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# Work environment in the South African military health service experienced by nurses: A qualitative study

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ABSTRACT

*Background:* The South African Military Health Service (SAMHS), which is an authoritarian and rigidly hierarchical corporate organisation, provides health services to soldiers, military veterans and their dependents. Moreover, it has its own set of rules and regulations, allowing little room for initiative and freedom of action on the part of nurses.

*Objective:* In the study, we aimed to explore and describe the experiences of nurses working in South African Military health institutions with regard to their work environment.

*Methods:* A descriptive phenomenological research design was used. Sixteen nurses from three hospitals and eight clinics that serve the SAMHS in various parts of the country were purposively selected, and individual semi-structured interviews were held. Data was transcribed and analysed using Tesch's methodology.

*Results:* The nurses highlighted concerns associated with the culture and traditions of the military, including adjustment problems because of inadequate induction, inappropriate use of military rank by senior officers, dual role conflict and a lack of professional development opportunities. Participants highlighted effective communication between staff, adequate staffing and development opportunities as contributing toward a healthy work environment.

*Conclusion:* According to the participants, a rigid, authoritarian and controlled military culture contributed to an unhealthy work environment for the practice of military nursing. However, attributes contributing to a healthy work environment were also described by the participants. The study findings provided a basis for recommendations for induction programmes; communication strategies; personal empowerment; planning and optimising adequate resources; and personal and professional development opportunities through conferences, meetings, training and workshops for nurses.

## 1. Introduction

The importance of healthy work environments that are caring and supportive to health professionals within their respective health departments is widely acknowledged by governments. This follows from the mounting evidence that satisfying work environments are imperative to enhance job satisfaction. Moreover, they contribute to the successful recruitment and retention of health professionals; the maintenance of an organisation's financial viability in competing with its rivals; and improving the quality of patient care (Aiken, Clarke, & Sloane, 2002; Rafferty, Ball, Aiken, & Fagin, 2001; Choi, Flynn, & Aiken, 2012; Aiken et al., 2011; American Association of Critical-Care Nurses, 2015). Furthermore, a healthy work environment is both collaborative and productive, as it enables nurses and other healthcare staff to meet their personal needs if they are empowered to fulfil their career potential. A work environment, where health professionals are protected from psychosocial and physical harm, will ensure that they provide safe and high-quality patient care (Aiken et al., 2013).

The Registered Nurses Association of Ontario (2008, p. 13) defines a healthy work environment as "a practice setting that maximises the health and well-being of professional nurses, quality patient/client outcomes, organisational performance and societal outcomes". A healthy environment includes workplace safety; appropriate staffing levels; fair and manageable workloads; equal opportunities and treatment; organisational support in terms of facilitating opportunities for professional development and career advancement; effective

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communication between staff, recognition; and adequate equipment, supplies and support staff (Aiken et al., 2002, 2011, 2013; Registered Nurses' Association of Ontario [RNAO], 2018). In addition, a healthy work environment is necessary for all practising health professionals (Twigg & McCullough, 2014).

Studies identify various essential components of a healthy work environment, which include the important role of nurse leaders in facilitating this and the engaging of healthcare staff through non-hierarchical decision-making (Aiken et al., 2013; Twigg & McCullough, 2014; Ajeigbe, McNeese-Smith, Leach, & Phillips, 2016; Panunto & Guirardello, 2014; Maurício et al., 2017). In addition, effective leadership that fosters staff leadership growth and communication between health professionals within the organisation is critical. Nurses, in particular, should participate in decision-making processes concerning patient care and their work environment over which they should have autonomy and control in an organisation with adequate numbers of staff as well as an appropriate skill mix. The efforts and achievements of the staff should be recognised and rewarded, and collegial relationships should exist within the healthcare team.

Nurses make an important contribution in health professional teams toward ensuring that the health system achieves its goals of providing access to sustainable and affordable services as well as high-quality patient care (Benatar, Sullivan, & Brown, 2017). A sufficient supply of nurses is central to sustaining these goals (World Health Organization, 2014). The safety, recruitment and retention of nurses rely heavily on the creation of healthy work environments (North Carolina State Board of Nursing, 2015).

