

Compassion Fatigue and Compassion Satisfaction among Staff Nurses Working in Critical Care Units

Jasleen Kaur Brar

Abstract

When compassion has been demonstrated for a long time, compassion fatigue could manifest as a negative outcome. Nurses who are affected by compassion fatigue have expressed feelings of depression, which may be related to the constant emotional trauma they experience by virtue of being employed in critical care areas. A cross-sectional descriptive study was conducted to assess compassion fatigue in terms of burnout and secondary traumatic stress and compassion satisfaction among nurses working in the critical care units of a tertiary care hospital in Punjab. A total of 100 staff nurses were selected by convenience sampling technique. Data was collected by socio-demographic profile, professional profile and Professional Quality of Life Scale (ProQOL) Version 5 (2009). The results revealed that 65 percent of the subjects had average level, 34 percent had low and only 1 percent had high level of burnout. It was found that 59 percent of the subjects had average level of secondary traumatic stress, 40 percent had low level and only 1 percent had high level of secondary traumatic stress. Majority (54%) had average level, 45 percent had high level and only 1 percent had low level of compassion satisfaction. Secondary traumatic stress was found to be significantly associated with socio-economic status, duration of work experience in critical care units and leave in past one week. Compassion satisfaction was significantly associated with age, habitat, professional qualification and extra duties performed. Majority of the subjects had average level of burnout and secondary traumatic stress. Secondary traumatic stress was higher in staff nurses who belonged to lower middle class ($p=0.05$) and who had not taken leave in the past one week and among staff nurses who had 11-15 years of work experience in critical care units.

Key words: Compassion fatigue, burnout, secondary traumatic stress

Compassion satisfaction is the sum of all the positive feelings a person that derives by helping others. Everyday nursing becomes more multifaceted with increasing complexities along with often constant intense human attraction. When a nurse is dealing with all of these factors it's important that they maintain a high level of caring and compassion for their patients (Figley, 1995).

Compassion fatigue describes physical, emotional and psychological impact of helping others, often described through experiences of stress or trauma. It is also known as Secondary Traumatic Stress, a condition characterised by a gradual lessening of compassion over time. Compassion fatigue is the final result of progressive and cumulative process, which is caused by prolonged, continuous and intense contact with the patients, the use of self and exposure to stress, which manifests with marked physical, social, emotional, spiritual and intellectual changes that increase in intensity (Jennifer et al,

2011). Workplace challenges that nurses face today can have long term negative consequences for the nurse and the patient. The physical, emotional and intellectual demands of contemporary nursing are far greater as patients are living longer with chronic illnesses and advances in technology create continual change. With these challenges, today's nurses are more likely to be exposed to secondary traumatic stress and are more likely to develop compassion fatigue in the workplace (Hooper et al, 2009).

Compassion fatigue can lead to nurses experiencing underperformance, irritability, and somatic complaints such as headaches, sleep disturbances, and depression. Compassion requires the nurse to have self-awareness, to see others as human, to experience the pain and suffering of others, and to have intention to alleviate that pain and suffering (Margo et al, 2015).

Need of study: Today the number of acute patients entering the health care system through emergency department, uninsured patients relying on treatment in the emergency department is increasing

The author is Assistant Professor, DMCH College of Nursing, Malakpur, Ludhiana (Punjab).

and patient average acuities are raising. At the same time support resources are constrained. It is important to understand the potential effect of these pressures on direct care staff. This study explores the prevalence of compassion fatigue among emergency and ICUs staff nurses (Coetzee & Kloppe, 2010).

Compassion fatigue is higher among health professionals directly or indirectly involved in the care of the patient. This can impact standards of patient care, relationships with colleagues or lead to more serious mental health conditions such as post-traumatic stress disorder, anxiety or depression. Working in emotionally and physically challenging area can cause stress for emergency and ICUs staff nurses (Beck 2011). Thus the researcher felt the need to undertake this study.

Problem statement: A study to assess compassion fatigue and compassion satisfaction among staff nurses working in critical care units of a tertiary care hospital of Punjab.

Objectives

The study had two objectives:

1. To assess compassion fatigue in terms of burnout and secondary traumatic stress and compassion satisfaction among staff nurses working in critical care units.
2. To find out the association of compassion fatigue and compassion satisfaction among staff nurses with selected socio-demographic variables.

Operational definitions

Compassion satisfaction: Pleasure that a person derives from helping others through work as assessed by ProQol version 5 (2009).

