EXPLORING SECONDARY TRAUMATIC STRESS IN MENTAL HEALTH NURSES WORKING IN KIGALI, RWANDA

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ABSTRACT

A unique feature of mental health nurses' work involves exposure to clients' descriptions of and reactions to trauma, and these experiences may indirectly cause distress to the nurse. This phenomenon has been termed "secondary traumatic stress" and is the focus of the study.

The aim of the study was to explore secondary traumatic stress experienced by nurses working in mental health services in Kigali, Rwanda. A quantitative study was conducted at Ndera Psychiatric Hospital, Kigali, Rwanda, using a convenience sample of 50 nurses who provided mental health care to trauma survivors and mentally ill patients. A questionnaire was compiled consisting of the Trauma Attachment Belief Scale (TABS) and several open ended questions pertaining to the respondents' current work situations and psychosocial support systems.

The majority of respondents' scores were situated between T-scores of 60 and 80, which are considered to indicate very high or extremely high risks. With regard to other-safety, 98.0% (n=49) of the respondents scored 80 or above which, again, is extremely high and may indicate a strong disruption in these areas. Supportive supervision, with sustained open communication channels, should be provided to nurses providing mental health services in Rwanda. The majority of respondents' TABS scores were situated between T-scores of 60 and 80, which are considered to indicate very high or extremely high risk.

KEYWORDS: Mental health, mental health nurse, Rwanda, secondary traumatic stress

BACKGROUND INFORMATION

Nurses working in mental health care hear stories on a regular basis of extreme human suffering and observe the emotions of fear, helplessness and horror registered by their clients. The vivid recounting of trauma by the survivor and the clinician's subsequent cognitive or emotional representation of that event may result in a set of symptoms and reactions that parallel Post Traumatic Stress Disorder (PTSD) (such as re-experiencing

the event, avoidance and hyper-arousal) (Stoesen, 2007). Traumatic stress may be a result of physical events (violence, for example physical abuse) and it can also be of a psychological nature (learning that one has a terminal disease such as cancer). Most research on traumatic stress has, to date, focused on the effects of traumatic stress on the primary victims and not on the secondary victims (those who provide care and support). It has been suggested that a unique feature in the work of mental health nurses is exposure, through their role as therapists, to clients' descriptions of and reactions to trauma, and that these experiences may actually indirectly cause distress and traumatisation to the nurse. This proposed phenomenon has been termed "secondary traumatic stress" and is the focus of the current study (Rothschild, 2006). Secondary traumatic stress is an important occupational hazard in the mental health nursing profession as the effects accumulate and may change the way in which the nurses view themselves and their world (Stoesen, 2007). Recent research demonstrates that these occupational duties may cause psychological symptoms in the clinicians who bear witness to the survivors' accounts of trauma. Secondary traumatic stress is defined as indirect exposure to trauma through a first-hand account or narrative of a traumatic event (Stoesen, 2007). Secondary traumatic stress is also referred to as compassion fatigue and vicarious traumatisation (Pearlman & McKay, 2008). The effects of secondary traumatic stress experienced by nurses in the workplace and the support systems available to them need to be investigated, as nurses who are overburdened with work, stress and their own trauma, have few resources left to care for and comfort others (Stoesen, 2007).

Rwanda experienced genocide during the months of April to July 1994, fourteen years prior to conducting this research. The Rwandan genocide was the systematic murder of Rwanda's Tutsi minority and the moderates of its Hutu majority, and it was both the bloodiest period of the Rwandan Civil War and one of the worst genocides in history (Schaal & Elbert, 2006). Victims were often massacred by the militia members while trying to hide in churches and school buildings and ordinary citizens were called upon by local officials and by government-sponsored radio to kill their neighbours (Waller, 2006). Those who refused to kill were often killed themselves, and people who tried to escape were hunted and hacked to death with machetes or shot (Lang, 2006). In addition to the killings, rape and other forms of physical and psychological violence and torture were committed.

Nurses form the largest group of health workers in Rwanda (MOH, 2006) and nurses working in mental health services are the first point of contact for psychologically traumatised clients and often bear witness to the severe physical and emotional trauma experienced by their clients. Mental health nurses in Rwanda are not equipped or trained to manage these demands made on their own mental health and the situation is exacerbated by the shortage of mental health nurses in Rwanda and the large numbers of mental health clients seeking treatment (Ndera Psychiatric Hospital, 2007). As most of the mental health nurses working with trauma survivors in Rwanda are themselves survivors of the genocide, the effects of secondary traumatic stress experienced by these nurses need to be investigated (Neugebauer et al., 2009).