Military nurses play an important supportive role in the success of the military health system. The nature and environment of military nursing is unique in nursing practice and distinguishes the military nurse from those in the civilian sector. Military nurses not only provide patient care in military hospitals and clinics but also have to sustain the health of deployed soldiers in a variety of contingencies. They may be called on to provide health care in an austere environment with limited logistical and collegial resources. This demands a level of versatility and autonomy slightly above that of civilian nurses (Finnegan et al., 2016). During wartime, military nurses work in hostile and dangerous environments, often under enemy fire (International Committee of the Red Cross, 2011). Working in conditions of warfare can be both emotionally/psychologically challenging and demands high levels of resilience (Bastian, 2017; Elliott, 2015).

Another aspect of the military nursing environment that makes it unique is the rank structure. This is the hierarchical order of military importance, which tends to be rigid and likely to stifle autonomy (Kelly, 2010; Deibler, 2012). When nurses first enter the military, they do so at the lowest officer rank, and are thus restricted in decision-making and autonomy (Center, 2017). Research shows that this leads to an unhealthy nursing work environment, indicating that employer organisations should receive support in creating a healthy one (Nayback-Beebe et al., 2013; Black, Balneaves, Garossino, Puyat, & Qian, 2015). Rankin (2011) maintains that to learn what nurses in a facility or organisation view as healthy will assist the administrator in creating and maintaining an environment to meet their needs. In addition, Rankin (2011) observes that policies and systems implemented to create a healthy work environment without the prior consultation of nurses will ultimately result in the dissatisfaction and frustration of both nurses and administrators.

A study conducted among registered nurses in the United States army bases found that unfavourable nursing practice environments were significantly related to job dissatisfaction, emotional exhaustion, intent to leave, and a poor quality of care (Patrician, Shang, & Lake, 2010), which underlines the need to creating a healthy work environment. Feedback of a working group on creating a healthy nursing work environment in a military hospital Intermediate Care Unit in the United States identified the following factors that could contribute to its realisation: skilled communication; appropriate collaboration; effective decision-making; sufficient staffing; significant credit; and reliable leadership (Nayback-Beebe et al., 2013). Staffing in particular seems to have a significant effect on the military work environment. A better nurse skill mix as well as sufficient hours of care and staff resulted in lower patient and nurse adverse events in 57 units in 13 military hospitals (Patrician, 2011).

In South Africa, the South African National Defence Force (SANDF), which falls under the Department of Defence (DoD), has a duty to provide health services to its employees. This is done through its arm of service, the South African Military Health Service (SAMHS), which comprises hospitals and sickbays (referred to as 'clinics' in this study) throughout South Africa. The consumers of these health services are the members of all arms of services of the SANDF, which includes the Army, the Air force, the Navy, the SAMHS, the military veterans and their respective dependents (DoD, 2012; Kramm, 2017). Similar to other defence structures globally, the SAMHS is a system where soldiers operate within a strict military code of conduct in a controlled environment that, like any other conventional force or corporate organisation, is authoritarian and rigidly hierarchical, with a set of rules and regulations, which allows little room for initiative and freedom of action (Mompeyssin, 2014).

Studies have been conducted on how military nurses experience being deployed in war zones or returning from war (Bastian, 2017; Elliott, 2015). The study conducted by Bastion (2017) revealed that during deployment, military nurses experienced both physical and mental hardships, emotional struggles, and ethical dilemmas resulting in mental health problems, including stress, anxiety, panic, feelings of guilt, depression, posttraumatic stress disorder (PTSD), and insomnia. In addition, Elliott (2015) found that the emotional struggles and losses that nurses experienced made it difficult to readapt to a different environment when returning from war. This affected their ability to cope with the demands of their job either during or after deployment. However, little evidence is available on how military nurses working permanently in hospitals and clinics in a non-war zone experience this environment, especially in South Africa. Based on the above assumptions, we therefore decided to explore and describe the experiences of nurses working in South African-based military health institutions with regard to their work environment.

