are at risk of compassion fatigue.

Results

Out of the two hundred and fifty two (252) mental health service providers in the hospital, only two hundred and thirty four (234) fulfilled the study's inclusion criteria and were recruited for this study. About two-thirds of the participants were females (67.9%). The mean age (SD) of the sample was 39.23 (7.79) years, with the majority married (76.9%). The mean (SD) duration of work experience was 12.33 (8.41) years.

The majority of the mental health service providers surveyed (75.2%) were at risk of compassion fatigue. (See Table 1).

The differences observed in the risk of compassion fatigue among the various sub groups of mental health service providers did not attain statistical significance ($X2 =1.17$, $p>0.56$, df=2)Table 3, 4.

Result of multiple regression shows that the various

Table 1. Cross tabulation of occupation types and level of compassion fatigue among participants

Compassion fatigue			
Occupation	At risk of CF	No risk of CF	Total
Medical doctor	21 (77.8%)	6 (22.2%)	27(100%)
Clinical Psychologist	5 (100%)	0 (0%)	5(100%)
Nurses	139 (73.9%)	49 (26.1%)	188(100%)
Occupational Therapist	3 (100%)	0 (0%)	3(100%)
Social worker	8 (72.7%)	3 (27.3%)	11(100%)
Total	176 (75.2%)	58 (24.8%)	234 (100%)

CF= compassion fatigue

sub-domain of professional quality of life ($F (227) = 11.927$; $p<0.05$; $r=0.417$, $r2 =0.174$). This shows that coping styles jointly accounted for 17.4% of compassion fatigue. However, when the subgroups of coping mechanisms were entered into the regression model separately with compassion fatigue, only emotional focused engagement and emotional focused disengage-

Table 4: Descriptive statistics showing the years of experience and compassion fatigue along their mean and spread

Years of Exp	Mean CF scores	Std. Deviation	N
1-5	44.96	8.766	56
5-10	43.92	8.074	62
11-15	47.37	10.854	43
16-20	48.96	14.396	26
21-25	49.25	11.947	20
26-30	43.25	7.665	12
31-35	42.88	6.621	8
Total	45.81	10.089	227

Table 3. Linear multiple regression showing relationship between compassion fatigue and coping mechanisms.

Variable	B	T	P	R	R²	Df	F	P
PFE	0.036	0.505	>0.05					
PFD	0.105	1.515	>0.05	0.417	0.174	227	11.927	<0.05
EFE	0.246	3.511	<0.05					
EFD	0.226	3.698	<0.05					

coping strategies jointly predicted compassion fatigue

ment coping styles independently predicted compassion

fatigue (β =0.246, t= 3.3.511, p<0.05) and (β =0.226, t= 3.698, p<0.05) respectively Table 2.

Table 2. Chi square comparison of occupation types and level of compassion fatigue among participants

Compassion fatigue			
Occupation	At risk of compassion fatigue (%)	No risk of compassion fatigue (%)	X^2
Psychiatric nurses	139 (78.9)	49(84.5)	X^2 =1.17, p=0.56, df=2
Psychiatrists/ trainees	21 (11.9)	6(10.3)	
Others	16(9.1)	3(5.2)	

Yates corrected X^2, CF= compassion fatigue

Discussion

This study aimed to investigate the relationships between gender, coping strategy and compassion fatigue of mental health service providers in a mental health facility in Nigeria. The results can be summarized thus: majority of the mental health service providers surveyed were at risk of compassion fatigue, the socio-demographic factor of gender was not significantly associated with compassion fatigue, and coping mechanism jointly predicted compassion fatigue. Also, when considering the subgroups of coping mechanism, only emotional focused coping independently predicted compassion fatigue.

The cost of caring for individuals with mental illness is usually burdensome for their carers, including professional mental health service providers. This burden taxes the resources of these professionals as they continue to care for their patients whose illnesses are usually prolonged and may be chronic. It is therefore not surprising that mental health professionals surveyed in this study had high risk of developing compassion fatigue. Similar findings of high risk of compassion fatigue has been reported in the studies of