RESEARCH METHODS

For this study a non-experimental quantitative approach, with a descriptive design, was used. The aim of the study was to describe the secondary traumatic stress experienced by nurses working in mental health services in Kigali, Rwanda. For this purpose a questionnaire was developed by the researcher which comprised the Trauma and Attachment Belief Scale (TABS) as well as open ended questions regarding the respondents' work situations and psychosocial support systems. The TABS, previously known as the Traumatic Stress Institute Belief Scale (TSI-BS), is a self-reporting instrument intended to assess the disrupted cognitive schemas in people working with traumatised clients (Pearlman & Saakvitne, 1995). This instrument measures beliefs which are related to the five needs areas that are sensitive to the effects of traumatic experiences, namely safety, trust, esteem, intimacy, and control (Pearlman, 2003). These five areas have two dimensions, self and other, which, in turn, yield ten subscales. Each of the ten subscales consists of a number of different items and the specific items which shape the ten subscales are made up as follows; self-safety (13 items), other-safety (8 items), self-trust (7 items), other-trust (8 items), self-esteem (9 items), other-esteem (8 items), self-intimacy (7 items), other-intimacy (8 items), self-control (9 items) and other-control (7 items). The TABS comprise 84 items and a response is required to each item, using a 6-point likert scale with the scale ranging from 1 (disagree strongly) to 6 (agree strongly) with positive items being reversed scored.

Permission to use this instrument was obtained from Western Psychological Service. The questionnaire was translated into French by the researcher and verified by the Department of French at the University of KwaZulu-Natal, South Africa.

This study was carried out in 2008 at Ndera Psychiatric Hospital which is located in the Gasabo district in Kigali City, the capital of Rwanda, and is a national referral inpatient mental health care facility. The target population for this study was all the nurses (67) currently working at this hospital, and a convenience sample of 50 respondents was selected. The inclusion criteria were; having had additional training in psychiatric nursing or trauma counselling, currently working full time at Ndera Psychiatric Hospital with at least six months' experience and being directly involved in the counselling of clients at this institution. A pilot study was carried out on ten mental health nurses in Rwanda who did not participate in the study and whose information was not included for analysis. The TABS has shown strong reliability and validity (Pearlman & Saakvine, 1995).

The researcher held an information session with the nurses and managers prior to data collection to explain the study and to negotiate a convenient time to collect data. Individual appointments were then made with the nurses willing to participate and the questionnaire was then hand delivered. Due to the sensitive nature of the questions asked, the researcher (a trained mental health nurse) provided his contact details to the respondents. This gave participants access to his psychological support should they feel

the need. The data were analysed using the Statistical Package for the Social Sciences (SPSS) version 15.0.

ETHICAL CONSIDERATIONS

Ethical approval was obtained from the ethics committee of the University of KwaZulu-Natal and permission to conduct the research was obtained from the authorities of Ndera Psychiatric Hospital in Kigali, Rwanda. Confidentiality and anonymity were maintained by ensuring that the questionnaires were anonymous and the data collected could not be traced back to individuals. Participation in the study was voluntary and written informed consent was obtained from all the respondents. The respondents were informed that they could withdraw from the study at any time.

RESEARCH FINDINGS

The total population of 67 nurses working at Ndera Psychiatric Hospital was identified to participate in the study and 50 (74.6%) nurses completed questionnaires.

Demographic data

The demographic characteristics of the respondents are shown in table 1. Of the respondents, 76.0% (n=38) had personally experienced the genocide while 10.0% (n=5) had experienced accidental disaster in their past, 8.0% (n=4) had experienced other emotional and psychological abuse and 6.0% (n=3) reported that they had experienced some form of natural disaster (e.g. flood, earthquake). Fifty percent (n=25) of the respondents spent 10 hours or less per week in counselling service, 42.0% (n=21) spent 10-20 hours per week in counselling services while only 8.0% (n=4) of the respondents spent 30 hours per week in counselling services.