## 2. Methods

### 2.1. Study design

This study adopted a qualitative research design with a descriptive phenomenological approach based on Husserl's philosophy that views experience as perceived by human cognisance as having value and influencing individuals' actions as they go about their daily lives (Lopez & Willis, 2004). Phenomenology is focused on the 'subjective experience of individuals and groups' in an effort to reveal the world as experienced by research participants through their 'life world stories' (Kafle, 2011). Descriptive phenomenology focusses on a description of phenomena as humans experience them and includes four steps: bracketing, intuiting, analysing and describing (Polit & Beck, 2012). In this study, we described and analysed the experiences of participants, who were nurses employed in the military service. The data collection consisted of their stories of how they experienced the work environment within their world of South African-based health institutions that form part of the SAMHS.

The entire study was conducted by the first author, a female, who was a former employee at the SAMHS at the time of the study, which was supervised by the second and third authors who were experienced in conducting qualitative research. For the purpose of this article, we only present the first phase (interviews) of the study.

### 2.2. Participants

The study was conducted within the SAMHS at three (n = 3) military hospitals and linked clinics in different provinces of South Africa. We purposively selected these sites, which ensured that the study participants would be diverse, as they worked in different military hospitals and clinics with a variety of military experience and exposure. Furthermore, the aim of selecting multiple sites in different provinces was to compare and contrast the participants' experiences, with a view to establishing commonalities that might inform best practice guidelines for a healthy work environment for professional nurses in the SAMHS. A total of sixteen (n = 16) participants were interviewed for the study.

The inclusion criteria for participation in the study were as follows: the participant had to be a nurse who was a practising member of the profession and a soldier in full-time employment working in a health institution within the Department of Defence. Moreover, he/she had to have worked with military patients for at least nine months.

After ethical clearance was obtained, written information about the study was given to Officers Commanding in charge of the military hospital or clinic, who acted as gatekeepers. They, in turn, informed the nurse managers, who then notified the nurses of the research study and the inclusion criteria. They also provided the potential participants with the contact details of the first author. The nurses who were willing to participate indicated their agreement and provided details, so they could be telephonically contacted by the first author. After introducing herself, the first researcher explained the study's purpose and the participants' rights, checked whether the participants complied with the above-mentioned inclusion criteria and selected an appropriate place and time for the interviews to be conducted with the volunteers. The recruitment of participants was done until data saturation was achieved; after the sixteenth interview, no additional data was obtained. No participants dropped out during the interviews, and no follow up interviews were required.

### 2.3. Data collection

The first author, who has a Masters in Nursing and is a retired professional nurse from SAMHS, conducted the data collection, during a four-month period (November 2014 to February 2015) using semi-structured individual interviews lasting 20–40 min. The interviews were held at a quiet place at the hospitals or clinics and were conducted in English, as the participants were proficient in this language. No established relationship existed between the researcher and the participants prior to the interviews.

The following main question was posed: 'Tell me how you experience working in the SAMHS as a nurse?' Probing was done for clarification purposes regarding the participants' understanding of a healthy work environment and what factors would hinder or facilitate this in the SAMHS. Field notes were written after all interviews, and the interviewer's observations were recorded as part of the notes taken. The interview schedule was pilot tested with three purposively selected nurses from one military hospital and two clinics in the Gauteng province. No changes were required in terms of the interview questions or methodology to be used. Thus, the same guiding question was used for the main research, and the results of the pilot study were included with those of the main study.

### 2.4. Data analysis

The data captured on audiotapes during interviews were transcribed verbatim and the field notes were typed out by the first author. The advantage of researchers transcribing their interview recordings is that they immediately become immersed in the data (Gray, Grove, & Sutherland, 2017). After recording and organising the data, researchers are able to establish 'a general sense of the information and an opportunity to reflect on its overall meaning' (Creswell, 2014). The field notes were analysed as part of the ongoing data collection, as they generated a series of memos that assisted with gathering and interpreting further observations to obtain a sense of the context in which the data was conducted. The coding process then started, using Tesch's method, where all transcripts were carefully read, possible topics were written down per interview, and a list of topics was made, which was checked with the transcriptions. Descriptive wording for the topics were found and converted into categories to which data were added, and re-coding was done as required (Creswell, 2014) with a view to identifying themes and sub-themes. In other words, once the initial coding was done by the researcher, an independent coder with expertise in qualitative research analysed the raw data independently for the emergence of themes that were prevalent amongst those interviewed. Subsequently, consensus was reached between the authors in a consensus discussion held at Nelson Mandela University to ensure the trustworthiness of the identified themes.

