



Prolonged Working Hours and Stress Responses among Nurses: A Review

Curva, Ma. Deborah P.^{1,2}, Dela Pena, Cindy V.¹, Gueco, Laura A.^{1,3}, Martinez, Jun Crister S.^{1,4}, Martinez, Marela Ilaine L.^{1,4}, Faller, Erwin M.¹

¹Graduate School, St. Bernadette of Lourdes College, Quezon City Manila Philippines

²Nursing Service Department, Labo District Hospital, Talobatib, Camarines Norte, Philippines

³Nursing Service Department, Physicians Diagnostic Services Center Inc., UN Avenue, Ermita Manila, Philippines

⁴Nursing Service Department, Lipa City District Hospital, Lipa City, Batangas, Philippines

ABSTRACT

Nurses are often work long and demanding hours due to the nature of their job. This can have various negative effects on their physical and mental health, as well as their overall job satisfaction and performance. Studies have shown that healthcare workers who work long hours are at a higher risk of developing physical health problems such as cardiovascular disease, musculoskeletal disorders, and chronic fatigue syndrome. Additionally, long working hours can contribute to mental health issues such as stress, depression, and burnout. These negative effects on health can not only impact the individual healthcare worker but also the quality of care provided to patients. Furthermore, long working hours can also affect job satisfaction and performance. Healthcare workers who work excessively long hours may experience reduced job satisfaction and a decreased sense of work-life balance. This can lead to increased turnover rates, which can have negative consequences for healthcare organizations and their ability to provide quality care to patients.

KEYWORDS: Prolonged working hours, Duty schedule, Financial, Personal meaning, Stress

INTRODUCTION

Prolonged working hours are defined as weekly overtime in addition to regular work hours. There are numerous occupations that require individuals to work overtime, therefore lengthy working hours are widespread throughout the globe. Likewise, working overtime or long hours does not necessarily result in greater output [1]. Consequently, prolonged working hours can diminish efficiency. Instead of doing more, employees complete less work, which is frequently of worse quality. In fact, some employees may accrue more hours not because they're accomplishing more tasks, but because they're unable to complete their normal workload. 52% of employees feel burned out, and 67% believe the problem has grown over the previous two years, according to a survey conducted by Indeed. According to Koinis et. al (2015), when there are fewer health care employees available to treat patients, both product and service quality deteriorate. To accommodate a bigger volume of work, health care staff must work quicker, and errors increase when targets are prioritized over quality. To reduce workload, health care personnel may be sped through training or started working without training. Low quality erodes a health care provider's reputation and drives away clients over time. This issue has driven some staff member to work extra hours to finish not only their own chores but also those that would ordinarily go to other team members [2].

Rajan D *et al.* (2017) added that in his study titled "Negative Impact of Long Working Hours among Nurses," it was discovered that 'too long and unsocial working hours,' 'rigid rules of the hospital with regard to working hours,' and 'inability to leave the duty on time' were the most prominent factors perceived to be associated with long working hours. The primary negative consequences of prolonged working hours on nurses were 'health-related worries,' 'destructive behavior at work,' 'inability to mix work and family life,' 'dissatisfaction in relationship with life partner,' and 'inability to meet requirements. Limiting the working hours to a minimal, such as 8 or 6 hours, will make employees more productive and focused on balancing their home and work lives by allotting sufficient time for family and social obligations. Nonetheless, working longer hours will not only make employees dissatisfied with their jobs, but it will also reduce their productivity, harm their physical health, and force them to quit. This situation is prevalent especially among healthcare workers, which in turn, might jeopardize patient safety since prolonged work hours will divert their attention by means of attending to both of their needs. This is alarming since healthcare workers are of the utmost importance to deliver efficient healthcare services to patients, as they help ensure their physical and mental health. Extended work hours damage not just the physical, emotional, family, and social life of staff, but also the safety of patients and the organization's reputation. Thus, it is essential for hospital administration to comprehend how extended working hours impact employees' physical, emotional, family, and social lives, and to implement corrective measures to reduce working hours [3].

These disclose how prolonged working hours affect nurses in their employment and their stress responses. Through this, the researcher would like to review literature on nurses long working hours and stress response and possible interventions, and recommendations.

METHODS

This review was conducted utilizing journal databases such as World Academy of Science, Engineering and Technology; Statista; Department of Information and Communication Technology; and Google Scholar. Search process was conducted for articles on each database without variations of language in the duration of the process of the study. The search started in December 2022 till February 2023. The search keywords applied include prolonged long hours, duty schedule, financial, personal meaning, and stress.

RESULTS AND DISCUSSION

There is a significant body of literature and studies that examines the effects of prolonged work hours to healthcare workers. Here are some studies that provide insights on the topic: Prolonged working hours are defined as weekly overtime in addition to regular work hours. There are numerous occupations that require individuals to work overtime, therefore lengthy working hours are widespread throughout the globe. Likewise, working overtime or long hours does not necessarily result in greater output [4].

