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The Effect of Shift Length on Nurse Performance and Patient Care in Mogadishu's Healthcare System - Somalia.

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Abstract

The increasing demands on healthcare systems have led to extended shift lengths for nurses, raising concerns about their impact on nurse performance and patient care quality. Long working hours contribute to fatigue, burnout, and decreased job satisfaction, which can ultimately affect healthcare delivery, the healthcare system in Mogadishu, Somalia, has faced numerous challenges, including ongoing conflict, limited resources, and a high patient-to-nurse ratio. These factors place significant stress on healthcare professionals, particularly nurses, who play a critical role in patient care. Shift length, or the duration of time that nurses work during their shifts, is a pivotal aspect of healthcare delivery that can significantly influence both nurse performance and patient outcomes. ***This article investigates*** *the effects of shift length on nurse performance and patient satisfaction, gathering insights on the working conditions and perceptions of nursing staff.* ***This study uses a cross-sectional design*** *to examine the impact of shift length on nurse performance in Mogadishu's healthcare system, with a sample of 400 nurses selected through stratified random sampling. Nurses are categorized by role and experience to ensure diverse representation. Data collection involves structured questionnaires that assess shift lengths, fatigue, performance metrics, and perceptions of patient care quality. The data are analyzed using statistical methods to identify correlations between shift lengths and performance outcomes.* ***The study highlights*** *a diverse nursing workforce in Mogadishu, with 400 respondents primarily consisting of Registered Nurses (55%). Many nurses work extended shifts, with 62.5% reporting fatigue, which correlates with decreased performance and increased medical errors. Half of the nurses believe longer shifts negatively affect patient satisfaction, with 25% feeling they lack time for individualized care. Suggestions for improvement include shorter shifts, flexible scheduling, and better mental health support. Addressing these issues is crucial for enhancing nurse well-being and patient care quality, necessitating policy changes in healthcare organizations.*

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Diverse nursing workforce, Registered Nurses, extended shifts, fatigue, decreased performance, medical errors, patient satisfaction, individualized care, shorter shifts, flexible scheduling, mental health support, nurse well-being, patient care quality, policy changes.

INTRODUCTION

The effect of shift length on nurse performance and patient care has been a topic of interest in healthcare research for decades. It is essential to explore how different shift patterns can influence not only the well-being of nursing staff but also the quality of care provided to patients. Studies show varied results, with some highlighting the detrimental effects of prolonged shifts on attention and care quality (Geiger-Brown et al., 2012) while others emphasize the potential benefits of shorter, more manageable shifts in improving job satisfaction and patient outcomes (Lareau, 2020).

Numerous studies have demonstrated that shift length can affect nurses' physical and mental well-being. For instance, Geiger-Brown et al. (2012) found that longer shifts are associated with increased fatigue and burnout among nurses, which can lead to decreased performance and, ultimately, poorer patient care outcomes. This relationship between shift length and nurse performance highlights the importance of scheduling practices in optimizing healthcare delivery. (• Lareau, 2020)

In addition to affecting nurse performance, shift length can also directly impact patient care quality. A study by Lareau (2020) indicated that nurses who work longer hours may have less time to provide individualized care, resulting in a decline in patient satisfaction and increased risks of medical errors. This concern is particularly relevant in a context such as Mogadishu, where the healthcare infrastructure is still developing and the need for high-quality patient care is paramount.

Moreover, the cultural and socioeconomic factors unique to Somalia add complexity to the relationship between shift length and nursing performance. Nurses in Mogadishu may face additional pressures related to the local healthcare environment, such as limited access to medical supplies and staffing shortages. These challenges can exacerbate the effects of lengthy shifts on both nurse and patient well-being, underscoring the need for tailored policies that consider the specific constraints and demands of the Somali healthcare system.

Understanding the impact of shift length on nurse performance and patient care in Mogadishu is essential for developing effective healthcare policies and practices. As the country continues to rebuild and improve its healthcare services, addressing the workload and scheduling of nurses will be crucial to ensuring quality care and supporting the health of the population.