### 2.5. Ethics

We obtained ethical clearance from the Nelson Mandela University (ethics number H13-HEA-NUR-020), and permission from the General Officers Commanding and Officers Commanding to conduct research in their respective units. Ethical principles of non-maleficence and autonomy were upheld as, respectively, the study did not cause harm to participants from whom informed consent was obtained. The right of the participants to withdraw from the study whenever they wished, without consequences, was assured.

### 2.6. Trustworthiness

Lincoln and Guba's model of trustworthiness (1985), as cited in Babbie and Mouton (2011), consisting of credibility, transferability, dependability and confirmability, was used to ensure the validity of the study. We developed an interview schedule that was reviewed by an expert in qualitative data and was piloted by interviewing three nurses to ensure it generated the data needed to answer the aim of the study. The identification of the researcher's assumptions or beliefs prior to conducting the study was done. Moreover, no detailed literature review was conducted prior to initiating the research, which did not have specific objectives other than to describe the lived experience of the participants in relation to the topic of study. Credibility requirements were adhered to, as data analysis was done with the aid of an independent coder, following which a consensus discussion was held to confirm the main themes and sub-themes. In presenting the data, confirmability conditions were met, as we stayed as close to the evidence as possible. In this study, neutrality was determined by the audit trail that was operationalised by validity checks, note taking, and verbatim transcription.

## 3. Results

Interviews were conducted with 16 participants, as described above. The majority of the participants were female (n = 10). Their age ranged from 24 to 59 years, while their work experience in the SAHMS ranged from 4 to 20 years. The researcher identified six major themes that reflected the nurses' experience of working in the SAMHS. These are outlined in Table 1 below.

These themes are discussed as follows:

## 4. Problems of adjusting to military culture because of inadequate induction

The DOD's military environment is unique in that it is a closed system and a society that is necessarily removed from civilian life. It is a controlled environment where soldiers operate within strict military

**Table 1**
Themes of the study.

| |
|---|
| Theme 1: Problems of adjusting to military culture because of inadequate induction |
| Theme 2: The military rank structure interferes with the nurses' autonomy |
| Theme 3: Conflict between the dual roles as soldier and nurse |
| Theme 4: Lack of professional development and delays in promotions lead to problems of command and control for nurses |
| Theme 5: A need for effective communication and support within the multi-disciplinary team and management |
| Theme 6: A need for adequate resources necessary in creating a healthy work environment |

codes of conduct, and where their life and well-being depend on following orders and the support of fellow soldiers. Therefore, it is necessary that those who serve in the military for the first time are assisted in gaining a general understanding of the institution in order for them to be able to work efficiently within the armed forces. This unique culture is inculcated through induction, training and practice over time. The nurses interviewed stated that the two weeks' induction training they received did not prepare them adequately to function as competent officers in the military environment. This view is evident in the following quote:

*"When I got here, I did not know about the military. I was just a professional nurse. But I was only trained for two weeks, induction. I was taught to drill and how to salute but I was not competent. I did not know who to salute and who should salute me … it was a bit frustrating, some of my seniors would reprimand me for not saluting … juniors would laugh at me … , the clinical part of it … is exactly the same … the different part is the way they run their things … the regulations … discipline, uniforms and the rules … the way they do things … you are not supposed to do stuff … you know how military things are. They are completely different and even when you do orderings" [Interview 6].*

Not having had adequate induction, training and practice also had consequences for effective collaboration with colleagues, as reflected by one of the participants:

*"I am one of those officers who are failing to discipline juniors because I am not sure if I am right and whether I would get support because I don't have the knowledge" [Interview 11].*

Specifically, newly employed nurses from outside the military struggled to adapt to the military environment because of the inadequate military induction training they received on joining the defence force. This made them feel insecure and inferior.