Compassion fatigue: Physical and mental exhaustion & emotional withdrawal experienced by those that care for sick or traumatised people over an extended period of time as assessed by ProQol version 5 (2009). Compassion fatigue breaks into two parts: burnout and secondary traumatic stress.

Burnout: It is associated with feelings of hopelessness and difficulties in dealing with work or in doing the job effectively as assessed by ProQol version 5 (2009). These negative feelings usually have a gradual onset. They can reflect the feeling that your efforts make no difference, or they can be associated with a very high workload or a non-supportive work environment.

Secondary traumatic stress: It is emotional distress that arises when an individual hears about the first hand trauma experiences of another as assessed by ProQOL version 5 (2009). The negative effects may include fear, sleep difficulties, intrusive images, or

avoiding reminders of the person's traumatic experiences.

Review of Literature

Kolthoff et al (2017) conducted an exploratory descriptive study on compassion fatigue, burnout and compassion satisfaction. The sample consisted of 42 nurses working in geriatric medicine unit. The tool used was ProQOL Version 5 (2009). The study revealed average levels of compassion fatigue, burnout and compassion satisfaction. New nurses reported higher level of compassion fatigue ($p<0.01$) and burn out ($p=0.02$) than experienced nurses.

Mathias & Wentzel (2017) conducted a descriptive study to find out compassion fatigue, burnout and compassion satisfaction among undergraduate nursing students at a tertiary nursing institution in KwaZulu-Natal. The sample consisted of 67 undergraduate students (26 3rd year and 41 4th year students). The data was collected by ProQOL. The study results showed that 53.7 percent participants attained low level of compassion fatigue, 44.7 percent participants attained average level and 1.5 percent participants attained high level of compassion fatigue. Six percent participants attained low level burnout, 94 percent attained average level of burnout. 3 percent participants attained low level compassion satisfaction; 95.5 percent participants attained an average level; and 1.5 percent participants attained high level of compassion satisfaction.

Amir et al (2016) conducted a cross-sectional study to determine the relationship on compassion fatigue with demographic characteristics among psychotherapists in Northern Uganda. Data was collected from 207 psychotherapists using ProQOL(5) and demographic questionnaire. The study results revealed that about two-third (66.4%) of male respondents and slightly above the half (52.7%) of female respondents were experiencing high level of compassion fatigue. The subjects in age group of 25-35 years (62.7%) experienced high level of compassion fatigue and those in age group of 55 or above experienced low (16.7%) level of compassion fatigue. The results indicated that there was significant difference among psychotherapist's compassion fatigue ($p=0.013$) based on working experience.

Methodology

A cross-sectional descriptive design was used to assess compassion fatigue and compassion satisfaction among staff nurses working in critical care units of tertiary care hospital. Criteria for selecting the setting is the availability of subjects, feasibility of conducting the study, easy access, familiarity of the investigator with the setting, expected coopera-

tion and administrative approval for conducting the study.

Convenience sampling technique was used to draw 100 staff nurses who were willing to participate and present at the time of data collection and those who had clinical experience of less than 12 months in critical care units and floated from other areas were excluded from the study.

Sample size estimation was done by using formula:

$$n = \frac{\left(1 - \frac{n}{N}\right) \times t^2 (p \times q)}{d^2}$$

Where n= desired sample size, N= size of population, t= total target population

p= proportion in the target population estimated to have a particular characteristic.

Description of tool(s)

The research tool had three parts: Socio-demographic profile, Professional profile of staff nurses, ProQoL Version 5 (2009). It was a standardised tool consisting of 30 items which measure positive and negative effects experienced by staff nurses. It consisted of three subscales: Burnout scale, Secondary Traumatic Stress scale and Compassion satisfaction scale. Each subscale had 10 items. Items were rated on 5-point scale (1=never, 2=rarely, 3=sometimes, 4=often, 5=very often) to yield score of 10-50.

The tool i.e. ProQoL Version 5 (2009) is a standardised tool. Content validity of Part A and Part B of the tool was determined by expert's opinion. As per guidance from the experts, needed amendments were made in the final tool. The tool was found to be valid for the study. Reliability of Professional Quality of Life Scale Version 5 (2009) was determined by split half method using Pearson's correlation coefficient. Established reliability of subscales of ProQoL Version 5 (2009) was as follows:

Compassion satisfaction = 0.88

Burnout = 0.75

Secondary traumatic stress = 0.81

Hence the tool was found to be reliable.

