Resilience and Compassion Fatigue Among Registered Nurses in Ghana

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ABSTRACT

In the healthcare sector, nurses provide health care services to different clients which can result in compassion fatigue. The resilience of nurses helps to provide control of compassion fatigue. The purpose of this study is to examine if there is a relationship between resilience and compassion fatigue and also find a significant difference in resilience and compassion fatigue in terms of sex, age, and clinical experience. Correlational research design was utilized where 249 registered nurses were conveniently sampled from Ghana. The study utilized a Resilience questionnaire Scale developed by Wagnild and Young (2010) and Professional quality of life (ProQOL) scale developed by Stamm (2010) was adapted and modified for compassion fatigue. The statistical treatments used were and Pearson Correlation, T-Test and ANOVA to address the research questions. The study showed that there was a high positive significant relationship between resilience and compassion fatigue. There was a significant difference in age and sex on compassion fatigue however, no significant on clinical experience. Sex and clinical experience showed a significant difference in resilience but no significant difference when age was considered. The results of the study suggest that registered nurses in Ghana experience high compassion fatigue. In preventing the compassion fatigue of the nurse's measures should be instituted to increase the resilience level of the nurses. Healthcare administrators should put in measures to reduce the compassion fatigue of the nurses. Further researchers should explore other variables in relation to the resilience to help reduce the compassion fatigue of nurses.

Keywords: Resilience, Compassion fatigue, Registered Nurses.

INTRODUCTION

In the healthcare industry, where patient acuity is growing, ongoing health assessments and discharges are taking place in which nurses deal with distinct clients who are probable to have various health circumstances that may exacerbate both treatment and recovery. In the nurses ' job setting, these stresses can trigger compassionate fatigue and job overload (Bahadır Yılmaz, 2017).

These adverse impacts of assisting others have been captured by the notion of "compassion fatigue." Commonly referred to as "care costs" (Hunsaker, Chen, Maughan, & Heaston 2015). According to Sheppard (2015), compassion fatigue is thought to affect 16 to 85 percent of

health care workers and cost the economy billions of dollars each year in wasted efficiency (Dewa et al., 2014). Compassionate fatigue has driven health officials, stakeholders, and professional organizations to the main problem (Ledoux, 2015).

According to Armmer (2017) workplace adversity-related problems can be detrimental, stressful, traumatic, resulting in nurses experiencing difficult situations or episodes of difficulty. Notwithstanding all these problems, resilience empowers nurses to cope with their working environment and maintain a healthy and stable psychological function (Mealer, Jones, & Moss, 2012). Compassion fatigue has been described as secondary traumatic stress, vicarious trauma, burnout (McGibbon, Peter & Gallop, 2010). Compassion fatigue in nurses can have an effect on job satisfaction and clinical outcomes and can cause nurses to leave a profession already plagued by shortages of staff (Harris & Griffin, 2015)

In a cross-sectional comparative study design by Khan, Malik, and Khan (2015) examine among healthcare professional on compassion fatigue. The researchers sampled 254 healthcare professionals which include nurses, doctors, and nursing assistant. Professional quality of life measure version 5(pro-QOL-5) was used as the questionnaires. The study results showed that compassion fatigue was significant among healthcare professional (p-value <0.049). The study showed that healthcare professionals experienced high compassion fatigue due to the nature of their work environment. The study failed to explore the resilience of healthcare professionals towards compassion fatigue.

Jarrad, Hammad, Shawashi, and Mahmoud (2018) in a descriptive study examine the substance use and compassion fatigue among nurses. The researches sampled 282 nurses and compassion fatigue scale was used as the questionnaire. The results of the study showed that there was a significant difference in compassion fatigue score and the use of drugs. The study concluded that the management of nursing should be aware of the drive for substance use among nurses and should develop institutional remedies to overcome compassion fatigue and potential problems with substance use. The study failed to explore the resilience of healthcare professionals towards compassion fatigue.