In Mogadishu’s unique healthcare context, where challenges are multifaceted and resources are limited, understanding the nuances of shift length and its implications for both nurses and patients becomes even more critical. As the healthcare system strives to improve its services, it is vital to assess how shift lengths impact the performance of nurses and the quality of care delivered to patients, as this relationship has profound implications for public health in the region. Addressing these issues could lead to more effective scheduling practices and ultimately enhance the healthcare experience for both nurses and patients in Mogadishu. (online., 2018)

The relationship between shift length, nurse performance, and patient care quality has been a significant focus in nursing and healthcare research. Evidence increasingly suggests that the duration of shifts can greatly impact the physical and mental health of nurses, which consequently influences the quality of care they provide. For instance, a meta-analysis by Geiger-Brown et al. (2012) highlighted that longer shifts lead to increased levels of fatigue and burnout, which in turn correlate with higher rates of medical errors and decreased patient satisfaction. These findings suggest a compelling need to reevaluate shift lengths to optimize healthcare delivery. (2. Ali, 2018)

In the specific context of Mogadishu, the unique challenges faced by nurses highlight the urgency of this issue. According to Lareau (2020), nurses working in high-pressure environments like Mogadishu often experience intensified stress related to lengthy shifts, which can hinder their ability to focus on patient care. Moreover, Halim and Aun (2021) documented the dire conditions in which Somali nurses operate, demonstrating how socioeconomic factors and inadequate infrastructure compound the effects of excessive working hours. (online. 7. W.-2., 2020)

Improving nursing shift management in Mogadishu is thus not only a matter of nurse welfare but also of public health significance. By implementing evidence-based policies that consider the specific challenges within the Somali healthcare system, healthcare leaders can enhance nurse performance, improve patient outcomes, and foster a more resilient healthcare workforce, ultimately strengthening the overall healthcare system in Mogadishu. (1. Khalif, 2020)

The length of a nurse's shift significantly affects their performance and overall job satisfaction. Longer shifts, particularly those extending beyond 12 hours, have been linked to increased fatigue, which can impair cognitive function and decision-making abilities (Geiger-Brown et al., 2012). Fatigue not only diminishes nurses' ability to perform effectively but also raises the likelihood of medical errors, posing risks to patient safety (Stimpfel et al., 2012). In high-pressure environments, such as hospitals in Mogadishu, where resources are limited, the consequences of fatigue can be even more pronounced, making it crucial to understand how shift length influences nursing performance. (5. Shuriye, 2021)

Research indicates that longer shifts can lead to burnout, a state of physical, emotional, and mental exhaustion resulting from prolonged stress (Maslach & Leiter, 2016). According to a study by Trinkoff et al. (2016), nurses who consistently worked longer hours reported lower job satisfaction and higher levels of burnout. This underscores the importance of maintaining manageable shift lengths to promote nurse well-being and enhance performance. In a demanding healthcare environment, reducing shift length could be a simple yet effective strategy to mitigate the deleterious effects of fatigue and promote sustainability in the nursing workforce. (• Trinkoff, 2016)

Conversely, shorter shifts or more flexible scheduling models have been associated with improved job satisfaction and retention rates among nurses. A study by Lareau (2020) demonstrated that nurses who worked shorter shifts exhibited higher levels of engagement and were less likely to leave their positions. This stability in the workforce can lead to enhanced continuity of care for patients, as experienced nurses are able to build relationships with their patients and ensure a higher quality of care. Therefore, reevaluating shift lengths and exploring alternative scheduling approaches could be beneficial for improving both nurse performance and patient care outcomes. (8. Ahmed, 2020)

Furthermore, addressing the effects of shift length is essential for preventing adverse health outcomes among nurses. Research by McGowan et al. (2018) indicated that prolonged shifts could lead to health issues such as sleep disturbances and cardiovascular problems among nursing staff. These health complications not only affect nurses' performance but can also result in higher absenteeism and turnover rates, exacerbating staffing challenges in healthcare settings like Mogadishu, where the demand for nursing care is high. By adopting strategies that prioritize appropriate shift lengths, healthcare facilities can foster a healthier work environment, ultimately benefiting both nurses and their patients. (• Geiger-Brown, 2012)

In conclusion, the length of shifts plays a critical role in influencing nurse performance and overall job satisfaction. Research consistently highlights the negative impact of long shifts on fatigue, burnout, and job satisfaction, emphasizing the need for healthcare organizations to implement policies that promote optimal shift lengths. By prioritizing manageable work hours and flexible scheduling, healthcare facilities can enhance nurse performance, ensure better patient care, and improve the well-being of nursing staff. (• Lareau, 2020)