The study was conducted after approval from Institutional Ethical Committee, Research Developmental Cell of the Hospital. Data was collected by investigators through self-report using paper pen method. Rapport was established to gain their confidence, details of study were explained and informed consent was taken. Data obtained was analysed using both descriptive and inferential

statistics with the help of MS Excel and SPSS.

Results

Figure 1 depicts distribution of staff nurses as per their level of burnout. It was revealed that majority (65%) had average level of burnout; 34 percent had low level of burnout and only 1 percent had high level of burnout. The mean score was found to be 26.90 ± 6.10 .

Figure 2 depicts distribution of staff nurses as per their level of secondary traumatic stress. It was found that majority (59%) had average level of secondary traumatic stress while remaining (40%) had low level of secondary traumatic stress and only 1 percent had high level of secondary level of stress. The mean score was found to be 24.33 ± 6.25 .

Figure 3 depicts that majority (54%) had average level of compassion satisfaction, followed by 45 percent had high level of compassion satisfaction and only 1 percent had low level of compassion satisfaction. The mean score was found to be 40.32 ± 5.78 .

Table 1 depicts the association of burnout among staff nurses working in critical care units with their socio demographic and professional characteristics. Higher mean score (31.33 ± 6.14) was found among staff nurses who had not taken leave in past one week while lower (26.06 ± 6.27) among staff nurses who had taken leave in past one week. The difference in mean score of both the

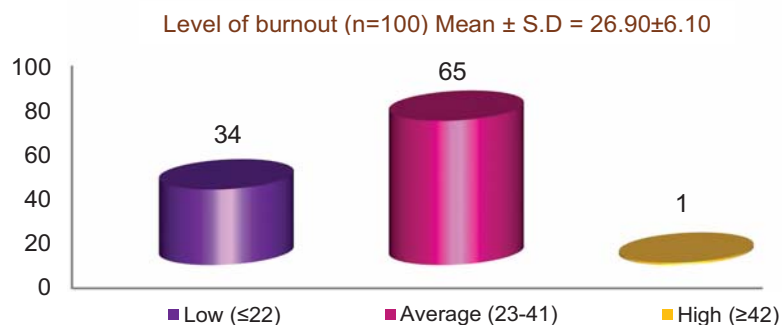


Fig 1: Distribution of staff nurses as per their level of burnout.

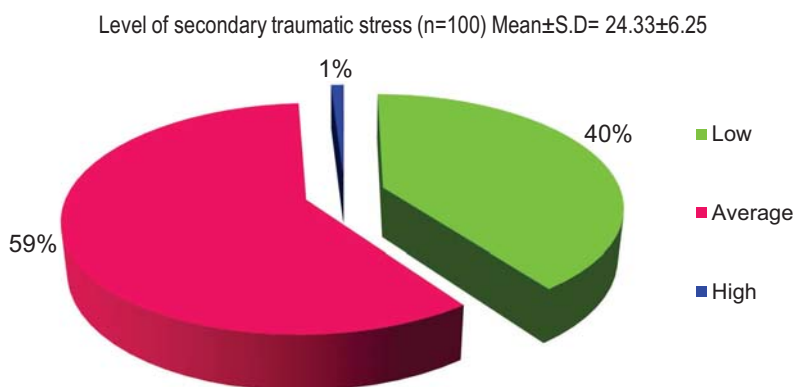


Fig 2: Distribution of staff nurses as per their level of secondary traumatic stress

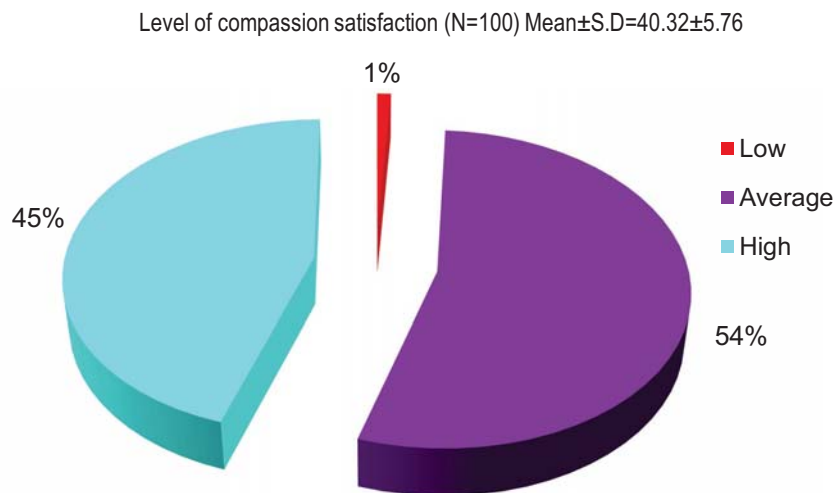


Fig 3: Distribution of staff nurses as per their level of compassion satisfaction.

groups was found to be statistically significant at $p \leq 0.05$ ($p=0.05$).