There is a paucity of literature to examine the relationship between resilience and compassion fatigue among nurses in Ghana, therefore, the aim of this study is to examine the relationship between resilience and compassion fatigue among nurses in Ghana.

LITERATURE REVIEW

According to Wagnild and Young (1993), resilience is postulated as the capacity to deal with problems, discover from harsh angles and develop, moreover, Hollnagel (2017) in his perspective of resilience as the capacity to regulate transition or challenging situations, it also argues that resilience is a feature of character that regulates negative stress effects and allows adjustment.

Welzant and Jacobson (2008) argue that resilience is focused on the capacity of a person to adjust and/or recover favorably from substantial adversity and the trouble it often produces. In the framework of important adversity, Luther, Cicchetti, and Becker (2000) pointed to resilience as a vibrant mechanism involving beneficial adjustment. Thomas and Revell (2016) given a more finite concept of resilience, arguing that amid being subjected to trauma and loss, it is the capacity of an individual to preserve a fairly secure, safe level of psychological and physical function over the moment and to create fresh sensations and beneficial feelings.

Resilience is made up of various variables and is, therefore, hardness, self-enhancing, repressive thinking, beneficial emotion, and stems from various routes (Hsieh, Hung, Wang, Ma, & Chan 2016). Southwick and Charney (2012) disclosed efficient stress resilience approach that involves genuine optimism, moral feeling, religious belief and spirituality, social support, physical fitness, psychological activity, mental and behavioral adaptability, significance and intent in existence. Resilience, according to Everly (2012), comprises of several vital characteristics including development, engagement, perseverance, interpersonal interaction, integrity and sincerity, personality control and hopefulness.

Resilience studies have given a further knowledge of psychological resilience predictors and the features of extremely resilient individuals. Bonanno, Galea, Mealer et al (2017) and Hudgins (2016) discovered that gender, age, race or ethnicity, schooling, earnings shift, social support, chronic disease incidence and latest and past life stressors were the distinctive predictors of resilience. The working definition of resilience in this study is defined as the ability to cope to modify or handle adverse life experiences.

Joinson (1992) first recognized the notion of compassionate fatigue (CF) among nurses who showed rage and frustration or switched off their own mental reactions observing their patients suffer from disease or trauma. Figley (1995) posed compassionate tiredness as the mental and cognitive reactions arising from an individual's knowledge of a traumatic case encountered by an important other–the pressure arising from assisting or assisting a traumatic or distress person. Compassion fatigue in a similar vein is the "cost of care" (Figley, 1995, p. 1), which can physically, spiritually, emotionally, cognitively, interpersonally, and behaviorally affect

the health care provider. Compassion fatigue has been described as a state of exhaustion, according to Nolte, Downing, Temane, and Hastings-Tolsma (2017), which reduces the capacity to participate in patient interactions and impacts skilled nursing output.

Compassion fatigue has also been constructively described as secondary emotional pressure or secondary pain from trauma-related literature. (Cieslak, Shoji, Douglas, Luszczynska, Melville, & Benight, 2013). Symptoms may grow in people who have undergone main exposure to a trauma case after one month or more in trauma care suppliers or participants with indirect exposure (Cieslak et al., 2013).

There are several variables that have demonstrated proof that can contribute to compassionate fatigue. All triggers of compassion fatigue are long and exhausting customer communication, steady self-giving, absence of acceptance, absence of self-care and depression. (Runge, Kelly, & Spencer, 2015). Signs and symptoms include apathy and/or mental numbness, over-implication or failure to touch clients, anxiety, and pressure, depression, emotions of hopelessness, bed disorders, headaches, enhanced absenteeism, substance violence and liquor dependence (Sorenson, Bolick, Wright & Hamilton, 2016).

Improving compassion fatigue consciousness and acceptance will assist avoid its disastrous impacts. Compassion fatigue and efficient procedures need to be identified soon in order to enhance nursing fulfillment and patient care and decrease patients ' turnover (Hunsaker, Chen, Maughan, & Heaston, 2015).