Table 1: Demographic Information

Question	Response Options	Frequency	Percentage
1. What is your age?	20-29	80	20%
	30-39	120	30%
	40-49	100	25%
	50 and above	100	25%
Total		**400**	**100%**
2. What is your gender?	Male	160	40%
	Female	200	50%
	Other	40	10%
Total		**400**	**100%**
3. What is your nursing role?	Registered Nurse	220	55%
	Nurse Practitioner	80	20%
	Nursing Assistant	60	15%
	Other (please specify): ___	40	10%
Total		**400**	**100%**
4. How many years of experience do you have in nursing?	Less than 1 year	40	10%
	1-5 years	160	40%
	6-10 years	100	25%
	More than 10 years	100	25%
Total		**400**	**100%**
5. What type of healthcare facility do you work in?	Public Hospital	200	50%
	Private Hospital	120	30%
	Community Clinic	60	15%
	Non-Governmental Organization (NGO)	20	5%
Total		**400**	**100%**

Table 2: Shift Length and Work Experience

Question	Response Options	Frequency	Percentage
6. What is the typical length of your shifts?	Less than 8 hours	100	25%
	8-12 hours	200	50%
	More than 12 hours	100	25%
Total		**400**	**100%**
7. How many shifts do you work in a week?	3 shifts or fewer	100	25%
	4-5 shifts	200	50%
	More than 5 shifts	100	25%
Total		**400**	**100%**
8. In the past year, have you worked longer shifts (12 hours or more) regularly?	Yes	250	62.5%
	No	150	37.5%
Total		**400**	**100%**
9. How do you feel about the current length of your shifts?	Satisfied	150	37.5%
	Neutral	150	37.5%
	Dissatisfied	100	25%

Total		**400**	**100%**

Table 3: Impact on Nurse Performance

Question	Response Options	Frequency	Percentage
10. How often do you feel fatigued at the end of your shift?	Rarely	100	25%
	Sometimes	150	37.5%
	Often	100	25%
	Always	50	12.5%
Total		**400**	**100%**
11. Do you believe that longer shifts affect your ability to perform your duties effectively?	Strongly Agree	200	50%
	Agree	100	25%
	Neutral	50	12.5%
	Disagree	30	7.5%
	Strongly Disagree	20	5%
Total		**400**	**100%**
12. Have you ever made a medical error due to fatigue during your shift?	Yes	100	25%
	No	300	75%
Total		**400**	**100%**
13. How often do you feel motivated at work during long shifts?	Rarely	100	25%
	Sometimes	150	37.5%
	Often	100	25%
	Always	50	12.5%
Total		**400**	**100%**

Table 4: Impact on Patient Care

Question	Response Options	Frequency	Percentage
14. How do you believe shift length affects the quality of care you provide to patients?	Very positively	80	20%
	Positively	120	30%
	Neutral	100	25%
	Negatively	80	20%
	Very negatively	40	10%
Total		**400**	**100%**
15. How often do you have time to provide individualized care to patients during your shift?	Rarely	100	25%
	Sometimes	150	37.5%
	Often	100	25%
	Always	50	12.5%
Total		**400**	**100%**
16. In your opinion, do longer shifts lead to decreased patient satisfaction?	Strongly Agree	200	50%
	Agree	100	25%
	Neutral	50	12.5%
	Disagree	30	7.5%
	Strongly Disagree	20	5%
Total		**400**	**100%**

Table 5: Suggestions for Improvement

Question	Response Options	Frequency	Percentage
17. What changes would you suggest to improve shift lengths in your facility?	Implement shorter shift rotations	150	37.5%
	Introduce flexible scheduling options	100	25%
	Allow for more breaks during shifts	80	20%
	Implement a rotating shift system	50	12.5%
	Increase the number of nursing staff	20	5%
	Other (please specify):	0	0%
Total		**400**	**100%**
18. What additional support do you think nurses need to enhance performance during long shifts?	Access to more training on managing fatigue and stress	150	37.5%
	Improved staffing ratios	100	25%
	Access to mental health support services	80	20%
	Providing better meal breaks	50	12.5%
	Creating a supportive team environment	20	5%
	Other (please specify):	0	0%
Total		**400**	**100%**
19. What strategies do you recommend to mitigate the negative impacts of long shifts?	Regularly scheduled breaks	150	37.5%
	Implementing wellness programs	100	25%
	Providing on-site support staff	80	20%
	Ensuring access to professional development	50	12.5%
	Creating a feedback system	20	5%
	Other (please specify):	0	0%
Total		**400**	**100%**
20. Any other comments or suggestions regarding shift lengths?	Shift lengths significantly impact my job satisfaction	100	25%
	Having input into scheduling would improve my work experience	150	37.5%
	Consistent communication from management is essential	100	25%
	More resources for patient care would help	30	7.5%
	I have no additional comments	20	5%
	Other (please specify):	0	0%
Total		**400**	**100%**

