

Night Shift as a Clinical Placement Strategy: A Qualitative Analysis of Nursing Students' Experiences in North-Eastern Namibia

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Abstract

Clinical placement strategies facilitate clinical learning, which students and nurse educators consider to be a foundation in nursing training; they gain the ability to develop expected competencies. Night shift is one of the clinical placements used in nursing education, yet many studies globally only focus on students' experiences of clinical placement during the day shift. It is not explicitly known how the nursing students in north-eastern Namibia experience the night shift as part of their clinical placement strategies. The focus of this article is on exploring and describing how nursing students in north-eastern Namibia have experienced the night shift as part of their clinical placement. The study was conducted at the university campus located in north-eastern Namibia. A qualitative approach, with phenomenology, was used as research design. Data were collected via focus group discussions with 18 nursing students who were purposively selected until data saturation was reached. Data analysis followed content analysis. The trustworthiness of the study was ensured using the criteria of Lincoln and Guba. The ethical principles of justice, beneficence, confidentiality, anonymity, and non-maleficence were also considered. Three main themes emerged: nursing students experienced the night shift as a beneficial clinical placement; there were negative experiences for nursing students when the night shift was used as a clinical placement; and there are strategies to strengthen the night shift as a clinical placement strategy. Nursing students in north-eastern Namibia have both positive and negative experiences of night shift clinical placement. Therefore, the School of Nursing should continue to use night shift as a clinical placement strategy, provided interventions are put in place to strengthen it and to make the learning environment more conducive.

Keywords: clinical placement; clinical practice; clinical settings; night shift; nursing education

Introduction

“Night shift” refers to a time period during the night in which a person is scheduled to work (Merriam-Webster Dictionary 2019). In Namibia, night shift in healthcare settings commences at 7 p.m. and ends at 7 a.m. Globally, night shifts in healthcare settings are implemented because hospitalised patients require continuous care and access to facilities (Ferri et al. 2016). This facilitates the monitoring of progress in patients’ conditions and carrying out interventions as prescribed. On the other hand, night shift may be used effectively as an integral part of students’ basic programme, through a clinical placement strategy; however, nursing students should not be a solution to a lack of nursing personnel. Therefore, as a routine management practice, a nurse in charge of the unit should design a duty roster to ensure adequate staff are delegated for each shift (Jooste, Prinsloo, and De Wet 2019).

Clinical placement strategies facilitate clinical learning, which students and nurse educators consider to be a foundation in nursing training; they gain the ability to develop expected clinical competencies (Palese et al. 2017). Placements help students apply their theoretical knowledge in the real world of clinical practice (Alshahrani, Cusack, and Rasmussen 2018; Tiwaken, Caranto, and Jose David 2015). Moreover, clinical placements also serve to meet the requirements for professional registration and recognition by regulatory bodies upon completion of the training programme (Nursing Council of Namibia 2019). Students in placement are guided from a state of uncertainty to becoming more confident when performing nursing procedures (Helgesen, Gregersen, and Roos 2016). However, students’ learning processes and exposures may be dissimilar between the night shift and day shift due to the uniqueness of the night shift (Palese et al. 2017). Night shifts are unique due to the intimate climate associated with darkness and silence, which fosters greater collaboration among staff, compared to the day shift (Powell 2013). Furthermore, there is less interaction with patients during night shifts because it is the ideal time for rest and sleep. Sleeping when it is dark is a normal physiological process required for learning, memory and proper functioning of the nervous system.

It is, however, not explicitly known how nursing students in north-eastern Namibia experience night shift as part of their clinical placement strategy. Many studies focus on students’ experiences of clinical placement during day shifts, or night shift experiences among medical students (Schiller et al. 2017). Their experiences differ due to the nature of the professions, and therefore cannot be generalised to nursing students. Other studies on the experiences of night shift focus on nurses who are already qualified (Al Ameri 2017; Ayed, Thulth, and Sayej 2015; Chakrani et al. 2016; Vitale, Varrone-Ganesh, and Vu 2015) . Therefore, the focus of this article is on exploring and describing how nursing students in north-eastern Namibia have experienced night shift as part of their clinical placement.

Research Design

This study followed a qualitative approach, with phenomenology as its research design. This design was suitable as it focuses on individuals who have experience of a phenomenon under study (Maree 2016). In this research, the focus was on students who experienced night shift as part of their clinical placement.