### 4.1. The military rank structure interferes with the nurse's autonomy

The participants agreed on how the rank structure in the military interfered their performing of their nursing duties. They claimed that nurses were disadvantaged and disempowered by the lower military rank they held of captain. As ranks are linked to authority and status in the military, their lower rank meant that participants sometimes felt that their professional opinion was ignored. A participant reported the following:

*"Decisions a lower rank makes are ignored, and that is a problem in the clinics. The professional opinion is not considered if it is from a lower rank" [Interview 4].*

Power imbalances related to rank caused some senior officers to interfere with how nurses do their work. Study participants shared how their right to practise nursing freely according to their scope of practice was interfered with by higher-ranking soldiers, who used their authority and status to instruct the nurses what to do. Nurses reported that this interference hindered the attainment of a healthy work environment, as evident in the following statement:

*"Sometimes in the military people who are senior will come and tell you what to do in your area of work, though they do not know your area of work." [Interview 1]*

Furthermore, the lack of authority interfered with the nurses' autonomy in addressing problems with their superior whose instructions they had to follow:

*"The rank structure hinders when your superiors come to the sickbay and tell you what to do and expect you not to talk back." [Interview 2]*

This lack of autonomy also influences patient care, as a nurse is supposed to be an advocate for their patient, especially when instructed by someone without knowledge of, and insight into, the nurses' area of work.

### 4.2. Conflict between the dual roles as soldier and nurse

Nurses trained in the military and those who joined the military already trained were unanimous in expressing the conflict they experienced because of their dual roles as soldiers and nurses. They felt this interfered with their nursing practice and family lives. While they would be busy performing their nursing function, the military function would need them elsewhere.

*"What I believe with the military culture that I have known since I joined the defence force, I understand that what the defence force wants military-wise comes first and then everything else can follow. So if now I am busy with my work and I received a call from my commander to say, "Stop! I need you for deployment, for this and that", then it means you must stop what you are doing and be ready for that. So I should be ready for what the military wants me to do at all times" [Interview 3].*

The nurses indicated that the superior position assumed by, or accorded to, military duties over nursing duties disadvantaged their practice of nursing. They expressed how they were not able to update their nursing skills because of the regimental duties that took precedence and the time they could have used to update their nursing skills and knowledge. They also found the dual roles as soldier and professional nurse to be exhausting, as the following interviewee reported:

*"In the military we are expected to do military duties, we are doing regimental duties, where you look after the buildings and answer phones at night whereas we also work as nurses during the day. It is tiring" [Interview 1]*

The dual role as soldier and professional nurse was experienced as burdensome by the nurses interviewed, leading to a sense of failure that affected their work environment and subsequently the quality of care that they offered.

### 4.3. Lack of professional development and delays in promotions lead to problems of command and control for nurses

There was a general feeling expressed by nurses who participated in this study that they needed to keep abreast with the latest developments in their professions:

*"I feel as a professional nurse where I am working I still need to keep on par with what is currently happening in my profession" [Interview 9].*

Participants felt that nurses outside the defence force were more in touch with the latest nursing knowledge, skills and developments than they were.

*"I feel I miss out a lot from outside because nurses outside are more exposed to other things that are not in the military, as the military is a closed environment. Whereas if you work outside it's different" [Interview 9]*

The nurses attributed their knowledge deficit of the latest practices

in nursing and technology to a lack of development opportunities. They indicated that, when they worked in hospitals outside the defence force during their spare time, they noticed differences between themselves and their colleagues from the Department of Health and the private health sector. Participants who studied nursing at universities discovered when they participated in class in the course of their studies that their colleagues were far ahead of them with the latest nursing information in nursing. Participants cited these circumstances as shedding light on how inferior their knowledge was. One interviewee reported that:

*"When I interact with other nurses from other environments, there is a lot of new information and new updates. But that is not happening with us. That is my concern. Career development is lacking compared to other nurses I communicate with" [Interview 4].*

This lack of exposure to new knowledge and further education made some nurses feel redundant and bored.

*"I felt a bit frustrated because I could not explore; go out and just feel how it is. And also to get exposure. It started on the fourth year. I felt bored and redundant because I did not feel the challenge … After you have seen the outside world, then you realize what you are missing" [Interview 9].*

The lack of professional development caused delays in promotion and feelings of being inferior and unextended. Because of the status accorded to military rank, promotion to a higher rank increases a nurse's experience of command and control. However, opportunities to do the military course that would qualify nurses in the military for a promotion were not always provided, leaving nurses to work without a rank for years, although being in charge of a clinic. Frustration regarding this situation was expressed by one participant as follows:

*"I have to explain myself that I am a registered nurse…but it is unfair that everybody is having a higher rank, but I am in charge…That is the frustration that I have" [Interview 7]*

According to the participants, a lack of professional development and promotion resulted in feelings of frustration, leading to problems of command and control as well as an unhealthy work environment.