According to Gallup (2021), a full-time employee works approximately 44 hours per week on average. The same study indicated that approximately 41% of workers put in 45 hours or more per week. In the meantime, research conducted by the International Labor Organization (ILO) found that more than 488 million people across the world, or almost 7% of the total population, were compelled to work more than 55 hours each week [5]. This exceeds the baseline recognized by the applicable standards of the International Labor Organization, which was defined as more than 48 hours of work each week [6].

Moreover, according to Wooden *et al.* (2015), it is widely assumed that people with professions requiring long hours are more likely to be physically inactive than other workers, partly because they have less free time to engage in physical activity [7]. As a result, prolonged working hours can diminish efficiency. Instead of doing more, employees complete less work, which is frequently of worse quality. In fact, some employees may accrue more hours not because they're accomplishing more tasks, but because they're unable to complete their normal workload. 52% of employees feel burned out, and 67% believe the problem has grown over the previous two years, according to a survey conducted by Indeed. According to Aiken L.H. et al. (2014), increasing a nurse's workload by one patient increased the risk of an inpatient dying within 30 days of admission by 7%, and every 10% increase in bachelor's degree nurses decreased this likelihood by 7%. It was found that patients in hospitals where 60% of nurses had bachelor's degrees and nurses cared for an average of six patients would have nearly 30% lower mortality than patients in hospitals where only 30% of nurses had bachelor's degrees and nurses cared for an average of eight patients.[8]. In addition, Barraclough (2021) [9] issued a similar analysis claiming that their research demonstrates that working long hours does not correlate with corporate performance and that chaining people to their desks serves no purpose. In addition, they stated that "hopefully, this indicates that the culture of presenteeism will be a thing of the past, and we will see a more flexible and balanced approach to work in the future".

Occupational stress is the process by which psychological experiences in the workplace and pressures on mental and physical health can contribute to stress [10]. Mismatches between the individual and the workplace, such as a terrible environment or working overtime, are risk factors for occupational stress. Working long hours might also lead to occupational stress. According to Barraclough (2021) [11], employees return to work feeling more refreshed and replenished than employees in countries with longer working weeks, when encouraged to gain a stronger sense of mental wellbeing and a better ability to take on the week.

Additionally, depending on their particular coping techniques and the intensity and duration of the stress they are experiencing, healthcare professionals may respond to stress in a variety of ways.

According to Paterlini *et al.* (2022), emotional responses come first. In response to stress, healthcare workers may experience a variety of emotions, including anxiety, irritation, anger, grief, and frustration. In addition, they may develop signs of depression or burnout, including a lack of desire, feelings of helplessness, and a diminished sense of accomplishment [12].

Second, are behavioral responses. Employees in the healthcare industry may engage in stress-relieving activities such as exercise, mindfulness, and social interaction. In addition, individuals may engage in maladaptive behaviors such as overeating, substance misuse, or social withdrawal [13].

The third category is physical responses. The physical manifestations of stress in healthcare workers may include headaches, muscle tightness, exhaustion, and problems sleeping. In addition, they may face more severe physical health issues, such as cardiovascular disease or chronic pain. Notably, it was indicated that stress was associated with a range of physical health problems in nurses, including musculoskeletal disorders, cardiovascular disease, and sleep disturbances [14]. The review highlighted the need for interventions to reduce stress and improve the health and well-being of nurses.

Lastly, according to Wilkie (2020), in response to stress, healthcare staff may alter their work environment or job obligations. For instance, they may request further training, a change in shift schedules, or a reduction in their work hours. It is crucial to recognize that healthcare professionals may not always respond to stress in a healthy or adaptable manner, and may require assistance and tools to effectively manage stress. Employers can assist by giving access to mental health resources, promoting good living practices, and providing training and development opportunities. Ultimately, decreasing stress and increasing well-being are vital for ensuring that healthcare personnel can give patients with high-quality care [15].

In many countries, the healthcare workforce is predominantly female. For example, in the United States, women make up approximately 70% of healthcare workers, while men make up approximately 30%. In other healthcare professions, such as medicine, the gender balance is more evenly distributed.

Meanwhile, the healthcare workforce tends to be relatively older than workers in other industries, with a significant proportion of workers aged 45 or older. This is partly due to the high levels of training and education required for many healthcare professions, which can take several years to complete [16].

Healthcare workers typically have high levels of education and training. Many healthcare professions require a bachelor's or master's degree, and some require a doctoral degree. However, there are also many entry-level positions in healthcare that require less education and training. The ethnic and racial diversity of the healthcare workforce varies widely depending on the country and region. In many countries, there are significant disparities in healthcare access and outcomes for minority populations, and efforts are being made to increase diversity in the healthcare workforce [17].

Many healthcare workers are employed full-time in hospitals, clinics, or other healthcare facilities. However, there is also a significant number of part-time and contract workers, particularly in lower-paying roles such as home health aides and nursing assistants. Additionally, healthcare work is vital to individual, household, and economic stability. Unfortunately, this highly demanded and demanding work is deeply undervalued and undercompensated. The care workers who allow those in their care—and their families—to flourish are paid persistently low wages with few employer benefits [18].

