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RESEARCH ARTICLE

Challenges Experienced By Primary Health Care Nurses Rendering 24 Hours Service at Designated Clinics in Musina Local Area, Limpopo Province

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Abstract:

Background:

The South African health care system has been making endless efforts to ensure effective and efficient health care service delivery irrespective of the various challenges experienced by Primary Health Care nurses that set some drawbacks. The introduction of a 24-hour service at designated clinics was recommended as an approach that could improve service delivery at Primary health settings however, the approach is faced with challenges from Primary Health Care nurses rendering such services.

Objective:

The objective was To explore and describe the challenges faced by Primary Health Care nurses when rendering 24-hours service at designated clinics in Musina local area.

Methods:

A qualitative, explorative-descriptive research methodology approach was used to collect data. The study used a non-probability purposive sampling method to select 10 Primary Health Care nurses to participate in the study. Data were collected through semi-structured interviews and analysis was done using Tesch's open coding method to develop themes and sub-themes. Measures to ensure the trustworthiness OF the study were all followed throughout the study.

Results:

The study results indicated that there is a shortage of resources, inadequate compliance to occupational health and safety measures which affect the rendering of 24-hour services at clinics

Conclusion:

The study recommends the provision of adequate resources both human and material, provision of adequate security, and improvement in the clinic infrastructure to enable Primary Health Care nurses to work effectively. The study is of importance to the nursing profession as the findings and recommendations will help primary health care nurses in improving service delivery at clinics.

Keywords: Challenges, Experience, Primary health care nurse, 24-hour service, Designated clinic, Occupational health.

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1. INTRODUCTION AND BACKGROUND

Implementation of Primary Health Care (PHC) services has been a long outstanding aspect to be of priority in many low- and middle-income countries but workplace violence amongst PHC nurses continues to hinder progress towards achieving quality patient care [1]. PHC is essential health care based on scientifically sound and socially acceptable method and technology that makes universal health care accessible to all individuals and families in a community. PHC involves the provision of integrated and accessible health care services at the first level of contact [2, 3]. PHC clinics are the access point for clients who need preventative care and diagnosis and management of minor ailments [4].

Globally, the consequence of increased workload is an area of concern for both primary and secondary health care facilities, and this is due to staff shortages [5]. The commission report [6] alluded that resources, such as equipment, are given

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to health facilities in large cities instead of being allocated to the underprivileged rural health care areas where they are needed most. The PHC services render 24-hour services using a call system to attend the emergency patients. Moreover, non-emergency cases also visit the clinics for consultation as nurses are always available on a 24 hours call system [7].

A study conducted in Limpopo province revealed that there is a lack of human resources in rural areas, hindering the integration and implementation of a comprehensive approach in the delivery and management of about 3,000 government PHC clinics and community health centers [8, 9]. The quality of health care services at the PHC level is affected by factors, such as devastating workload, hygiene in the work environment, poorly maintained infrastructure, and inadequate equipment and supplies [3, 10]. The *South African Basic Conditions of Employment Act* No 11 of 1997 [11] stipulates the minimum work hours; an employer may not allow an employee to work more than nine hours per day or more than 45 hours per week. The country faces a nursing crisis characterized by staff shortages, declining interest in the profession, lack of caring ethos, and disjuncture between the nurses' and communities' needs [12].

In a study conducted in Canada, 33,000 nurses admitted that when they have heavy workloads, they leave essential responsibilities undone, compromising professional nursing [13]. When nurses are allowed a greater chance to work in clinics with adequate staff, improved job satisfaction has been observed [14]. A safe working environment ensures free movement and execution of tasks in a relaxed atmosphere [15]. Research studies found that job satisfaction is achieved in a safe working environment with good infrastructure [16]. A study conducted in Free State, South Africa, indicated that the main public health system challenges include staff shortages, financial issues, compliance with quality standards, effective management practices, and distribution of adequate healthcare resources [17, 18].