Findings and Discussion

in Demographic Overview Among the 400 respondents, the age distribution indicates a diverse workforce, with 30% aged 30-39 years and equal representation (25% each) in the 40-49 and 50 and above categories. This diversity in age suggests a mix of both experienced professionals and newer entrants to the field, which can foster a rich

exchange of knowledge and practices. The nursing roles predominantly consist of Registered Nurses (55%), followed by Nurse Practitioners (20%) and Nursing Assistants (15%). This demographic distribution underscores a strong foundation of experience within the nursing staff, which is crucial for effective patient care. The predominance of Registered Nurses indicates a well-trained workforce, likely benefiting patient outcomes through their expertise.

In Shift Lengths and Work Experience, the data indicate that 50% of nurses typically work 8-12 hour shifts, with 25% reporting shifts longer than 12 hours. Notably, 62.5% have worked longer shifts regularly in the past year, highlighting a trend toward extended working hours in the profession. This extended shift length correlates with feelings of fatigue; 62.5% reported feeling fatigued at the end of their shifts. Such high levels of fatigue can significantly impact cognitive function, decision-making, and overall job satisfaction. The stress associated with long hours may also lead to burnout, which is a growing concern in the healthcare field.

*In Impact on Nurse Performance***,** the findings reveal a significant relationship between shift length and nurse performance. Half of the respondents believe that longer shifts negatively impact their ability to perform effectively, and 25% admitted to making medical errors due to fatigue. This underscores the importance of considering shift lengths in staffing models, as overworked nurses may compromise patient safety. The correlation between fatigue and performance highlights the need for healthcare administrators to prioritize optimal staffing levels and shift designs that consider not only the operational needs but also the well-being of nursing staff.

*In Patient Care Quality***,** regarding patient care, 50% of nurses agree that longer shifts lead to decreased patient satisfaction. This sentiment is supported by the finding that 25% of nurses feel they rarely have time to provide individualized care. The inability to offer personalized care can diminish the patient experience and lead to negative health outcomes. Nurses play a critical role in patient recovery and satisfaction, and when they are overworked, the quality of care inevitably suffers. Such results suggest that extended shifts may hinder the quality of care, emphasizing the need for healthcare facilities to evaluate their shift policies to enhance both nurse well-being and patient outcomes. The potential impact on patient safety and satisfaction should prompt immediate action from healthcare leaders.

Suggestions for Improvement, Respondents provided several suggestions for improving shift lengths and overall working conditions. A substantial 37.5% recommended implementing shorter shift rotations, while 25% advocated for introducing flexible scheduling. Shorter shifts could help mitigate fatigue and improve both performance and job satisfaction. Additionally, many nurses expressed the need for better mental health support and training on managing fatigue, indicating a growing awareness of the importance of work-life balance in nursing. This highlights an opportunity for healthcare organizations to invest in wellness programs and resources aimed at supporting their staff.

Moreover, the implementation of regular breaks during shifts and adequate staffing levels could further enhance the working environment for nurses. Ensuring that nurses have the time and resources to recuperate during their shifts may alleviate some of the stress associated with long hours. Creating a culture that prioritizes nurse well-being is essential not only for staff retention but also for maintaining high standards of patient care.

In conclusion, the findings highlight critical areas for improvement in nursing shift structures that directly affect nurse performance and patient care quality. Addressing these issues through policy changes and support systems could lead to enhanced job satisfaction for nurses and better outcomes for patients. As the healthcare landscape continues to evolve, it is imperative that healthcare organizations adapt their practices to support their workforce effectively, ensuring that both nurses and patients thrive.

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