Table 1: Demographic characteristics

Demographic characteristics		Frequency
Gender	Female	32 (64.0%)
	Male	18 (36.0%)
Age	25 years and less	5 (10.0%)
	26 – 35 years	40 (80.0%)
	36 – 45 years	3 (6.0%)
	45 years and more	2 (4.0%)
Marital status	Single	32 (64.0%)
	Married	18 (36.0%)
	Separated	0 (0%)
	Widow	0 (0%)
Qualifications	Enrolled nurse	17 (34.0%)
	Registered nurse	30 (60.0%)
	Honors	3 (6.0%)
	Master's	0 (0%)
Experience as a nurse	0 – 5 years	18 (36.0%)
	6 – 10 years	23 (46.0%)
	11 – 20 years	5 (10.0%)
	More than 20 years	4 (8.0%)

Trauma and Attachment Belief Scale (TABS)

The TABS is made up of 84 items and the respondents scored each item using a 6-point Likert scale, ranging from 1 (disagree strongly) to 6 (agree strongly) with positive items being reversed scored. According to Pearlman (2003), scoring for TABS subscale should be interpreted as follows; 29 or less = extremely low risk (very little disruption), 30-39 = very low risk, 40-44 = moderate risk, 45-55 = high risk, 60-69 = very high risk and 70 or more = extremely high risk (substantial disruption). Thus, the higher the scores, the greater the risk factor for secondary traumatic stress. It has been suggested that the cut-off point for secondary traumatic stress is 50, above which moderate or severe disruptions are indicated. The subscale scores were converted to T scores and these are shown in table 2. The subscale other-safety had the highest mean at 79.6, whilst self-trust had the lowest at 63.7.

To investigate the relationship between the subscales, pair-wise correlation coefficients were computed. The correlations other-safety versus self-esteem (r=.294), other-safety

versus other-esteem (r=.285) significantly correlated at .05% and other-safety versus other control (r=.396) was significantly correlated at .01% level of significance. A scatter plot was used to provide a visual representation of the relationship between variables, for example, self intimacy versus other control. Pairs of scores for the ten subscales were plotted on a graph by placing dots to indicate where each pair of variables relating to the subscales intersected. Inspection of the scatter plot denoted that other-safety had a strong linear relationship with other subscales.

Table 2: T scores for the subsections of the Trauma and Attachment Belief Scale

Subscales	Mean and Std deviation
Other – Safety (OS)	79.6 ± 3.0
Self – Control (SC)	78.9 ± 2.6
Other – Control (OC)	77.0 ± 5.8
Self – Esteem (SE)	72.5 ± 3.7
Other – Intimacy (OI)	72.2 ± 4.5
Other – Esteem (OE)	71.5 ± 4.8
Self – Safety (SS)	69.9 ± 3.0
Self – Intimacy (SI)	67.0 ± 4.6
Other – Trust (OT)	65.2 ± 4.8
Self – Trust (ST)	63.7 ± 5.1

Personal trauma history and secondary traumatic stress

To explore a relationship between personal trauma and the Trauma Attachment Belief Scale on ten subscales, a plot was used to graphically illustrate the relationship between the personal trauma history of the respondent and the ten subscales. The majority of the respondents who had reported a personal trauma history in their lives were located on the top of the box plot between the T score of 60 and 80. Using a composite box plot, the descriptive statistics of the sample were denoted. The distribution of the respondents on the TABS, according to their personal trauma history, looked abnormal. The majority of respondents' scores were situated between T scores of 60 and 80, which are considered as very high or extremely high risk. With regard to other-safety, 98.0% (n=49) of the respondents scored 80 or above which, again, is extremely high and may indicate a strong disruption in these areas.

Work conditions and secondary traumatic stress

To explore the relationship between variable hours spent on counselling service and the ten subscales, a Kruskal-Wallis test was used. The means rank for hours spent in counselling service did not differ significantly for the ten subscales. This indicated that there was a relationship between counselling time and secondary trauma in nurses.

Support systems

Forty-six percent of respondents (n=23) indicated that there was no psychological support system for nurses working in the mental health services in Rwanda, 30.0% (n=15) indicated that there was a psychological support system and 24.0% (n=12) did not know if such a system existed.

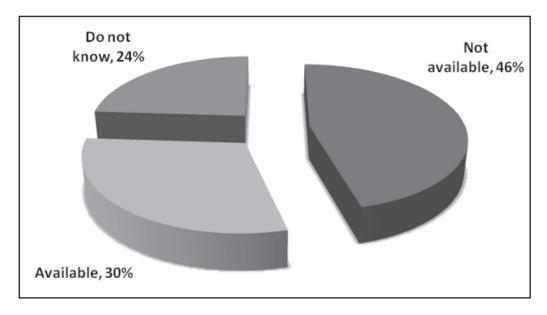


Figure 1: Availability of support systems

Regarding types of support systems used by mental health nurses, 30.0% (n=15) indicated that support was provided by a peer supervision group; 26.0% (n=13) by talking to friends or family; 24.0% (n=12) by psychiatrists or psychologists working in the mental health system; 12.0% (n=6) by psychiatric nurses working in the same service and 8.0% (n=4) reported using a structured workplace system.