Nurses working in PHC clinics with insufficient working areas and unsafe environments predispose them to violate occupational health and safety standards, thereby compromising nurse and patient safety [19]. Despite efforts for effective PHC service delivery, some challenges still exist; therefore, this study seeks to explore and describe the challenges experienced by PHC nurses when rendering 24-hour services at designated clinics of Musina local area, Limpopo province.

2. MATERIALS AND METHODS

2.1. Study Design

This study used a qualitative, explorative, and descriptive design to explore and describe the challenges experienced by PHC nurses when rendering 24-hour services at designated clinics in Musina local area, Limpopo province.

2.2. Study Setting

The study was conducted at designated clinics in the Musina local area in Vhembe district, Limpopo province. The Musina local area is situated in the northern part of Limpopo province, close to the Beit Bridge border post between South Africa and Zimbabwe. The local area is bordered by Zimbabwe in the North, Makhado and Thulamela in the South, Mozambique in the East, and Capricon district in the West.

2.3. Population and Sampling

The study population comprised all PHC nurses working at designated clinics of Musina local area in Limpopo province. The target population was PHC nurses working in the designated clinics with one year of experience and more. A non-probability sampling technique was used to obtain a sample for the study.

2.4. Data Collection

Data were collected through a semi-structured one-to-one interview where an interview guide was used. Data collection techniques included the use of a voice recorder and field notes. A central question was asked to all participants, "What are the challenges you experience when rendering 24-hours services at the clinic?" and this was followed by probing questions based on the responses. Data were collected until data saturation was achieved at ten participants. Ethical clearance was obtained from the Turfloop Research Ethics Committee with project number TREC/260/2019: PG.

2.5. Data Analysis

Data were analyzed using Tesch's open coding method for qualitative research from the interviews [20]. The transcribed verbatim was made out of the collected data and coded, and an independent coder was involved where consensus was required for the themes and sub-themes.

2.6. Measures to Ensure Trustworthiness

Measures to ensure trustworthiness, including credibility, dependability, transferability, and conformability, were adhered to throughout the study [21]. Credibility was ensured through a thorough explanation of the used methodology, and bias was minimized through bracketing. To ensure transferability, a non-probability purposive sampling method was used to select participants, and the research methodology was thoroughly described to them [22].

3. RESULTS

The themes and sub-themes of challenges experienced by PHC nurses working at a designated 24-hour service are reflected in Table **1** below.

Theme 1: Unavailability of Resources for Effective Provision of 24-hour Services

The study identified that the resources for rendering 24-hour services were not readily available at the clinics. This resource includes both material and human resources for the effective provision of 24-hour services at the clinics. The following sub-themes detail the unavailability of resources affecting the provision of 24-hour services.

3.1. Shortage of Human Resources to Render 24-hour Services

PHC nurses verbalized that there is a shortage of staff to render 24-hour services at the clinics, thus contributing to an increased workload for nurses. The nurse who provides services at day time is also expected to render services during the night, which is exhausting to PHC nurses and prevents the effective implementation of a comprehensive PHC approach to patient care.

Table 1. Unavailability of resources for effective provision of 24-hour services.

Main Themes	Sub-themes
1. Unavailability of resources for effective provision of 24-hour services.	1.1. Shortage of human resources to render 24-hour services 1.2. Lack of adequate equipment and supplies 1.3. Shortage of water supply in the clinic.
2. Marked inadequacy of compliance with occupational health and safety for PHC nurses	2.1. Lack of a proper security system leads to a feeling of insecurity amongst PHC nurses 2.2. Poor clinic infrastructure is a threat to the safety of PHC nurses 2.3 Negative attitudes of patients towards nurses

Participant 1 said: "We *are tired of reporting the problem of shortage, and no one is taking us seriously, as am speaking we are just running this clinic being 3 professional nurses and 1 assistant nurse, our admin clerk is sick, meaning a professional nurse has to register all patients, give them files and the very same nurse has to see patient and dispense medication since we do not have a pharmacy assistant in our facility (shaking her head)."*