Regan et al(2006) 11among frontline mental health professionals; Musa & Abdalla Hamid (2008)30 among humanitarian aid workers in Darfur, Sudan; Huggard & Dixon(2011)21 among resident doctors in New Zealand and the review article by Sabo (2011)32 on compassion fatigue among mental health nurses. In addition to the burden of caring for their patients, mental health service providers face numerous other stressors including high job demand, poor relationships with colleagues, poor working conditions, competing tensions of work and home life, as well as the various administrative activities they are compelled to carry out. Three components of burnout were identified by Maslach and Jackson (1986) 29–emotional exhaustion, depersonalisation, and feelings of reduced personal accomplishment. Deckard, Meterko, & Field, (1994)12 reported emotional exhaustion as a significant contributor to the stress experienced by doctors. The very high patient to mental health service provider ratio in the country (Ayorinde et al 2004, Jacob et al, 2007)[3,18] also worsens the burden for these professionals. All these may have accounted for the high risk of compassion fatigue observed in this study.

In contrast to the finding of slight variation in the risk of compassion fatigue among the various mental health service providers found in this study, Creamer & Liddle (2005) 10reported that professional discipline was not significant to the experience of compassion fatigue in their study. No differences were also recorded in the experience of compassion fatigue when mental health service providers were compared to other professionals in medical line in another study (Zeidner, et al, 2013). 43

This study did not record any significant difference when experience of compassion fatigue was

compared across gender. Though Zeidner et.al, (2013),43 had reported that female participants in their study experienced more compassion fatigue than male, findings from other studies have been similar to the report from this study (Craig & Sprang 2010,[9] Hojat et al, 2002,[19]Stamm, 2010).34

Another finding from this study was that coping strategies predicted compassion fatigue, with emotion-focus coping strategy being significant independent predictor of compassion fatigue. This is in keeping with the reports of Ben-Zur (2012)5 and Yoder, (2010)42 which affirmed that coping strategies helped prevent compassion fatigue. Yoder's study revealed that nurses employed both engagement and disengagement themes in coping with compassion fatigue. Also in keeping with the findings of the present study, is the study from Israel (Zeidner et al, 2013), 43that opined that the usage of emotion-focus coping is more significant to compassion fatigue than problem-focus coping. Individuals generally utilize a combination of all the coping strategies and coping skills are usually adapted to the prevailing circumstances. Some authors have opined that the use of problem-focused coping strategies results in a better adjustment to life (Taylor 2006)37, because it affords individuals, an apparent greater control over their problem, unlike emotion-focused coping strategies which may sometimes results in a sense of loss of control over the problem. Another argument is that emotion focused coping strategies tends to show a greater association with distress unlike problem focused coping strategies which tends to be positively correlated with overall health outcomes (Penley, Tomaka, & Weibe, 2002)31. Typically, mental health professionals have been found to be skillful in the use of emotion-focused coping strategy, (Zeidner, et al,

2013). 43Ironically, this trait which is said to improve their ability to help their patients with psychological problems better also increases their risk of compassion fatigue.

Conclusion and Implication

It can be concluded from the study that there is a report of risk of compassion fatigue in the mental health service providers surveyed and coping strategies are significantly related to compassion fatigue. The implication of this on these professionals could include exhaustion, absenteeism, reduced happiness previously derived from their job, reduced ability to make decisions etc. There would also be a spillover effect on the patients that they care for, resulting in a reduction in the quality of services provided for these patients. This calls for proactive measures on a two-level basis which may involve an organizational effort to encourage the recognition of compassion fatigue by staff, debriefing, reduction in workloads for these professionals, peer support, and more promotion opportunities. In addition, these professionals should be encouraged to set only realistic goals about their patient's outcomes, utilize breaks within work periods, get a colleague with whom they can ventilate emotions. Relaxation techniques and connecting with higher being, as well as being emotionally intelligent could also be beneficial to these professionals.

Limitation

Our research design calls for caution in the interpretation of our results. The study was a cross-sectional study which considers actions retrospectively and does not provide causal explanation for phenomena. There will be a lot to gain in the understanding of the construct of compassion fatigue if future studies utilize a

prospective research design. Also the gender distribution in the sample population is a limitation for this study. A great majority of the participants were females and this may impinge on the generalizability of the result of this study. Further study that will encourage equality in the gender of the participants will be of good use. A country-wide study will be more scientifically beneficial to the generalization of the results for a study of this nature. The present single site consideration for this study raises a caveat on the use of its result.

References

1. Adams, R., Boscarino, J., & Figley, J. (2006). Compassion Fatigue and Psychological distress among social workers: a validation study. American Journal of Orthopsychiatry, 76, 103-108.