CONCLUSION

The nurses are diverse and highly educated, with many workers facing high levels of stress and burnout due to the demanding nature of their work. Efforts to promote diversity, improve working conditions, and support the well-being of healthcare workers are critical for maintaining a high-quality healthcare system. The negative effects of extended work hours and employee stress on the health of the population they serve should be the main topics of research. Preventive measures must be assessed and implemented. It's important for individuals and organizations to recognize the potential negative effects of long working hours and to prioritize work-life balance to maintain productivity, satisfaction, and well-being.

ACKNOWLEDGEMENT

The researchers would like to acknowledge St. Bernadette of Lourdes College, Labo District Hospital, Physicians Diagnostic Services Center Inc. and Lipa City District Hospital for this opportunity to publish our research work.

CONFLICT OF ON INTEREST

No conflict of interest among authors.

REFERENCES:

1. Freedman, M. (2023). Working Overtime? Longer Hours Won't Make You More Productive. Retrieved from: <https://www.businessnewsdaily.com/9302-hours-worked-productivity.html>
2. Koinis et. al (2015). The Impact of Healthcare Workers Job Environment on Their Mental-emotional Health. Coping Strategies: The Case of a Local General Hospital. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4768542/>
3. Rajan, D. (2017). Negative Impacts of Long Working Hours: A Comparative Study among Nurses. Retrieved from: https://www.academia.edu/34828649/Negative_Impacts_of_Long_Working_Hours_A_Comparative_Study_among_Nurses_Introduction
4. Freedman, M. (2023). Working Overtime? Longer Hours Won't Make You More Productive. Retrieved from: <https://www.businessnewsdaily.com/9302-hours-worked-productivity.html>
5. Pega, F., Náfrádi, B., Momen, N. C., Ujita, Y., Streicher, K. N., Prüss-Üstün, A. M., et al. (2021). Global, regional, and national burdens of ischemic heart disease and stroke attributable to exposure to long working hours for 194 countries, 2000-2016: A systematic analysis from the WHO/ILO joint estimates of the work-related burden of disease and injury. *Environ. Int.* 154:106595. doi: 10.1016/j.envint.2021.106595
6. Hong, Y., Zhang, Y., Xue, P., Fang, X., Zhou, L., Wei, F., Lou, X., & Zou, H. (2022). The influence of long working hours, occupational stress, and well-being on depression among couriers in Zhejiang, China. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.928928>
7. Wooden, M., Angrave D., Charlwood, A. (2015). Long Work Hours and Physical Activity. Retrieved from: https://www.academia.edu/18350233/Long_working_hours_and_physical_activity
8. Aiken LH et al. (2014). Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. Retrieved from: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(13\)62631-8/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)62631-8/fulltext)
9. Barraclough (2021). The World's Most Productive Countries in 2020. Retrieved from: <https://www.expertmarket.com/uk/crm-systems/the-ultimate-guide-to-work-place-productivity>
10. Zhang, Y., Huang, L., Wang, Y., Lan, Y., and Zhang, Y. (2021). Characteristics of publications on occupational stress: contributions and trends. *Front. Public Health* 9:664013. doi:10.3389/fpubh.2021.664013
11. Barraclough (2021). The Effect of Long Working Hours and Overtime on Occupational Health: A Meta-Analysis of Evidence from 1998 to 2018. Retrieved from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6617405/>

-
12. Paterlini, M., Neri, E., Nicoli, A., Genova, F., Villani, M.T., Santi, S., and Agostini, F. (2022). Emotions, Stress and Coping among Healthcare Workers in a Reproductive Medicine Unit during the First and Second COVID-19 Lockdowns. doi: 10.3390/ijerph19105899
 13. Hardey, S., Thomas, S., Stein, S., Kelley, R., and Ackermann, K. (2022). Addiction as a Coping Mechanism and Healthy Alternatives. Retrieved from: <https://americanaddictioncenters.org/sobriety-guide/coping-mechanism>
 14. Hegney DG, Craigie M, Hemsworth D, Osseiran-Moisson R, Aoun S, Francis K, Drury V (2014).
 15. Wilkie, D. (2020). What Managers Can Do to Ease Workplace Stress. Retrieved from: <https://www.shrm.org/resourcesandtools/hr-topics/employee-relations/pages/how-managers-can-help-stressed-workers-.aspx>
 16. Boniol, M., McIsaac, M., Xu, L., Wuliji, T., Diallo, K., and Campbell, J. (2019). Gender equity in the health workforce: Analysis of 104 countries. Retrieved from: <https://apps.who.int/iris/bitstream/handle/10665/311314/WHO-HIS-HWF-Gender-WP1-2019.1-eng.pdf>
 17. Kindall, J. (2022). Healthcare Jobs: How Much Education Do You Need? Retrieved from: <https://www.teenlife.com/blog/healthcare-jobs-education/>
 18. Banerjee, A., Gould, E., and Sawo, M. (2021). Setting Higher Wages for Child Care and Home Health Care Workers. Retrieved from: <https://www.epi.org/publication/higher-wages-for-child-care-and-home-health-care-workers/>