Burnett (2015) examined the relationship between resilience in relation to compassion fatigue, burnout, and compassion satisfaction. The researcher sample 139 respondent through convenience sampling technique. The research utilized the professional Quality of life scale, the 14-item resilience scale, and a demographic questionnaire. The results of the study showed that resilience was significant negatively correlation with compassion fatigue and was significant ((r =-0.31, p = 0.00). Additionally, it was found that resilience correlated with compassion fatigue (David, 2012).

There was no effect of gender on compassion fatigue (Khan, Malik, and Khan, 2015). According to Sacco et al (2015), there is a significant difference in age, sex and clinical experience in relation to compassion fatigue. Sull, Harland, and Moore (2015) showed that on gender, the female is more resilient however there was no difference in age on resilience. (Rushton et al (2015) in the showed that there is a significant difference in clinical experience in relation to resilience.

METHODS

The study used a correlational design to examine the relationship between resilience and compassion fatigue among registered nurses. The researchers used a convenient sampling technique to sample 249 registered nurses from two teaching hospitals in Ghana. The inclusion criteria were registered nurses who were willing to take part in the study and registered nurses who have worked for 1 year and above. The exclusion criteria are registered nurses who have worked for less than six months will not take part in the study as well as community health nurses and midwives.

Table 1. **Demographic Profile of the respondents**

		N	MEAN	SD
Sex	Male	89	2.928	0.4555
	Female	160	2.754	0.5225
Age				
	18-29 years	44	3.082	0.3251
	30-44 years	132	2.975	0.4024
	45 and above	73	2.791	0.5158
Clinical Experience	1-10 years	164	2.84	0.511
	11 years and above	85	2.905	0.4361

Wagnild and Young (1993) initially created the Resilience Scale as a self-report questionnaire of 25 items intended to evaluate five topics of resilience using a Likert7-point scale. Wagnild (2010) created the initial instrument's smaller 14-item variant. The RS-14 includes 14 products varying from 1 (Strongly Disagree) to 7 (Strongly Agree) ranked on a 7-point Likert scale. The scale of Professional Life Quality (ProQOL) created by Stamm (2010) has been tailored to compassionate fatigue and modified. The reliability measurement based on the internal consistency by using Cronbach Alpha resulted that resilience .805 and compassion fatigue .895 In determining the strength of the relationship, Cohen (1998) absolute correlation valves where r=.10 to .29 meaning small or low, r=.30 to .49 is medium or moderate and larger r=.50 to 1.0 is large or high and interpreted were used furthermore in determining the significant difference value where .01=small effect, .06=moderate effect, .14=large effect.

A research assistant was employed from Ghana. Registered nurses were approached from the two separate institutions. The research assistant explained the purpose and procedure of the study before distributing the questionnaires. The questionnaires were collected and sealed after

completion. The research assistant encoded the raw data and sent them using google forum for statistical treatment to be done.

Nurses privacy was protected by providing anonymous and voluntary participation. The purpose of the study was explained, and consent would be obtained before data collection. Participants had the right to withdraw from the study at any stage. Furthermore, the identification of the participants was not disclosed, and only aggregate data were presented. Ethical consideration was taken into account during the study from the various two teaching hospitals.

The study used the Statistical Package for Social Sciences (SPSS) version 22 to analyze the data. Question one was answered by using Pearson Correlation Coefficients were used to determine the relationship based on their strength and direction of resilience and compassion fatigue. Question two was answered by using T-Test and ANOVA was used to assess the differences between registered nurses' demographics on resilience, and compassion fatigue.

RESULTS

Pearson correlation coefficient was used to examine the first research question to determine the relationship between resilience and compassion fatigue. The relationship between resilience and compassion fatigue showed a *highly significant positive relationship* (r=.593, p=0.000) at a 95% confidence interval. This means that as the compassion fatigue of the registered nurse's increases they adopt other resilience measures to keep them active in their work.

