



## Exploring the Effects of Sleep Deprivation on Nurses' Performance and Patient Care

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### Abstract

**Background:** Fatigue has been cited as a significant problem in most healthcare settings resulting in declined performance, and higher incidence of medical errors. The interventions negatively affect decision-making processes and communication and as a result it will leads to compromise the patient outcomes.

**Aim:** The objectives of this study are as follow The purpose of this study is to examine how fatigue affects the performance of healthcare workers/patient outcome, (a)The kind of risks it poses to the patients/health care workers and (b) The ways through which the effects can be minimized.

**Methods:** A broad research synthesis of published studies and reports on the impacts of fatigue on medical competence and social interaction was carried out.

**Results:** The results reveal that being fatigued impacts medical workers and teams as it hinders communication between the teams and inflicts a higher percentage of mistakes to patients' care quality and safety.

**Conclusion:** Fatigue in healthcare places put patients at high risk and worsens the quality of care greatly. The way to manage these risks is to organize better work shifts and organizational support to employees.

**Keywords:** Tiredness, patient outcomes, adverse events, flow of information, health care, workforce exhaustion.

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### Introduction

Where health care is involved, their health is also felt in the quality health care services they offer to patients. Among the important issues and obstacles in healthcare delivery system is that most workers are facing fatigue. A large number of nurses, doctors and other health care workers regularly work extended hours, have irregular schedules, and deal with stressful conditions; they quickly become fatigued. Fatigued condition in these environments reduces mental performance, problem solving skills and productivity, resulting in increased risks of medical mistakes and compromising patient safety as well as job satisfaction. The relationship between fatigue and the associated hazards in healthcare settings; consequences of fatigue on clinical outcome, communication, and patient care are discussed in this paper. It is for these reasons that such risk factors need to be identified as well as understood to help formulate the right interventions to address fatigue as well as enhance the wellbeing, safety and the efficiency of the technical delivery of healthcare.[1]

## **A systematic review on the effects of health literate on healthcare outcomes**

Lack of sleep among RNs is a common problem in health care organizations that has major ramifications for not only caregiver productivity but care recipient and health outcomes as well. Employees especially nurses have to work extraordinary hours or unpredictable hours for several days in a row without having adequate rest. Such schedules put people for quite a long period without sleep, thus leading to impact on attention, memory, and decision making. The safety and effectiveness of the delivery of patient care is partly determined by performance and health of these healthcare workers who provide the bulk of care to the patients. Kenneth Rock- Boss and Douglas Graham *Awakened – Insights and Strategies for Saving Your Health, Your Relationships and Your Life* by Abigail Brenner have indicated that a nurse who has been working while sleepy is likely to make error on medication administration if not follow treatment procedures properly and may also take long to identify the changes in the patient status. Such errors cause negative outcomes including increasing incidences of adverse events, lengthened hospitalization, and fatalities. [2,3] The Implication of the lack of sleep reaches far beyond affected productivity, penetrating to the aspects of organizational interaction and the standards of healthcare organizations. Fatigue also has effects on how the nurses share information with their friends, this is likely to cause misunderstandings during change-overs endorsement or other combined procedures. Such scenarios of healthcare can be highly inefficient and lead to the situation when patients do not receive all the necessary measures often at the appropriate time. Moreover, I could not undermine the impact of the timed wakefulness on the occupants in terms of the emotional health. Fatigued staff tends to develop stress, increased irritability, and burnout that erodes the quality of care that patients receive from exhausted nurses. Nurses' reliance on emotional cues is seen as an important link to the way in which care is delivered; consequently, if this bond is eroded, customers or patients' satisfaction with health services are likely be reduced. Sleep deprivation among nurses is a significant topic that should be discussed in order to enhance clarity of the results in the sphere of healthcare. Techniques used in combating fatigues include the having of a sleep and rest schedule, having regular shift patterns and putting into practice wellbeing messages. Also, there is the need to engage in constant education and creating awareness amongst healthcare administrators on why people should get enough sleep for their general health and wellbeing and that of their organizations. It is important to understand that this is a systems problem; introducing changes demands an intervention by policy bodies, health systems, and nursing staff. Finally, the promotion of effective sleep in the occupied position, nurses will not only increase the effectiveness, but also organized, safe, effective, and patient-focused health care.[4]