Research Methods

Research Setting

This study took place at one of the public university campuses located in north-eastern Namibia. The School of Nursing at this campus only offers a four-year undergraduate bachelor honours degree programme, which was introduced in 2017 when the school also received an intake of second- and third-level students from other campuses. The school uses a two-week theory and practice system, which means during a one-month period, students spend two weeks in a theoretical block and another two weeks in a clinical block. Night shift is only introduced to students in levels three and four of their training as a clinical placement strategy. Students attend clinical practice for four nights and get three nights off. They are placed on night shift in maternity, surgical, paediatric, medical and casualty wards. The departments are located in a 300-bed capacity public intermediate hospital in the region. The School of Nursing follows constructivism as its educational philosophy, and experiential learning is thus a key component and is emphasised through clinical placements.

Population Sampling Strategy

In the 2018 academic year, there were 64 ($N = 64$) students at level three and four of their training, and participants were purposively selected from this group. A sample size of 18 ($n = 18$) nursing students was obtained, as determined by data saturation. No participant withdrew from the study. The participants were considered for the study when they had experienced night shift as a clinical placement strategy during their training, and when they had accepted participation and had given written informed consent. Of the 18 nursing students who participated in the study, 12 were females, and six were males. This gender variance is typical; at this institution, there are more female nursing students than males. The participants' ages ranged from 22 to 33 years. Ten students were in level three, while eight students were in level four. Two students had previous experiences in nursing prior to joining this programme, which meant they were enrolled nurses and joined the degree programme to upgrade their academic qualifications. Sixteen students had no prior nursing experience. This difference in experiences occurred naturally as only 5% of the students in third- and fourth-year levels of training were enrolled nurses prior to registering at this institution.

Data Collection Method

Upon receipt of the ethical clearance certificate from the School of Nursing Research Committee, as well as permission to conduct the study, the researcher approached the

potential participants face-to-face in the lecture halls, explained the purpose of the study and asked them to participate. The researcher conducted three unstructured focus group discussions which consisted of six participants each. Participants determined the time and date of the discussion, in terms of what was convenient for them. Data were collected from October to November 2018. All group discussions were recorded with a digital voice recorder, followed by verbatim transcriptions. The researcher used field notes to record the participants' body language and other non-verbal communications.

The group discussions lasted for 40–50 minutes and the duration was determined by the participants' responses. The researcher posed the following question to the group: "How did you experience night shift as a clinical placement strategy in the nursing programme?" and followed up with further questions to seek clarity on responses that were insufficient and not detailed enough. The researcher conducted member checking and paraphrased responses to ensure mutual understanding and meaning of responses given. No new information emerged at the end of the third focus group discussion, and at this point, data saturation was reached.

Data Analysis

The content analysis method was used to analyse the data since it is the most reliable strategy used in qualitative research and gives the researcher an opportunity to organise the information into themes and sub-themes (Polit and Beck 2017). Each focus group discussion was analysed for units of meaning, and all units of meaning were clustered together to form themes and sub-themes. After initial data analysis by the researcher, the audio recording and field notes were given to an independent coder to analyse the data. The independent coder was a senior lecturer with experience in qualitative research. Thereafter, the researcher and independent coder met to reach consensus on the established themes and sub-themes, which emerged as a result of the study.

Measures to Ensure Trustworthiness

The trustworthiness of the study was ensured using the criteria of credibility, transferability, dependability, and confirmability (Lincoln and Guba 1985). Credibility was achieved through member checking and prolonged engagement with the participants during the group discussion to gain an understanding of how they experience the night shift as a clinical placement strategy. Transferability was ensured through data saturation, purposive sampling, dense description of the study design and methods, and the findings were made available with supporting quotes from participants. Dependability was facilitated through literature control, prolonged engagement and member checking, and confirmability was ensured through triangulation of the date and time of data collection.

Ethical Considerations

The School of Nursing Research Committee gave ethical clearance for the study (23/09/18). The second ethical clearance was granted by the Research Unit in the

Ministry of Health and Social Services (Ref: 17/3/3 VNN). Participants also gave written informed consent prior to participation in the study. Participants' confidentiality and anonymity were ensured as their names were not mentioned anywhere in the study; instead, numbers were allocated to each participant. Participation in the research was voluntary and the participants were informed that they had the right to withdraw from the study at any time without the risk of penalty or prejudicial treatment. Moreover, the principles of justice, beneficence and non-maleficence were observed.