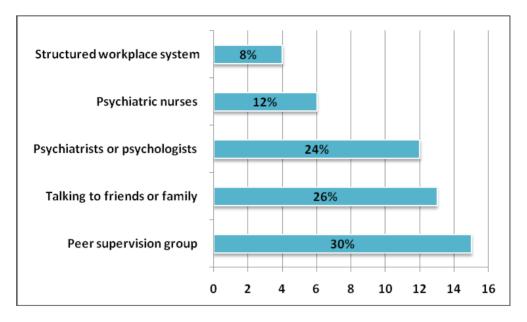


Figure 2: Types of support systems used by mental health nurses in Rwanda

When asked what would assist the nurses in managing their secondary traumatic stress, 36.0% (n=18) reported that better working conditions would make a difference, 24.0% (n=12) suggested that sensitivity shown by their non-mental health colleagues and management would help, 20.0% (n=10) reported that debriefing would assist, 12.0% (n=6) reported a better salary would help and 8.0% (n=4) suggested that help with transport would be beneficial.

DISCUSSION OF RESEARCH FINDINGS

The total scores were high in all areas of beliefs. This could indicate that there is a disruption in the cognitive schema of the nurses providing mental health services in Rwanda. The mean scores of most respondents ranged from very high to extremely high in all areas of cognitive beliefs. Of the respondents, 98.0% (n=49) had a T score of 80 for other-safety, which was extremely high. Pearlman (2003) indicates that a T score of 70, or more, is deemed extremely high and indicates a substantial disruption in cognitive schema. A personal history of trauma is a contentious factor in research findings to date. Pearlman and McKay (2008) reported that a personal history of past trauma was a risk factor in the development of secondary trauma and suggested that the personal trauma history of trauma therapists requires further study.

The time spent counselling trauma victims was reportedly the best predictor of trauma scores among counsellors (Bober & Regehr, 2006). Therapists with a higher percentage

of trauma survivors in their caseload reported more disrupted beliefs (Mouldern & Firestone 2007), more STS symptoms and more self-reported secondary traumatisation.

Wilson and Drosdek (2007) emphasise that the support of family and significant others is important for the individual to maintain a healthy physical, psychological and social life and that the absence of this support creates feelings of alienation and loneliness in the individual. Extra workloads that nurses carry, because of staff shortages, result in high levels of stress. Osofsky et al. (2008) are of the opinion that management and the employer have a responsibility to ensure that the workplace remains a healthy and supportive environment. In support of this, Traynor and Wade (2008) state that decreased job satisfaction is a by-product of the traumatic stress that individuals experience because they do not have support systems they can rely on to assist them deal with their problems. According to Traynor and Wade (2008) nurses were more accepting of nurses as supervisors than psychiatrists, psychologists or clergy. These findings may be attributed to the fact that the respondents were themselves mental health nurses and were knowledgeable about the role of psychiatric nurses in psychological support.

CONCLUSIONS

There is a general consensus in the literature that working with traumatised individuals in mental health services may negatively impact the well-being of therapists. This study explored the secondary traumatic stress experienced by nurses working in mental health services in Kigali, Rwanda, and the majority of the respondents' scores indicated very high or extremely high risks for post-traumatic stress. The Rwandan genocide, one of the biggest in human history, not only led to unimaginable personal loss and grief, but also to the disappearance of all kinds of human resources, experiences, talents and staffing needed for the efficient functioning of a whole society. Fourteen years later, the consequences are still apparent.

RECOMMENDATIONS

Supervision should be made compulsory for all nurses working in mental health service in Rwanda, especially those who treat the traumatised patients. With regular supervision young inexperienced nurses who are recruited to work in mental health services should be oriented and supported by having open channels of communication with the supervisor. Educational programmes on secondary traumatic stress need to be developed for the nurses, identifying triggers, symptoms and coping strategies. In these programmes nurses recruited to work in mental health should be informed of the potential risk of developing symptoms related to secondary traumatic stress. Caring for the staff should be included in the organisation's strategic plan as a key focus area in order to ensure that their most valuable asset, their human resources, are retained and feel valued. Nurses should be encouraged to attend personal development courses such

as stress management, time management and conflict resolution courses to acquire the skills needed to deal with challenges in life. A qualitative study should be conducted on the internal process related to understanding the cognitive effects that nurses experience when working with traumatised individuals.

LIMITATIONS OF THE STUDY

Although the sample size was adequate for the statistical procedures used in the current study, its size may limit generalisation. Also, the questionnaires (including the TABS) were translated into French, and this has not been previously validated.

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