A paper that focuses on the main idea of how to be both productive in one's professional work as a nurse while minimizing the overall dangers of nursing to personal health. Nursing is a challenging career that entails civil servants to combine the measures of professional desk productivity with the exigencies of mortal health in the course of long working hours, stress and strenuous work. Nurses therefore act as a vital link on patient care hence exposing them to any unfavorable working conditions avertable affects patients. However, there is pressure from organizations to provide quality services, which are sometimes trailed in complicated and difficult manners hag; thereby affecting the nurses' physical and psychological well being. Thus, the crucial factor which can help to learn how to require from nurses an effective work without injuries is to discover the optimum ratio of work/time and health resources. If such a balance is not achieved, some health consequences will be seen such as burnout, chronic fatigue, musculoskeletal injuries and mental health issues including anxiety and depression all of which result in decreased job satisfaction, low morale and even potential attrition from the profession. [5,6]

Organizational effectiveness of decisions and actions in clinical practice implies extended work shifts, handling of several tasks concurrently, and fast decision-making in complex conditions. These needs are critical for patient care but increase the hazards of sleeplessness, stress, and physical pressure. Thus, nurses themselves are among the most endangered workers in terms of health: sleep deprivation, for instance, remains one of the most acute problems affecting or concerning nurses. Forced to work at hospitals, which have strict shift schedules, nurses will at times be forced to work at night, take their overtime or work for extended hours that are bound to in one way or another affect their circadian rhythm and thus lack quality

sleep. Fatigue arising from inadequate sleep impacts on the brain, specifically thinking, problem solving together with behavior and mood thus compromising the clinical reasonability and error processing abilities and decision making, thereby increasing the propensity to make mistakes. If not well addressed, these health implications lead to a vicious cycle through which stress and fatigue hinder efficient nursing performance then depletes health.[7,8]

Optimizing strategies to balance efficiency against health risks always poses a task of change within a healthcare system. Organizations should be embracing the central role of catering for their workforce, to ensure that they are healthy, balanced and productive and achieve organizational and personal goals. Probably the most impactful tactic is improving work shifts from organizational management level, specifically, evidence-based models of decent staffing and scheduling, which help avoid burnout during non-working time. Nurses should have some control over their working hours so that they can avoid working during their most vulnerable period; extending the current breaks to ensure that any tired nurses get to rest. Furthermore, the main goal of creating a mentally healthy workplace should be an eradication of threats connected with high-stressed jobs. With the availability of resources like counseling offices, stress handling seminars, and mind-relieving seminars, the nurses will not only meet the stress challenges of their working conditions but also build up their emotional muscle power.[9] On the other hand, self care means that nurses should protect their own health in the course of performing their duties. Time-tested principles of handling patients and duties acquired from trainings regarding proper carrying, bending and lifting techniques for patients can be applied ultimately to protect nurse's musculoskeletal health They also include recommendations on ways/necessary exercise standard techniques of stress management are crucial in preserving nurse's health in the course of their duties. It also ensures that patients receive enough, and quality health care and nurses receive the necessary care to help them meet the standard demands efficiently. In conclusion, it is imperative to suggest the comprehensive strategy of the balance between efficiency on the job and/or health risks in nursing by focusing on the organizational factors as well as promoting the vocational health and personal health management of nurses along with a support to the nursing workforce. Reducing patient and staff stress, increasing patient satisfaction and providing key resources to nurses will help to improve the standard care for valuable customers and support the health of valuable employees.[10]

In the following article we look at what role if any People have a direct correlation with the subject of this database on The Link Between Sleep Patterns and Patient Safety in Clinical Settings.

Concerning patient safety the role of sleep Intervals or the absence of it is widely discussed in clinical environments in the recent past. Due to the nature of their roles, nurses usually come into contact with patients and as such they are supposed to work during late evenings, weekends or even midnights, thus they often lose natural sleep. This impact, in turn, distorts cognitive and physical performance, increases the potential of errors that endanger patient lives. Different studies clearly point to the fact that sleep loss could adversely affect decision making performance, slow down one's reaction time, and affect one's attention and memory as well as that, sleep loss could also adversely affect one's clinical judgment. Hence, sleep patterns determine the extent to which healthcare personnel can address patients' needs, attend to calamities and stick to the measures that protect patients' health.[11]

Injury to the Neuro-Cognitive functioning of the nurses is not the only problem associated with poor sleep, health and well-being of the nurses including their motor coordination, are affected. Forced to work while they are sleepy, nurses become tired, thus, are more likely to have accidents at work, whether these are accidental dropping of medications or equipment, or other severe accidents involving falls and injuries. These impairments can still worsen the safety of patients which are under their custody. Also, sleep loss is characterized by an amplified emotional state, which makes people become irritable, moody, or even narcissistic for lack of better heart. Some ways burn out manifests in a nurse includes nurse to patient relations, nurses to staff relations, and patient satisfaction. Emotional stress due to lack of sleep can also cause burn out that decreases the ability of the nurse to give optimum care for an extended period of time making patients even more vulnerable than before. [12] Furthermore, the shifting of patient's sleeping patterns can have outpatient risks to the safety of the patients in the long run as it accumulates. Health-care