Findings and Discussion

Three main themes emanated from this study, namely: nursing students experienced night shift as being a beneficial clinical placement strategy; there were negative experiences among nursing students when night shift was used as a clinical placement strategy; and strategies were mentioned to strengthen night shift as a clinical placement strategy. These themes and their sub-themes are described and discussed in the sub-sections that follow, and are presented in Table 1.

Table 1: Summary of findings

Sub-themes	Themes
Night shift offers sufficient time for teaching and learning Night shift provides sufficient clinical hours	Nursing students experienced night shift as being a beneficial clinical placement strategy
High workload in the maternity ward Nursing students sleep during night shifts Night shift interferes with sleeping patterns Negative attitudes of nursing staff on night shifts	There were negative experiences among nursing students when the night shift was used as a clinical placement strategy
Reducing nursing students' night shift clinical placement duration Limiting nursing students' night shift clinical placement to the maternity ward	Strategies to strengthen the night shift as a clinical placement strategy

Theme 1: Nursing students experienced night shift as being a beneficial clinical placement strategy

The participants in this study expressed that night shift was beneficial to nursing students—both in terms of teaching and learning, as well as contributing to them meeting their requirements for professional registration upon completion of the training programme. The latter is provided as evidence in the form of the number of hours spent

in various clinical disciplines. The sub-themes under “night shift as a beneficial clinical placement strategy” are described and discussed next.

Sub-theme 1.1: Night shift offers sufficient time for teaching and learning

The participants stated that there is sufficient time for registered nurses to teach nursing students during night shifts. Time for teaching was created due to a lack of routine work during the night shift, as compared to the day shift. Therefore, registered nurses in the wards have sufficient time to go through the students’ practical books and give them demonstrations. Participants felt that during night shifts, they are helped to meet their clinical learning objectives. In addition, participants alluded that they have sufficient time to learn patients’ conditions in more detail, to interact with patients, and they were also made aware of interventions that they could have missed during the day due to a number of activities taking place at the same time. The following is a response of one participant:

I learned a lot of things during night duty, the fact that it’s the time that most of the routine activities are not taking place, so there’s enough time for nurses, professional nurses and other categories of nurses to give attention to us students, whereby they will be teaching us about the duty, in general, [and] what is expected from us while we are in the setting. And the fact that we had enough time, that some routine things were not taking place. We had time to also interact well with the patients, which gives us an opportunity to know the patients’ illnesses and even conditions. P¹ 4 G1

McKenna and French (2010) asserted that nursing students’ competence is partially attributed to the existence of clinical exposure. Skills and knowledge are to be gained when there is sufficient exposure to different cases in a clinical setting. This study similarly found that nursing students achieve their clinical learning objectives due to sufficient exposure and time with patients. In contrast, Jamshidi et al. (2016) revealed that students’ learning is achieved when they interact with their clinical instructors, which happens only during the day. However, participants in this study did not mention the presence of clinical instructors, likely because the instructors in the study’s context do not follow-up with students during night shifts. The teaching and supervision are facilitated by the registered nurses in the nursing units where students are allocated.

Sub-theme 1.2: Night shift provides sufficient clinical hours

Participants experienced night shift as a beneficial clinical placement strategy because it offers them sufficient clinical hours as required by the Health Professions Council of Namibia (HPCNA) at the end of their training. These hours are required for registration as a registered nurse and midwife upon completion of the training programme. One of the participants stated:

1 Participant’s code number and focus group discussion number.

My experience is, the night shift is good in terms of getting hours required by [the] nursing council. This is because we work longer hours compared to day shift. P2 G2

This result concurs with Campbell et al. (2008), who conducted a study on nursing students' experiences of clinical learning placement in Australia. They also revealed that the night shift helped students gain enough hours in clinical education. In the setting where the current study was conducted, the HPCNA expected all nursing students to accumulate at least 2 500 hours of clinical practice prior to their registration. Failure to obtain these hours leads to an extension of their training programme. Students thus find night shift to be beneficial because it helps them gain enough clinical hours in a short period of time. There is no other evidence that supports or contradicts this result.