Table 2. **Relationship Between Resilience and Compassion Fatigue**

Correlations			
		Compassion Fatigue	Resilience
Compassion fatigue	Pearson Correlation	1	.593**
	Sig. (1-tailed)		.000
	N	249	249

**. Correlation is significant at the 0.01 level (1-tailed).

This implies that the nurses' resilience correlates with nurse's compassion fatigue. As a result, the study *rejects* the null hypothesis in that there is no significant relationship between resilience and compassion fatigue of registered nurses. This study supports the findings of Burnett (2015) which showed there is nurses have high resilience towards compassion fatigue.

The difference in Compassion Fatigue when considering Sex

The study investigated the significant difference of sex on compassion fatigue. The outcome of this scrutiny showed that there is a *significant difference* in sex. Female nurses experienced high compassion fatigue that the male nurses (female mean= 2.928, SD=.4555, Male mean= 2.754, SD= .5225) and its *statistically significant* p=0.009 at equal variance not assumed.

Table 3. **T-Test of Compassion Fatigue when considering Sex**

Independent Samples Test

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		
Compasssion Fatigue	Equal variances assumed	8.574	.004	2.742	247	.007	.1742	.0635	.0491	.2993
	Equal variances not assumed			2.637	162.094	.009	.1742	.0661	.0437	.3046

This implies that the female nurses experienced high compassion fatigue that the male nurses. This means that the female nurses are closer and attends to the healthcare needs of the patients more than the male nurses. The study *rejects* the null hypothesis that there is no significant difference in compassion fatigue when considering sex. This study is in support of the findings of Sacco et al. (2015) which states that there is a significant difference in sex in relation to compassion fatigue, however, the finding of Khan, Malik, and Khan, (2015) contradict the results of this study which states that there was no effect of gender on the compassion fatigue.

The difference between Resilience when considering Sex

The study investigated the significant difference of sex on the resilience of the respondents. The outcome of this scrutiny showed that there was a *significant difference* between female and male (Female mean= 2.732, SD=.4943, Male mean= 2.523, SD = .5420) and its *statistically significant* p=.0.002 at equal variance assumed.

Table 4. **T-Test of Resilience on Sex**

Independent Samples Test

	Levene's Test for	t-test for Equality of Means

	Equality of Variances							95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Resilience	Equal variances assumed	.391	.532	3.085	247	.002	.2088	.0677	.0755	.3421
	Equal variances not assumed			3.005	168.323	.003	.2088	.0695	.0717	.3460

This implies that female nurses have the adopt more resilience measures towards compassion fatigue than there male registered nurses. The study *reject*s the null hypothesis that there is no significant difference in resilience when considering sex. The results of the study are in support of the findings of Sull, Harland, and Moore (2015) which showed that on gender, the female is more resilient

The difference in Compassion Fatigue when considering Age

A one-way between-groups analysis of variance was conducted to explore the impact of age on compassion fatigue. Participants were divided into three groups according to their age Group 1: 18 to 29 years; Group 2: 30 to 44 years; Group 3: 45 years and above. There was a *statistically significant difference* at the p> 0.00 level in compassion fatigue score the age group: F= 7.6. Despite reaching statistical significant the actual difference in mean score between the groups was *small*. The effect size, calculated using eta squared, was .05. Post- hoc comparison using the LSD test indicated that the mean score for Group 1 (M=3.082, SD=.3251) significantly different from Group 3 (M= 2.791, SD= .5158). Group 2 (M= 2.975, SD= .4024) did not show differ significantly from either the Group 1or 3. The study *rejects* the null hypothesis that there is no significant difference in compassion fatigue when considering age. This study is in support with Sacco et al (2015) which showed that there is a significant difference in age in relation to compassion fatigue

Table 5. **ANOVA Table for compassion fatigue when considering Age**

	Compassion fatigue				
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.409	2	1.705	7.579	.001