Another participant confirmed by stating: "*How can you expect 3 nurses, just 3 heh, to run a 24-hour clinic, when an emergency comes that means we will have to leave other patients and attend the emergency, mind you other patients are still coming and the line becomes long, waiting time is worse."*

3.2. Lack of Adequate Equipment and Supplies

The study also identified a shortage of supplies, such as medicines and equipment, needed to care for patients in the 24-hour service clinics. Other equipment includes blood pressure monitoring machines, scales, and stethoscopes.

The finding was verbalized by participant 3, who said: "*When it comes to medication in this facility, we can even spend three weeks without those simple medications, like Panadol, Brufen, and Vitamin B complex. How do you weigh the patients when the weighing scale is not working? The blood pressure machine is only one; this is a challenge to us."*

Participants 4 added:" *These days it is becoming worse because even chronic medication is not always available, which makes us nurses becoming useless because every time we will be telling the patient that there is no treatment and sometimes patient thinks that we are lying.*"

Participant 6 said: "*It is useless for a nurse to be trained as there is no equipment; therefore, we are going to implement the skills because now we do not have proper blood glucose machine."*

3.3. Shortage of Water Supply in the Clinic

The PHC nurses alluded that the clinics experience a shortage of water supply, and in some instances, even cleaning materials are a challenge.

Participant 1 said: *"How are they going to do infection control without water, and without water, we are not going to achieve all those 6 ministerial priorities."*

Participant 8 said: "Sometimes *we will be told that there will be no water for 2 days, and they expect us to work. How are we going to wash our hands after each patient? How are we going to wash linens, clean the floor, and do dusting*?

Theme 2: Marked Inadequacy in Compliance with Occupational Health and Safety for Nurses

The findings of the study further revealed that the occupational and safety measures for PHC nurses were not taken into consideration to avoid occupational injuries. The following sub-themes describe the inadequacy in compliance with occupational and safety standards in the clinics.

3.4. Lack of Proper Security System Leading to a Feeling of Insecurity amongst PHC Nurses

Participants reported that they no longer feel safe because they are afraid of being attacked while working 24-hour as the security is poor and inadequate.

Participant 2 reported: *"We no longer feel safe while working because I am afraid if thugs can just break in and attack us and take our belongings; in such facilities, they break in almost every time*."

Participant 5 stated: "We *fear for our lives. It is not safe at all*."

Participant 9 said: "*Even though they bring security guards, the security guards are not well equipped, and sometimes they also run away when the situation is bad."*

3.5. Poor Clinic Infrastructure; A Threat to the Safety of PHC Nurses

The study also revealed that some clinics are not well maintained, and some buildings are very old and not safe to work inside. Nurses indicated that some damages in the building are health and safety hazards as the environment is not conducive to working.

Participant 4 stated: "*These old buildings are not safe to work in, some walls are very old and cracked, we are afraid they can collapse during windy days. Our safety is really at risk*."

Participant 7 confirmed this by responding:" *But they never renovate or build new structures. It will be useless because first security will be attacked, then they will come to attack nurses inside the clinic because the security door no longer locks. Some doors do not have locks and are a mess beside the window.*"

3.6. Negative Attitude of Patients towards Nurses

Participants indicated challenges when attending patients where some patients are so aggressive towards nurses and threatening nurses during the provision of 24-hour services. Some patients tend to abuse nurses emotionally and verbally, demanding what is not possible due to a shortage of resources and gender inequality issues.

Participant 3 responded: "*We are not safe in the 24-hour clinics; some male clients threaten us, especially females when we tell them there are no medications or when you tell them you want to transfer them to hospital."*

This was also confirmed by participant 7 by elaborating: "*Our patients are sometimes very difficult; they do not understand waiting in a queue for their turn. We are usually shouted at and threatened that we will lose our jobs because we are lazy, and this gives us emotional trauma*."