Theme 2: Negative experiences among nursing students when the night shift was used as a clinical placement strategy

This theme describes the participants' challenges and negative emotions toward the night shift as a clinical placement strategy. The sub-themes are described and discussed as follows:

Sub-theme 2.1: High workload in the maternity ward

The participants stated that the maternity ward is as busy during the night as it is during day shift—despite a lack of routine procedures being required during night duty. According to the participants' experiences, more women tend to deliver during the night-time, leading to a higher workload in the maternity ward compared to the other wards. This phenomenon is aggravated by the fact that fewer qualified nurses/midwives are delegated to the night shift, resulting in nursing students performing more tasks than they do during the day shift. This leads to exhaustion among nursing students. One participant described it as follows:

But when it comes to [the] maternity ward, [the] maternity ward is a very busy ward during night and day. Where you can say during [the] night, there is almost [an] equal [number of] cases as [the] day. P6 G1

Another participant mentioned that:

I do not know what to say, I remember one day me and my class mate arrive[d] for night duty, [and] there were about eight women in labour. We ended up conducting deliveries on our own because all sisters were busy with other cases. I think there were even caesarean sections that night. Oh, when I went back home [in] morning time, I was very exhausted. I was exhausted the whole week. P3 G3

Maternity wards are known for a high workload due to the unpredictable nature of the events and procedures performed in the ward. A recent study conducted in Gauteng Province, South Africa, revealed that labour wards in maternity units are associated with a high workload and it is, therefore, difficult to balance staff numbers on shifts (Matlala

and Lumadi 2019). An excessive workload among nursing staff was also revealed in a study conducted in Tanzania (Bremnes et al. 2018). In the setting of the current study, the high workload and staff shortage could result in nursing students filling the gaps, which may lead to exhaustion. The high workload in maternity wards also hinders registered nurses from teaching and offering demonstrations to students, because they are busy handling and managing cases. No evidence could be found of a prior study being conducted in Namibia on the workload in maternity wards and its effects on student learning.

Sub-theme 2.2: Nursing students sleep during night shifts

Sleeping during night shifts was stated as one of the negative experiences among nursing students. The participants claimed that due to the lack of activities at night in some general wards, students tend to sleep while on duty. However, participants made it clear that this is not applicable to the maternity ward because it is extremely busy. Participants noted that sleeping during night shift has a negative impact on their clinical learning, because their rotation in a specific unit ends without them learning much. This was supported by the following statements:

Students go on night shift [and] just [go] to sleep because there is nothing much to do. Only in maternity where you can get deliveries and get extremely busy with other things [do you not fall asleep]. P2 G1

We go on night shift to sleep. Yah, it's good for me, but on the other hand my rotation is completed without learning anything. I can say it is useless to me. P1 G2

Although good sleep is associated with improved memory consolidation and better results in examination (Fox 2019), it is not beneficial for students to sleep while they are on night shift as it stops them from learning from the available clinical encounters. The other consequence of sleeping while on night shift is that it hinders students from practising safely. In addition, sleeping while being on duty is significantly associated with lower self-efficacy scores for both occupational health and patient care (James, Butterfield, and Tuell 2019).

Palese et al. (2017) conducted a study in northern Italy which revealed that nursing students experienced increased fatigue and decreased concentration in the middle of the night, which makes it difficult for them to stay alert and awake; as a result, they end up sleeping while being on duty. The reason for students in the current study sleeping while they were on night shift could be based on their lack of recognition of this placement as being equally as important as day shift, which could be associated with insufficient supervision. Alternatively, they do not get sufficient rest and time to sleep during the day.

Sub-theme 2.3: Night shift interferences with sleeping patterns

The study participants indicated that night shift interferes with their biological clocks. They struggle to sleep during the day and during the night, especially on their nights off or when they have completed night shift. This negatively affects their participation in daily activities such as projects and assignments that have to be done during the day. One participant said:

Night shift plays with our biological clocks and it really takes time to go back to normal. Let me be specific, oom, when we are night off, we can't sleep during the night but when we are on duty, we want to sleep. Sometimes we want to do assignments and other projects during the day but we can't because we feel very sleepy. P6 G3

Moreover, participants also indicated that due to disturbed sleep patterns that occur during the night shift, they end up with fatigue and feel they are not mentally strong. This was mentioned thus:

When you knock off, due to long hours you feel fatigue. I really struggle to sleep after duty, so really it's not a good experience. Night shift needs someone who is really mentally strong, I feel like most of us are not strong enough. P1 G2

Work schedule is one of the predisposing factors that determine the circadian timing system that regulates the biological rhythms such as the sleep-wake cycle (Menon, Karishma, and Mamatha 2015). The participants in this study also recognised that the work schedule influenced their biological clocks, and therefore indicated that night shift caused a disturbance in sleeping patterns. These findings concur with Postma et al. (2017), who reported that shift work, such as night shift, impacted on the physical health of students, which includes disrupted sleeping patterns, problems falling asleep at irregular times and struggling to stay asleep. Moreover, the findings of the current study are comparable to a study by Thomas et al. (2017), conducted in the United States of America, where nursing students indicated that a 12-hour shift—such as night shift—leads to sleep deprivation, which further decreases their abilities to learn. As a result, their cognitive abilities such as critical thinking, decision-making and problem-solving skills will be limited, and this may jeopardise patients' and students' safety. As an accepted practice, staff members who work night shift use the day-time to rest and sleep in order to compensate for the time they spend on the night shift. However, sleeping during the day may not be adequate due to various social issues faced by staff members (Chakrani et al. 2016). The same phenomenon was experienced by participants in this study who revealed that night shift disturbs their sleeping patterns. Although participants in this study did not indicate social issues as being hindrances to sleeping during the day, they indicated that academic activities such as projects and assignments keep them busy during the day, thereby preventing them from sleeping.

Sub-theme 2.4: Negative attitudes of nursing staff on night shifts

Participants stated that sometimes they experience negative attitudes from nurses while on the night shift. The participants associate this with the long working hours of the night shift, as it results in exhaustion and fatigue, leading to irritability. The negative attitudes of nurses cause less interaction between them and students, which has a negative impact on their clinical learning and experiences. Participants said that:

... there were also bad experiences, in a sense that sometimes registered nurses were not, uhhh, when you approach them for demonstrations, they will shout at you CAN'T YOU SEE I AM TIRED! P3 G1

Night shift hours are really long and it seems they make our nurses tired, exhausted and irritable; they shout for no reason, they do not want to teach and in general one can say they don't want students there. In the end we do not learn anything, because the environment is tense and negatively affects our learning experience. P5 G2

Clinical practice requires significant interaction between nursing staff and students in order for learning to take place. This interaction is hindered when the nursing staff have negative attitudes toward the students allocated to them for mentoring. In the current study, nursing students experienced negative attitudes from the nursing staff, which supports the findings of Parvin et al. (2016) that nurses' negative attitudes were reported by more than 80% of their nursing student participants. This was associated with the perception that students cannot attain the required clinical competencies. However, in the current study, the negative attitude of nurses toward the students was associated with fatigue and exhaustion, which is a result of having worked long hours during the night shift. Nurses' negative attitudes toward nursing students were also revealed in a study by Hatupopi and Nuuyoma (2019), which explored the theory-practice gap challenges experienced by nursing students in southern Namibia. This could mean that, in general, nurses' negative attitudes toward students adversely affect learning and teaching in clinical settings in Namibia.

Theme 3: Strategies to strengthen the night shift as a clinical placement strategy

This theme includes suggestions made by participants on how the night shift can be improved as a clinical placement strategy to help nursing students attain the required clinical competency. The sub-themes under "strategies to strengthen night shift as a clinical placement strategy" are discussed next.

Sub-theme 3.1: Reducing nursing students' night shift clinical placement duration

Participants urged the School of Nursing management to continue with night shift clinical placement—but the duration should be reduced. They mentioned that the usual night shift placement period lasts for four weeks. They suggested that the placement period be shortened to one to two weeks. The participants understood that working night shifts is necessary when training nursing students to be socialised into the profession,

but it is very tiring and makes them lose interest when the placement is too long. One of the participants stated that:

I would recommend the school here to continue placing us on night shift but, at least to reduce the number of days per allocation. I think a week or two rather than sending us for the whole month. P4 G1

Moreover, the duration for night shift placement should be reduced since some nursing students cannot afford transport fees to clinical settings. It is not possible for them to walk, because it is not safe in the evening as it is dark when night shift commences. They felt that they could manage transportation fees for a shorter placement period. A participant explained:

It is expensive to be placed on night shift because every day I have to take a taxi to the hospital. It is not possible to walk there in the evening after the sunset due to [a] high crime rate. I am not saying no night shift for students, but if it can be reduced to one week only then I can only use a taxi one week. P3 G2

The suggestions to reduce night shift clinical placement concurs with the recommendations for nursing student allocation, which state that due to limited supervision and guidance on night duty, night shift placement should not be too long (Meyer and Van Niekerk 2008). However, Stuart (2013) recommends that clinical placement should be designed to enable students to experience practice 24 hours a day and seven days a week, and the duration should not be limited. Furthermore, participants in the study by Postma et al. (2017) recommended that the nursing college give them opportunities to experience night shifts and 12-hour long shifts. They advocated that longer clinical practice allows students more time to align their schedules with the clinical preceptors.

While participants in the current study were suggesting night shift placement to be reduced to one or two weeks, clinical placements of a duration of more than four weeks were reported to offer an improved quality learning atmosphere in comparison to those of two weeks or less (Ramsbotham et al. 2019). The reason to limit night shift placement expressed by participants in the current study was related to financial constraints. The facility where students do clinical practice is far from the university hostel and residential areas, requiring transport in the evening. Moreover, the financial assistance provided by the government does not cater for transportation fees, and students have to pay taxi fares themselves.

Sub-theme 3.2: Limit students' night shift clinical placement to the maternity ward

Participants in this study suggested that night shift clinical placement should be limited to the maternity ward only. They believed that in other wards students just fall asleep while they are working night shift due to a low workload, and they end up not gaining any clinical experience. The maternity ward is more conducive for students; due to the

nature of activities, it is always busy and a lot of learning takes place. Students are exposed to different cases and learn how to handle them. Participants shared:

My suggestion to improve night shift placement is that the school should only send students to the maternity ward. I do not support sending students to other wards, because what I saw, even now what's happening currently, students are being placed on day shift but they opt to go for night duty just to go sleep because there is nothing to do. P2 G2

I do not see the need for students to be placed in other units. I suggest the school only allocate students on night shift to the maternity ward because that's where they learn; other wards is just to sleep, chat and eat then the shift is over. P4 G1

In the setting of the current study, there was no evidence of a guiding document indicating that nursing students should not be placed in a specific ward during the night shift. The units where students are placed are selected based on the availability of learning opportunities and nursing staff to supervise them. In addition, the level of study determines the content of the curriculum, which is another factor that guides where to place the students, irrespective of whether they are on day or night shift.

Limitation

This study focused on the experiences of nursing students from the university campus located in north-eastern Namibia. Their experiences of night shift as a clinical placement strategy may differ from nursing students who are registered at other campuses because they practise in different clinical settings. As a result, the findings of the current study cannot be generalised to other campuses.

Conclusions

This study contributes to the academic literature by revealing nursing students' experiences of night shift as a clinical placement strategy. Drawing from the findings of this study, it can be concluded that nursing students in north-eastern Namibia have both positive and negative experiences of night shift placement. The participants demonstrated positive experiences by stating that the night shift is beneficial to teaching and learning, as well as in assisting them in meeting the nursing council requirements for registration upon completion of the programme. The negative experiences among nursing students on night shift placement related to the high workload, sleeping on night shifts, disturbances in sleeping patterns and negative attitudes experienced from the nursing staff. The latter is a new insight that this study revealed in relation to the experiences of nursing students on night shift placement. Lastly, the study also concluded with recommended strategies from nursing students in north-eastern Namibia to strengthen night shift placements.

Recommendations

This study recommends that the School of Nursing continues to place third- and fourth-year level students on the night shift, since it is beneficial in the learning and teaching process as well as in the successful completion of the programme. The number of students allocated in the maternity ward during the night shift may be increased to at least five per shift, for them to be exposed to different cases since it is busy during the night. The nursing students should also receive guidance on how to rest and sleep during the day, for them to be well prepared for the night shift. Moreover, they should be educated on sleep as a normal physiological process and how to change their sleeping routine. At the training institution, the management of the school should consider providing nursing students on the night shift with transport and paying a monthly minimum fee instead of them having to use public transport.

Competing Interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' Contributions

V.N. was involved in the conceptualisation, literature review, data collection, analysis, writing and review of the manuscript. A.N.J. conceptualised, searched the literature and analysed the data from this study.

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