### *4.4. A need for effective communication and support within the multi-disciplinary team and management*

The participants in this study maintained that both effective communication within a multi-disciplinary team and management support were key to enhancing a healthy work environment. One participant reported as follows:

*"In general, I think communication is the answer to solving problems. If superiors do not discuss things or consult personnel and just expect to implement, that hinders a healthy work environment" [Interview 2]*

Participants identified a number of characteristics of a healthy work environment that related to communication and support. They indicated the need for an atmosphere where health care workers worked harmoniously in a multidisciplinary team and where there was effective communication amongst team members as well as between employers and employees. Furthermore, the interviewees maintained that a management that was supportive of nurses, collaborating with them before making decisions, and that had an open-door policy, would ensure a healthy work environment. Finally, the nurses interviewed associated personal development and growth with a healthy work environment. One participant described appropriate communication as follows:

*"Consult with people before deploying them, not say 'you will go'. Discuss with nurses when you are going to introduce a baby clinic, for instance. It is good to discuss with people and ask 'Who is willing to go?' or 'How can we run the clinic?'. Communicate with staff as to why their needs are not met" [Interview 6]*

As stated above, communication is key in meeting the staff's needs. A lack of effective communication came up frequently as a factor inhibiting a healthy work environment, which was linked to the need for management to improve staff support and be available for discussion and feedback on matters of importance to employees. This is summed up in the following statement:

*"I think the open- door policy comes in. If there is none, they will never know what the problem is" [Interview 2]*

Effective communication through consulting and collaboration within a multi-disciplinary team supported by managers, who follow an open-door policy, could therefore assist in creating a healthy work environment for the nurses employed in a military setting.

### *4.5. A need for adequate resources necessary in creating a healthy work environment*

In general, the nurses strongly associated a healthy work environment with the availability of adequate material, financial and human resources. This was explained by the following participant:

*"We need resources. They should be able to avail resources for us so that we can be able to do our work and we don't even have to hassle" [Interview 3].*

These resources identified by study participants included the facilities and equipment provided to the personnel to do the work. In addition, the participants emphasised the need for an adequate budget to procure, maintain and repair these resources. The budget allocated for the salaries of the employees was another resource acknowledge by the interviewees. In particular, the participants mentioned the lack of resources in terms of levels of staffing, which resulted in an unhealthy and unsafe work environment. The following was stated by a nurse:

*"There should be resources, enough resources, for me – for me as an employee—to work. It should be free of danger for me and also for my patients. I should be protected from the patient. It is a bit of a challenge when there is shortage of personnel. If there is not enough personnel people working there do more" [Interview 7].*

The participants indicated that a lack of adequate material, financial and human resources negatively affects a healthy work environment in the military setting.

## 5. Discussion

### *5.1. Experiences of nurses working in South African-based military health institutions with regard to their work environment*

The nurses interviewed in the study identified certain factors that contributed to a healthy work environment. These included knowledge of the military culture and practices; autonomy; clear role definition; professional development; promotion; effective communication; and the availability of resources. With the exception of the first one, these factors have also been identified elsewhere as contributing to a healthy work environment for generalist/civilian nurses (Aiken et al., 2002, 2011, 2013; Twigg & McCullough, 2014; Ajeigbe et al., 2016; Panunto & Guirardello, 2014; Maurício et al., 2017). The organisational culture, including available policies and practices related to the dignity and respect for all workers in an organisation; authentic leadership, which fosters effective communication; collaborative relationships; and promoting decision making among nurses, plays a major role in creating a healthy work environment (Heath, Johanson, & Blake, 2004; World Health Organization, 2010; Tsai, 2011). However, the contribution of the strict, rigid and hierarchical military culture and practices in

creating a healthy work environment seems to be unique to the military setting. Furthermore, many of the above-mentioned factors seemed to be lacking in the participants' work environment. For example, newly employed nurses found two weeks' induction training to be insufficient to enable them to assimilate the military culture, despite their being allowed to wear a uniform and to perform as soldiers. The interviewees attributed their lack of knowledge of relevant military practices to inadequate induction training.