Table 2 depicts the association of secondary traumatic stress with socio demographic and professional characteristics of staff nurses working in critical care units. It was found that the mean score was highest among subjects belonging to lower middle class (32.00 ± 6.25) followed by subjects belonging to upper middle class (24.52 ± 5.66) and least among subjects belonging to upper class (22.35 ± 6.99).

Table 1: Association of burnout among staff nurses with socio-demographic and professional characteristics (N=100)

Variables	n	Mean $\pm$ SD	F/t value p value
Leave in past one week			
No	37	31.33 $\pm$ 6.14	t=1.84 (0.05*)
Yes	63	26.06 $\pm$ 6.27	

*Significant at $p \leq 0.05$ Min score =10, Max score= 50.

Table 2: Association of level of secondary traumatic stress among staff nurses with socio-demographic and professional characteristics (N=100)

Variables	n	Mean $\pm$ SD	F/t value p value
Socioeconomic status			
Upper(I)	24	22.35 $\pm$ 6.99	F=5.57 0.005*
Upper middle (II)	71	24.52 $\pm$ 5.66	
Lower middle (III)	05	32.00 $\pm$ 6.25	
Duration of work experience in critical care unit (in years)			
1-5	54	24.04 $\pm$ 6.20	F= 5.10 (0.003*)
6-10	24	21.46 $\pm$ 4.62	
11-15	16	28.44 $\pm$ 6.00	
16-20	06	27.50 $\pm$ 7.34	
Leave in past one week			
No	37	25.89 $\pm$ 4.98	t=1.94 0.05*
Yes	63	23.41 $\pm$ 6.76	

*Significant at $p \leq 0.05$, Min score =10, Max score= 50.

The mean difference was found to be statistically significant at $p \leq 0.05$ ($p=0.005$). Higher mean score was found among staff nurses who had 11-15 years of experience in critical care units (28.44 ± 6.00) and least among staff nurses who had 6-10 years of experience in critical care units (21.46 ± 4.62). The mean difference were found to be statistically significant at $p \leq 0.05$ ($p=0.003$). Regarding leave in past one week, there was higher mean score (25.89 ± 4.98) of secondary traumatic stress among staff nurses who had not taken leave in past one week while least (23.41 ± 6.76) among those who had taken leave in past one week. The difference in mean score of both the groups was found to be statistically

significant at $p \leq 0.05$ ($p=0.05$). Hence, it is concluded that subjects belonging to lower middle class, 11-15 years of experience in critical care units had highest secondary traumatic and subjects who had not taken leave in past one week.

Table 3 depicts the association of compassion satisfaction with socio-demographic and professional characteristics of staff nurses working in critical care units. The mean score for compassion satisfaction was found to be highest among subjects in age group of 33-37 years (43.14 ± 4.464) and least among subjects in age group of 23-27 years (38.29 ± 5.73). The mean difference was found to be statistically significant at $p \leq 0.05$ ($p=0.018$). The mean score was found higher among staff nurses residing in urban area (41.58 ± 5.53) whereas lower among staff nurses residing in rural area (39.06 ± 5.76). The difference in mean score of both the groups was found to be statistically significant at $p \leq 0.05$ ($p=0.03$). It was found that mean score were highest in staff nurses who had pursued GNM (42.24 ± 4.72) followed by subjects who had pursued advanced diploma in nursing (41.33 ± 6.50) and least (38.21 ± 6.10) among subjects who had pursued BSc Nursing as their professional qualification. The mean difference was found to be statistically significant at $p \leq 0.05$ ($p=0.002$). Regarding extra duties performed in month, the mean score of staff nurses who had not performed any extra duty was 42.67 ± 6.88 followed by staff nurses who had performed more than 18 hours of extra duty (42.00 ± 8.18), nurses who had performed 6 hours of extra duties (40.68 ± 4.89), nurses who had performed 12 hours of extra du-