Within Groups	55.331	246	.225	
Total	58.740	248		

Table 6. **Multiple comparisons using LSD using ANOVA**

Dependent Variable: C.F
LSD

(I) Age		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
18-29 years	30-44years	.1068	.1102	.333	-.110	.324
	44 and above years	.2911*	.0801	.000	.133	.449
30-44years	18-29 years	-.1068	.1102	.333	-.324	.110
	44 and above years	.1842*	.0913	.045	.004	.364
44 and above years	18-29 years	-.2911*	.0801	.000	-.449	-.133
	30-44years	-.1842*	.0913	.045	-.364	-.004

*. *The mean difference is significant at the 0.05 level.*

The difference in Resilience when considering Age

A one-way between-groups analysis of variance was conducted to explore the impact of age on resilience. Participants were divided into three groups according to their age Group 1: 18 to 29 years; Group 2: 30 to 44 years; Group 3: 45 years and above. There was *no statistical difference* in the age group with the F=1.532 and p> .218 when the significant level was placed at p>0.05. The mean score of the age groups are Group 1(M= 2.554, SD= .4982) Group 2 (M= 2.761, SD= .2527); Group 3(M= 2.664, SD=.5589). The study *fails to reject* the null hypothesis that there is no significant difference in resilience when considering age. The study supported by the findings of Sull, Harland, and Moore (2015) which showed that there was no significant difference in age on resilience.

Table 7. **ANOVA Table for Resilience when considering Age**

Resilience

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.827	2	.413	1.532	.218
Within Groups	66.379	246	.270		
Total	67.206	248			

The difference in Compassion Fatigue when considering Clinical Experience

An independent-samples t-test was conducted to compare the clinical experience scores for 1-10 years and 11and above years on compassion fatigue. There was *no significant* difference in scores for 1-10 years (M = 2.840, SD = .5110) and 11years and above (M = 2.905, SD = .4361; t (195.2)= .-953, p = .342, two-tailed). The magnitude of the differences in the means (mean difference = -.0590, 95% CI: –.1810 to -.0631) at equal variance not assumed. This study *fails to reject* the null hypothesis that there is no significant difference in compassion when considering clinical experience. The results of the study contradict the finding of Sacco et al (2015) which states that there is a significant difference in clinical experience in relation to compassion fatigue.

Table 8. **T-Test of compassion fatigue when considering Clinical Experience**

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Compassion Fatigue	Equal variances assumed	16.583	.000	-.906	247	.366	-.0590	.0651	-.1871	.0692
	Equal variances not assumed			-.953	195.153	.342	-.0590	.0619	-.1810	.0631

The difference in Resilience when considering Clinical Experience

An independent-samples t-test was conducted to compare the clinical experience scores for 1-10 years and 11and above years on resilience. There was *significant difference* in scores for 1-10 years (M = 2.713, SD = 0.5445 and 11years and above (M = 2.55, SD = 0.455; t (247)= 2.366, p = .019, two-tailed). The magnitude of the differences in the means (mean difference = .1631, 95% CI: .0273 to .2989) at equal variance assumed. This study *rejects* the null hypothesis that there is no significant difference in clinical experience on resilience. This implies that it does not matter the number of clinical experience of the nurses they all have some level of resilience when considering clinical experience. The results support the findings of Rushton et al (2015) which states that there is a significant difference in clinical experience in relation to resilience.

Table 9. **T-Test of Resilience when considering Clinical Experience**

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Differen ce	Std. Error Differe nce	Lower	Upper
Resilience	Equal variances assumed	3.145	.077	2.366	247	.019	.1631	.0689	.0273	.2989
	Equal variances not assumed			2.504	198.6 13	.013	.1631	.0651	.0347	.2916

Independent Samples Test

DISCUSSION

The results of the study suggest that registered nurses in ghana experience high compassion fatigue. in preventing the compassion fatigue of the nurse's measures should be instituted to increase the resilience level of the nurses. healthcare administrators should put in measures to reduce the compassion fatigue of the nurses. Education and relaxation activities can be instituted to nurses who experience compassion fatigue. Further researchers should explore other variables in relation to the resilience to help reduce the compassion fatigue of nurses.

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