A study conducted in India on the effective induction of employee satisfaction (Nandi, 2015), revealed that the various induction activities conducted by organisations have a positive effect on employee performance and satisfaction. Thus, it is important for every organisation to have an effective induction program for new employees, as it greatly affects their performance and feelings of professional fulfilment, and in turn the overall success of the organisation.

Vrey, Esterhuyse, and Mandrup (2013) contend that learning how to work efficiently in a military organisation involves the inculcation of individual military members into a very particular military culture. The military is in many ways a total institution, and military culture is similarly a total concept. Military culture should thus be understood as involving both input and output. This means that members of the military have to be encultured in a particular way so that they portray the behaviour that underpins a unique organisational culture. The culture of a particular military is therefore rooted in the ideas and behaviour of its people. However, in some instances, worker safety as part of a healthy work environment is influenced more by the organisation's culture than the individual worker's traits (Pickering, Nurenberg, & Schiamberg, 2017). Thus, the influence of the organisation's culture on patient safety should be further analysed to understand how these factors relate and contribute to a healthy work environment.

In a military setting, rank is important, as it is linked to the soldier's level of responsibility, command authority and respect experienced. Most frustrations expressed by the nurses who had trained within the defence force were related to the advancement of their professional position. These nurses reported serious concerns over delays in obtaining military rank promotions after completing their nursing studies. They indicated that having a lower military rank than that befitting their professional status was the most challenging experience, as they were not accorded the acknowledgement officers received. They asserted that working with a lower military rank interfered with their command and control function, whereas nurses were expected to supervise nursing students and oversee the nursing facility. This lack of power and control seemed to be their source of frustration, which led to an unhealthy work environment. In addition, a lack of empowerment and autonomy was found to have a negative impact on civilian/generalist nurses' experiences of their work environment and on their intent to stay (Bergquist, 2018).

The South African Military Health Service SAMHSA (2016) points out that the military chain of command is based on rank, which determines the authority to issue orders considered as final from the highest to the lowest ranking members, who comply but complain later (SAMHSA, 2016). The evidence from this study suggests that the military should take it on itself to prevent the rank structure from negatively affecting the autonomy of the nurses to practice freely so that the achievement of a healthy work environment is enhanced.

In contrast to their civilian counterparts, military health care providers assume multiple roles as professionals and soldiers. Johnson, Bacho, Heim, and Ralph (2006) identify features of military practice settings that frequently raise multiple role concerns for health care workers. They purport that the health care provider as a commissioned officer has a primary obligation is to the military mission. Thus, military nurses automatically occupy at least two specific roles with each patient because every nurse is both a licensed practitioner and a commissioned officer. These nurses do not enjoy the luxury of serving exclusively the patient or the organisation but must balance those obligations, even when they conflict.

The dual roles assumed by the nurses are a source of frustration according to the participants in this study, as they perceive their professional role as being given a secondary status. The military as an organisation should consider the nurses perceptions and help them manage their role conflict to ensure synergy and the achievement of a healthy work environment. This is confirmed by D'Ortenzio (2012) who concludes that stakeholders in an organisation, including employees, should be involved in finding solutions and taking action, thereby creating a healthy work environment

The lack of professional development opportunities was a matter of concern to the SAMHS nurses interviewed in this study. In addition, they indicated that development increased their knowledge, and this made them comfortable working in a team. Merchant (2010) emphasises the importance of personnel development and professional growth in civilian nurses as factors that increase staff retention and satisfaction. According to Merchant (2010), training allows employees to develop and acquire the knowledge, skills and abilities required to enhance their current work and prepares them for future job opportunities.

It is essential that organisations place a high value on career development, which will allow employees to fulfil their career needs. In addition, this will ensure the retention of a greater number of their competent and qualified employees (Merchant, 2010). Mizell (2010) maintains that professional development is most effective when it occurs in the context of employees' daily work. Coaching, mentoring, meetings, workshops, conferences, studying and research are cited as typical modes of professional development (Mizell, 2010). Assisting and promoting career growth promotes a healthy work environment and these should therefore be considered by the SAHMS.