Table 3: Association of compassion satisfaction among staff nurses with socio demographic and professional characteristics (N=100)

Variables	n	Mean $\pm$ S.D	F/t p value
Age (in years)			
23-27	35	38.29 $\pm$ 5.73	F=3.52 0.018*
28-32	33	40.30 $\pm$ 6.24	
33-37	21	43.14 $\pm$ 4.46	
38-42	11	41.45 $\pm$ 4.45	
Habitat			
Rural	50	39.06 $\pm$ 5.76	t=2.23 0.03*
Urban	50	41.58 $\pm$ 5.53	
Professional qualification			
G.N.M.	50	42.24 $\pm$ 4.72	F=6.64 0.002*
B.Sc. Nursing	47	38.21 $\pm$ 6.10	
Advanced diploma in nursing	03	41.33 $\pm$ 6.50	
Extra duties performed in month (in hours)			
00	15	42.67 $\pm$ 6.88	F=3.35 0.01*
06	66	40.68 $\pm$ 4.89	
12	12	37.33 $\pm$ 6.19	
18	04	33.25 $\pm$ 5.90	
>18	03	42.00 $\pm$ 8.18	

*Significant $p \leq 0.05$, Min score =10, Max score= 50

ties (37.33 $\pm$ 6.19) and least (33.25 $\pm$ 5.90) among performed 18 hours of extra duties. The mean difference was found to be statistically significant at $p \leq 0.05$ ($p=0.01$).

Hence, it is concluded that subjects in age group of 33-37 years, residing in urban area, who had pursued GNM as professional qualification and nurses who had not performed any extra duty in past month had highest compassion satisfaction.

Discussion

In the present study, out of 100 staff nurses, majority (65%) had average level of burnout, 34 percent had low and only 1 percent had high level of burnout. Mathias & Wentzel (2017) revealed that most (94%) of subjects had average level, 6 percent had low and no subject had high level of burnout. The study also revealed that more than half (53.7%) had low level of compassion fatigue, 44.7 percent had average and only 1.5 percent had high level of compassion fatigue. Tracy Ann Petleski (2013) reported that majority of nurses (70.8%) had average level of burnout, 29.2 percent had high level and no subject had low level of burnout.

As per the present study, out of 100 staff nurses, majority (59%) of subjects had average level of secondary traumatic stress, 40 percent had low level and only 1 percent had high level of secondary traumatic stress. A contradictory finding was reported by Tracy Ann Patleski (2013) that most (91.7%) subjects had high, 8.3 percent had average and no subject had low level of secondary traumatic

stress.

Another study by Khan AA, Khan MA, Malik NJ (2015) reported that 31.1 percent participants had low compassion fatigue, 66.1 percent had average, whereas 22.8 percent had high Compassion fatigue scores. In our present study, out of 100 staff nurses, majority (54%) had high level of compassion satisfaction, 45 percent had average level and only 1 percent had low level of compassion satisfaction.

Contradictory findings were reported by Mathias & Wentzel (2017) where most (95.5%) of subjects had average level of compassion satisfaction, 3 percent had low and 1.5 percent had high level of compassion satisfaction. According to study by Tracy Ann Petleski (2013), half (50%) of total subjects had high level, followed by 37.5 percent average level and 12.5 percent had low level of compassion satisfaction. Another study by Rossi A, Cetrano G, Pertile R, et al (2012) showed that 42 percent had low, 32 percent had moderate and 10 percent had high level of compassion satisfaction.

The present study revealed significant association of burnout with leave taken in past one week. Kolthoff & Hichman (2017) found similar outcome that nurses who had not taken leave in past days reported higher burnout. Also there was significant association of secondary traumatic stress among staff nurses with socioeconomic status, duration of work experience in critical care units and leave in past one week. Higher secondary traumatic stress was found among staff nurses who belonged to lower middle (III) class. Higher secondary traumatic stress was found among staff nurses who had 11-15 years of experience in critical care units and who had not taken leave in past one week.

Kolthoff & Hichman (2017) reported contradictory findings in their study which had shown that secondary traumatic stress was high in new nurses as compared with experienced nurses. According to study by Sacco TL, Cieurzynski SM, Harvey ME, Ingersoll GL (2015) high secondary traumatic stress was found in subjects belonging to age group of 40-49 years. A higher secondary traumatic stress was predicted in subjects engaged in more individual supervision and self-care activities and in those with a personal trauma history. The authors reported that more subjects from single acuity units (81%) reported low levels of secondary traumatic stress than subjects on mixed acuity units (61%).