2. Addison, C., C., Campbell-Jenkins, B., W., & Sarpong, D., F. (2007).Psychometric Evaluation of a Coping Strategies Inventory Short-Form (CSI-SF) in the Jackson Heart Study Cohort. International Journal of Environmental Research and Public Health;4(4):289-295

3. Ayorinde, O., Gureje, O., & Lawal, R. (2004). Psychiatric Research in Nigeria: Bridging Tradition, and Modernization. Br J. Psychiatry; 184: 536-8. PubMed, Google Scholar.

4. Anewalt, P. (2009). Fired up or burned out? Understanding the importance of professional boundaries in home health care hospice. Home Healthcare Nurse, 27(10), 591-597.

5. Ben-zur, H., Gil, S., & Shamshins, Y. (2012). The Relationship between Exposure to Terror through the Media, Coping Strategies and Resources, and Distress and Secondary Traumatization. International Journal of Stress Management. Vol. 19, No. 2, 132–150.

6. Carver, C. S.(2011), Coping. In R. J. Contrada & A. Baum (Eds.). The Handbook of Stress Science: Biology, Psychology, and Health. (220-229). New York: Springer Publishing Company.

7. Connor-Smith, J.K. & Flachsbart, C. (2007). Relations between personality and coping: a meta-analysis. J. Personal. Soc. Psychol. 93:1080–107.

8. Compas, B.E., Connor-Smith, J.K., Saltzman, H., Thomsen, A.H., & Wadsworth, M.E. (2001). Coping with stress during childhood and adolescence: problems, progress, and potential in theory and research.Psychol.Bull.127:87– 127

9. Craig, C.D., & Sprang, G. (2010). Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. Anxiety, Stress & Coping: An International Journal, 23, 319339. doi: 10.1080/1061580090308581

10. Creamer, T.L., & Liddle, B.J. (2005). Secondary traumatic stress among disaster mental health workers responding to the September 11 attacks. Journal of Traumatic Stress, 18, 89 96. doi:10.1002/jts.20008

11. Regan, J., Sowman, R. & Walsh, I. Dysphagia (2006) 21: 95. https://doi.org/10.1007/s00455-006-9016-9

12. Deckard, G., Meterko, M., & Field, D. (1994). Physician burnout: an examination of personal, professional, and organizational relationships. Medical Care, 32(7), 745-754

13. Endler, N.S. (1997). Stress, anxiety and coping: The Multidimensional Interaction Model. Canadian Psychology, 38:136-153.

14. Figley, C.R. (Ed.) (1995). Compassion Fatigue: Secondary Traumatic Stress Disorders from Treating the Traumatized. New York: Brunner/Mazel.

15. Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: A study of emotion and coping during three stages of a college examination. Journal of Personality and Social Psychology, 48, 150-170.

16. Folkman, S. & Lazarus, R. S. (1988). "Coping as a mediator of emotion". Journal of personality and social psychology 54 (3): 466–75. doi:10.1037/0022 -3514.54.3.466. PMID 3361419.

17. Grunfeld, E. (2000). Cancer care workers in Ontario: prevalence of burnout, job stress and job satisfaction: CMAJ; 163(2): 166–169.

18. Jacob, K.S., Sharan, P., Mirza, I., & Garrido-Cumberra. (2007). Mental Health Systems In Countries: Where are we now? Lancet; 370(9592): 1061-77

19. Hojat, M., Gonnella, J.S., Nasca, T.J., Mangione, S., Vergare, M., & Magee, M. (2002). Physician empathy: Definition, components, measurement, and relationship to gender and specialty. The American Journal of Psychiatry, 159, 15631569. doi:10.1176/appi.ajp.159. 9.1563

20. Hooper, C., Craig, J., Janvrin, D., Wetsel, M., & Riemels, E. (2010). Compassion Satisfaction, Burnout, and Compassion Fatigue Among Emergency Nurses Compared With Nurses in Other Selected Inpatient Specialties. Journal of Emergency Nursing, 36(5), 420-427.