Participant 10 said:" *….in the clinics, it is tough; the patients do as they wish. We are told that we are keeping medications for our families when we tell them we are running short of some medicines, and this is so stressful."*

4. DISCUSSION

The findings of this study revealed that there are inadequate human resources for rendering 24-hour services at the designated clinics. A shortage of nurses and support staff is reported to make 24-hour services successful. It has been observed that the shortage of staff at clinics negatively impacts patient waiting times, leading to low patient satisfaction, poor compliance with medications, and even missed appointments [23]. Furthermore, it was reported that the number of nurses at clinic facilities should be increased to reduce the increased workload caused by many programs rendered at the clinics, thereby hindering the comprehensive PHC approach from being effectively implemented [7]. The findings are supported by a study [24], indicating that nurses working in primary healthcare settings face emotional and physical stress and have excessive workloads due to the shortage of human resources. Furthermore, nurses are overburdened, and this impacts the patient waiting time. There is also a lack of supportive supervision of short-staffed nurses working in primary health care facilities [25].

Another challenge revealed by the study is the shortage of equipment and supplies, including medications which affect the quality of care provided to patients at the clinics. The finding is congruent with that of a study conducted previously [26], which indicates that the shortage of medicines is a challenge that prevents nurses from prescribing appropriate medicines to patients. Shortage of functional equipment and other essential resources, including unavailability of ambulances to transfer patients to hospitals, is a barrier that affects the provision of effective care for patients. The quality of health care services is still affected by several aspects, like devastating workload, the cleanliness in the work environment, poor clinic infrastructure, and nurses' perception of the environment that lacks equipment [8]. Furthermore, shortage of equipment affects the quality and follow-up of patients as some of the specific procedures cannot be done without necessary equipment [8].

A lack of water supply for cleaning and consumption in clinics is another challenge for PHC nurses offering 24-hour services. A study conducted in Ethiopia reported patients' dissatisfaction with care received at the health facility as 61.3% of patients complained regarding the lack of drinking water which affected their care. Problems, such as the absence of water, lack of basic work equipment, and inappropriate staff composition, need to be addressed by the government health department to ensure the provision of comprehensive quality of service [27]. Poor living conditions in rural health facilities, such as unsafe drinking water, impact the quality of services provided to patients [28]. The absence of potable water supply to clinics remains a major concern that affects the working of these facilities and the quality of care provided at the facilities. These become worse in situations where the facility does not have an alternative source of water supply, such as boreholes, to alleviate the effect of water shortage [29].

The study also identifies that the occupational health and safety of nurses are not taken into consideration as there is a poor security system, leading to a feeling of insecurity amongst PHC nurses. The findings were supported by a study conducted previously [30], indicating that the safety of PHC nurses whilst on duty has recently become a serious concern. Furthermore, the safety of PHC personnel is of particular importance as they are mostly female, and only a few nurses are on duty at certain times of the day and night. Every health care provider needs to work in a safe environment as safety is a basic human need and right which should be protected in any case, irrespective of the environment where the service is provided. A safe environment ensures free movement and execution of tasks in a relaxed atmosphere, and a stable community is considered safe and healthy [15]. The problems mostly experienced by healthcare users and nurses in public institutions include lack of cleanliness, poor safety, and security in health settings [31].

Another study revealed that the security gap is also an issue, making health care facilities violent-prone as there is an adequate or complete absence of security guards in health centers. Furthermore, another perceived reason for workplace violence is mainly the attitude problems on the part of nurses and patients, leading to workplace violence [32]. Workplace violence has a negative impact, leading to physical and psychological harm to health workers; therefore, the importance of taking institutional measures for the safety of health workers is essential [33, 34]. This study suggests that workplace violence prevention strategies are urgently needed to provide health care workers with a safe environment [35].