The present study found that there was significant association of compassion satisfaction among staff nurses with age and habitat. Higher compassion satisfaction was found among staff nurses who

were in age group of 33-37 years and belonged to urban area. Contradictory findings were reported by Sacco TL, Ingersore GL (2015) where compassion satisfaction was high among staff nurses with age of 50 years or older.

According to the study by Kelly L, Runge J, Spencer C (2015), subjects with fewer years of experience and age group of 50-65 years had significant predictor of compassion satisfaction. The present study also revealed significant association of compassion satisfaction among staff nurses with professional qualification, extra duties performed in month (in hours). Higher compassion satisfaction was found among staff nurses who had GNM as their professional qualification and staff nurses who had not performed any extra duty in month.

Contradictory findings were reported by Sacco TL, Ingersore GL (2015) where compassion satisfaction was high among nurses with an associate degree or master degree.

Conclusion

There was average level of burnout, secondary traumatic stress and compassion satisfaction among the staff nurses working in the critical care units. There was significant association of level of secondary traumatic stress among the subjects with lower middle class and subjects with 11-15 years work experience in critical care unit. Association of compassion satisfaction was found with subjects of age group 33-37 years, those belonging to urban area and subjects with GNM as professional qualification and performed no extra duties in a month.

Recommendations

- Similar study can be conducted (a) on a large sample in future, (b) among other health care professionals.
- Comparative study can be conducted among the nurses working in the critical care units and general wards.
- Regular training for nurses regarding knowledge and prevention of compassion fatigue can be provided.
- Effect of varied interventions in prevention of compassion fatigue can be assessed regularly.

Implications of study

Nursing practices: Practice self-care and set emotional boundaries. Consider seeing a therapist who can help in processing feelings and implement strategies to combat compassion fatigue.

Nursing education: The findings of the present study revealed that there is average level of compassion fatigue among staff nurses. Nurses can develop self-awareness of compassion satisfaction, burnout

and secondary traumatic stress through an education program. The nursing educator should suggest the practical ways of preventing compassion fatigue. Identifying and using workplace strategies such as support groups, open discussions and regular breaks.

Nursing administration: The administrator should develop core understanding and knowledge regarding the compassion fatigue. The administrator should motivate the nurses to make balance between the personal and professional life. The administrator must conduct the educational classes regarding the compassion fatigue and strategies to combat it.

Nursing research: The study can serve as the basis for further descriptive and interventional studies.

Limitations of the study

The study was restricted to 100 staff nurses due to time and resource constraints. This limits the generalisability of the study findings. Study was drawn from one hospital which limits the generalisability of study.

References

1. Figley CR. Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized. Brunner/Mazel psychosocial stress series. *Routledge* 1995; 13-21
2. Jennifer DR, Anderson RA. Compassion fatigue: Informal caregivers of family members with dementia. *Nursing Research and Practice* 2011; 1-10
3. Hooper C, Craig J, Janvrin DR, Wetsel MA, Reimels E. Compassion satisfaction, burnout and compassion fatigue among emergency nurses compared with nurses in other selected inpatient specialties. *Journal of Emergency Nursing* 2009; 37(2):125
4. Margo MC, Kompanje EJ, Benoit DD, Bakker J, Nijkamp MD. The prevalence of compassion fatigue and burnout among health professionals in intensive care units: A systematic review. *PloS ONE* 2015; 10(8)
5. Coetzee SK, Kloppe HC. Compassion fatigue within nursing practice: A concept analysis. *Nursing & Health Sciences* 2010; 12: 235-43
6. Beck CT. Secondary traumatic stress in nurses: A systematic review. *Archives of Psychiatric Nursing* 2011; 25(1): 1-10
7. Kolthoff KL, Hickman SE. Compassion fatigue among nurses working with older adults. *Geriatric Nursing* 2017; 38(2): 1-5
8. Mathias CT, Wentzel DL. Descriptive study of burnout, compassion fatigue and compassion satisfaction in KwaZulu-Natal. *Curationis* 2017; 40(1):e1-e6
9. Amir K, Stephen M, George M. Compassion fatigue: A study of psychotherapists demographics in Northern Uganda. *International Journal of Academic Research in Psychology* 2016; 3(1): 37-48