The results of this study revealed that the nurses working in the SAMHS who were interviewed believed that communication was important in creating cohesion and support between members of a multidisciplinary team and management. Having an open-door policy and being consulted and listened to by management seemed to be central to the creation of a healthy work environment in the view of the participants. Effective communication is an essential component of the nursing role, as the patient is at risk in both military and civilian environments when problems arise in the communication process. This was also found for civilian nurses. Effective communication between nurses and other caregivers is therefore critical to enhance staff retention and ensure patient safety (Blake, Leach, Robbins, Pike, & Needleman, 2013). However, numerous challenges contribute to poor communication and an unhealthy reliance on individual action (Nadzam, 2009; Kourkouta & Papathanasiou, 2014). Four core skills are necessary for effective communication: understanding communication from another's perspective; listening; emotional intelligence; and conflict management. When a nurse neglects to listen to another member of the care team or to the patient, vital information can be lost and the safety of the patient can be jeopardised. Regarding support to subordinates, regardless of rank, it is the obligation of those in charge to ensure that service members are adequately trained, have the necessary equipment and obtain sufficient sleep/food to remain at peak performance. Moreover, the leaders of the nursing teams need to make sure that the nurses follow the rules and regulations that dictate military performance both on and off duty (SAMHSA, 2016)).

To create a healthy work environment, nurse leaders should facilitate nurses' access to appropriate resources, such as the materials, finances, supplies, equipment and time necessary to fulfil their roles (RNAO, 2013). Evidence indicates that work environments that provide access to information, resources, support and opportunity create a culture of satisfied nurses, ultimately reducing turnover (Purdy, Laschinger, Finegan, Kerr, & Olivera, 2010; Hauck, Quinn Griffin, & Fitzpatrick, 2011). Therefore, the management of an organisation such as the SAHMS should conduct a context analysis to indicate which resources are lacking in the current nursing work environment and indicate how these could be included in strategic plans and budgets. Moreover, available resources should be fully optimised.

It is important for the military to take cognisance of the uniqueness of its environment to create strategies that will assist new nurses in adjusting to the military culture. The leadership should provide a structured induction program that will equip the newly appointed nurses with the military skills used on a daily basis before they wear the military uniform. Nurse leaders should promote the flow of information and ideas at multiple levels through formal/informal practices, and opportunities for professional autonomy to be optimised. In addition, nurse leadership should provide knowledge, and thus transfer opportunities to nurses. These might include annual seminars, conferences, workshops and continuous in-service training. Moreover, nurses should have access to up-to-date, functioning equipment, sufficient staffing and the appropriate infrastructure.

The principles for entrenching a healthy work environment for nurses in the SAMHS should be part of the nursing curriculum at the SAMHS Nursing College. This would foster an awareness amongst student nurses as to what a healthy work environment entails.

## 6. Limitations

This study was limited to SAMHS health institutions in six of the nine provinces because of the researcher's geographical and financial constraints. The unavailability of nurses because of changing jobs or retirement became a limitation, but this did not influence the drawing of conclusions from the data findings. Furthermore, the study did not categorise nurses, thereby excluding the exclusive experiences of managers as a category of nurses. Nevertheless, similar studies could be repeated in the SAMHS using a sample that includes nurse leaders and other nurse groupings. The aim would be to obtain a more global view of the experiences of nurses working in the SAMHS through an investigation of a healthy work environment.

## 7. Conclusion

The study showed that the rigid, authoritarian and controlled military culture contributed to an unhealthy work environment in military nursing practice. A lack of comprehensive and structured induction training programmes created problems in the nurses' adjustment to military traditions. The inappropriate use of military rank, dual role conflict, ineffective communication and a lack of professional development opportunities worsened the experiences of nurses working in the SAMHS. However, the participants indicated factors that contributed to a healthy work environment, which included knowledge about military culture and practices; autonomy; a clear role definition; professional development; promotion; effective communication; and the availability of resources. These findings led to the following recommendations: induction programmes; personal empowerment; and personal and professional development opportunities through conferences, meetings, training, and workshops for nurses. Furthermore, the researchers recommended that consideration should be given to the development of communication strategies and planning for the required resources required, whilst optimising those that already exist.

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## Conflicts of interest

None.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ijans.2019.100171.

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