21. Hugard, P., & Dixon, R. (2011). "Tired of Caring": The Impact of Caring on Resident Doctors. Australasian Journal of Disaster and Trauma Studies, Vol, 3 URL: http://trauma.massey.ac.nz/issues/2011 -3/AJDTS_2011- 3_04_Huggard.pdf

22. Injeyan, M.C., Shuman, C., Shugar, A., Chitayat, D., Atenafu, E.G., & Kaiser, A. (2011). Personality traits associated with genetic counselor compassion fatigue: The roles of dispositional optimism and locus of control. Journal of Genetic Counseling, 20, 526540. doi:10.1007/s10897-011-9379-4.

23. Kabunga, A., Japheth O., A., Disiye, M, Mwirotsi, E., S., & Shikanga, T. A. (2015). Therapists' Past Traumatic Experiences, Compassion Fatigue and the Consequent Work Performance: A Case of Professional Therapists in Eldoret, Kenya. International Journal of Sciences: Basic and Applied Research (IJSBAR), Volume 20, No 1, pp 356-364

24. Kearney, M.K, Weininger R.B., Vachon, M.L., Harrison, R.L., & Mount, B.M. (2011). Self-care of physicians caring for patients at the end of life: "Being connected... a key to my survival". JAMA. 2009 Mar 18; 301(11):1155-64,

25. Lazarus, R.S. (1996). Psychological stress and the coping process. New York: Mc Graw Hill

26. Lazarus, R. S. (1999). Stress and emotion: A new synthesis. London, UK: Free Association Books.

27. Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal and coping. New York, NY: Springer-Verlag.

28. Levine, J.; Warrenburg, S.; Kerns, R.; Schwartz, G. (1987). The role of denial in recovery from coronary heart disease. Psychosomatic Medicine, 49,109-117.

29. Maslach, C. & Jackson, S.E. (1986). Maslach Burnout Inventory Manual (2ndEd.). Palo Alto, CS: Consulting Psychologists Press Inc.

30. Musa, S.A. & Abdalla Hamid, A.R.M. (2008).Psychological Problems among aid workers operating in Darfur. Social Behavior and Personality, 2008, 36 (3), 407-416.

31. Penley, J. A.; Tomaka, J.; Weibe, J. S. (2002). The association of coping to physical and psychological health outcomes: A meta-analytic review. Journal of Behavioral Medicine, 25,551-603.

32. Sabo, B. (2011). Reflecting on the Concept of Compassion Fatigue. The Online Journal of Issues in Nursing. 16(1) © 2011 American Nurses Association. Posted: 07/08/2011; OJIN

33. Stamm, B. H. (2005). The ProQOL manual. Pocatello, ID: Idaho State University

34. Stamm, B.H. (2010). The Concise ProQOL Manual. Pocatello, ID: ProQOL.org.

35. Suls, J.; & Fletcher, B. (1985). The relative efficacy of avoidant and non-avoidant coping strategies: A meta - analysis. Health Psychology. 4, 249-288.

36. Snyder, C.R. (ed.) (1999). Coping: The Psychology of What Works. New York: Oxford University Press. ISBN 0-19-511934-7.

37. Taylor, S.E. (2006). Health Psychology, International edition. McGraw-Hill Education, pg. 193

38. Terry, D. J. (1994). Determinants of coping: The role of stable and situational factors. Journal of Personality and Social Psychology, 66, 895–910. doi:10.1037/0022-3514.66.5.895

39. Tobin, D. L.; Holroyd, K. A.; Reynolds, R. V.; & Wigul, J. K. (1989). The hierarchical factor structure of the Coping Strategies Inventory. Cognitive Therapy and Research, 13, 343-361.

40. Wee, D.F., & Myers, D. (2002). Stress responses of mental health workers following disaster: The Oklahoma City bombing. In C.R. Figley (Ed.). Psychosocial stress series, no. 24. Treating compassion fatigue (pp. 5783). New York, NY: Brunner-Routledge.

41. Weiten, W. & Lloyd, M.A. (2008). Psychology Applied to Modern Life (9th ed.). ISBN 0-495-55339-5

42. Yoder, E. A. (2010). Compassion fatigue in nurses. Applied Nursing Research, 23, 191-197.

43. Zeidner, M., Matthews, G., & Roberts, R.D. (2013). Personal factors related to compassion fatigue in health professionals, Anxiety, Stress & Coping: An International Journal, DOI:10.1080/10615806.2013.77704.

44. Zeidner, M. & Endler, N.S. (Ed). (1996). Handbook of Coping: Theory, Research, Applications. New York: John Wiley. IS BN 0-471-59946-8