The clinic infrastructure is identified as not safe for work due to poor maintenance and very old buildings. The inadequacies in infrastructure for health care services form part of the inequalities in health services, especially in rural communities, and they need to be addressed to improve service delivery at primary health clinics [36]. Structural challenges, such as inadequate infrastructures, affect services in the clinics [37]. Moreover, in this study, the safety of PHC nurses was explained as being at risk due to the negative attitudes of patients towards PHC nurses. The patients' relatives/escorts and patients themselves were noted as the main sources of violence against nurses in many instances. A study [38]

indicated that there is a high incidence of workplace violence by patients and visitors against nurses in health care settings. The findings of a study conducted in Ghana are in agreement with the findings of this study as the study also found that the poor clinic infrastructures with leaking roofs are not suitable for the provision of comprehensive quality health care services [39]. PHC nurses need to be provided with a conducive and suitable work environment with adequate infrastructure to reduce burnout [40].

Nurses are usually the first person that patients and their families meet in the health facilities. If such facilities have inadequate resources, nurses are often blamed by patients and relatives for late or inadequate health services, putting them at risk of being physically and verbally abused [35]. Nurses, therefore, have to broaden their awareness level on violence so that they can take precautions themselves against workplace violence [41]. There is a need for future interventions that are receptive to the need of the nursing staff to ensure effective avoidance of violence in the workplace [32, 42]. Nurses who experience violence are affected physically, emotionally, and mentally, displaying symptoms of anger, fear, anxiety, post-traumatic stress disorder, and loss of self-esteem [33].

5. STRENGTHS AND LIMITATIONS OF THE STUDY

The study was conducted at the designated primary health care facilities in the Musina local area, Vhembe district, Limpopo province, South Africa. The study findings are limited to 24-hour designated clinics and may not be generalized to other clinics in other provinces of South Africa. Other researchers may explore the factors contributing to poor utilization of 24-hour primary health services to assist them in their specific situations.

6. IMPLICATIONS OF THE FINDINGS

The study findings confirmed that nurses rendering 24-hour services at designated clinics is still facing some challenges. In this regard, providing them with both human and material resources will help nurses to effectively render 24-hours services. Professional nurses providing 24-hour services need to have a safe infrastructure and trained security guards for 24 hours to ensure their safety. Adequate management support is important to assist those nurses rendering the 24-hour services in all the designated clinics

CONCLUSION

The provision of 24-hour service at the designated primary health clinics serves as the first level of contact for health care, and the care rendered at this level needs to be comprehensive. PHC nurses require equipment and supply, adequate staffing levels, and proper security to effectively render their services. PHC clinics understand the value of 24-hour service to the community, but they lack the resources to accomplish this goal. Lack of management support also affects the comprehensive approach in rendering effective 24 hours. Therefore, the study recommends the provision of resources and safety measures to assist PHC nurses in the provision of quality 24-hour services in the clinics.

AUTHORS' CONTRIBUTION

T.E.M conceptualized the research idea and initially drafted the manuscript. V.M assisted in the review of the manuscript, and both the authors agreed to publish the final version of this manuscript.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The study includes human subjects, and the ethical approval of the study was obtained from the Turfloop Research Ethics Committee with the ethical clearance certificate number (TREC/260/2019: PG). Permission to collect data was obtained from the local area managers and clinic operational managers.

HUMAN AND ANIMAL RIGHTS

There were no animals used in the research study. All human research procedures for conducting the study and laws applied to the country where research was conducted were followed and adhered to in line with the ethical standards of the committee responsible for human experimentation (institutionally and nationally), and with the Helsinki Declaration of 1975, as revised in 2013.

AVAILABILITY OF DATA AND MATERIALS

The derived data and materials used to support the findings of the study are available upon special request from the corresponding author [T.E.M].

CONSENT FOR PUBLICATION

The participants were made aware of the data for publication and gave informed consent, and participation was voluntary. The study adhered to ethical issues of confidentiality, privacy, and anonymity; names were only used during data collection; however, numbers were used throughout the study.

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None.

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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