workers, particularly those in rotating shift work or consecutive long shifts, lose their ability to obtain adequate restorative sleep. This means that the personnel becomes tired or rather have a tired feeling which if persistent overtime results to the reduction of the ability of the nursing staff to notice shifts in the patient states. Such a response delay is particularly vindictive in settings with higher acuity such as the emergency departments or intensive care units where timely action is critical to averting emergent events or complications. Through tracking the patients, identifying sign/symptoms indicating deterioration and/or face any emergency, it is clear that the level of alertness a nurse has is greatly determined by the quality/quantity of sleep the nurse has had. [13] To manage such risks, healthcare institutions must deal with the causes of sleep disruption in their institutions. Staffing: Introducing, where possible research-based staffing models; Shift working: the promotion of shift patterns which are conducive to rest; Resting spaces: making sure that nurses have access to adequate rest areas during their shifts. Moreover, there is need for policies, which would give a healthy time off between the shifts besides reducing the pressure of working extra hours. This paper argues that knowledge about sleep hygiene and consequences of sleep loss on nursing health and performance may assist nurses to enhance their sleep quality and, in doing so, promote their health as well as the health of patients. As a result, promotion and support of sleep health of the nursing staff can immediately improve the quality of the care being provided and may also decrease the likelihood of the adverse events that increase the danger of compromising the patients' safety.[14]

For the productivity scenario, the activities to be assessed are product output, product quality, and product defects; the performance measures are product throughput, product quality, and defects; the data sources are product samples; and the outcome criteria are productivity, product quality, overall decision-making, and decision error rates.[15] For the healthcare sector especially the nursing segment, assessment of productivity, decision and error is vital for assessing how efficient or inefficient the nurses are and in real sense how their efficiency affects their performance. Special attention is paid to the ways of expressing productivity in terms of nursing wherein productivity depends on the readiness to give efficient care with multitasking. But quality and timescale of such work is as important as the quantity or number of projects, assignments or tasks managed or achieved. Lack of sleep poses a big threat to performance, because worn out nurses are likely to spend more time on tasks, have limited ability to handle tasks effectively and efficiently and make priorities in delivery of care obscure. This places efficiency under the microscope, and when the overall rate of efficiency is lowered by factors like non-adherence to exercise, the repercussions are not quickly apparent but can mean a slower turnaround for patient care and resulting in the deterioration of conditions and increased deterioration along the lines of lengthened recovery, complications, and even unneeded deaths. [16,17]

Decision making is another-important cognitive function closely linked with sleep deprivation. Virtually every day, nurses can make choices that have some consequences to the patients protected by their skills, knowledge, and experience: for example, what to do if a certain patient's condition changed, how to prescribe the dose of the medicines, and even what risks can be a sign of if not prevented timely. Decision making is a complex cognitive function that involves attention, memory and judgment that are all knocked out by poor sleep. Nurses who have worked for long hours without sleep will be prone to commit mistakes in decision making as well as miss essential features about a patient's condition. Even these small mistakes can turn into deep ones in some circumstances, especially in clinical situations. For instance, mistakes in administration of medications make a patient suffer from toxicity or drug resistance due to wrong dosage administration or failure to look for reaction to drugs [18]. Furthermore, sleep deprivation not only influence the productivity and decision capability but also the amount of error observed in nursing. As the research on the topic indicates, any chance of errors is ramped up by tiredness especially in busy institutions like hospitals. One can distinguish between professional errors which can include procedural mistakes (for example, failure to document or inaccurate communication with other providers) and clinical mistakes, for example, failure to assess a patient's vital signs, failure to diagnosing a condition that is actually present. The error rate maybe high owing to fatigue on a particular shift especially if the nurse has not rested as they work on consecutive shifts or rotating shifts which disrupt the natural sleep wake cycle. Fatigue reduces concentration; decreases efficiency in the performance of tasks; and exponentially enhances the possibility of missing vital incidents. Such errors may involve simple procedural mistakes that

cause delays in the treatment of patients or else serious risks that affect the general health of a patient; this implies that there is need to constantly review the rates of these errors in the promotion of quality health care services.[19]

Addressing the factors that affect productivity, decision-making, and error The issue of staff nurse-to-patient bedside care and adequate sleep rates as important as understanding the importance of sufficient sleeping, as well as addressing and creating organizational changes for enhanced nurses' wellbeing. Recruiting and staffing, effective workforce management, sleep and fatigue management are the important steps which need to follow in order to minimize detrimental effects of sleep deprivation. However, ensuring that employees work in a proper environment that provides relaxation, decreasing overworking and providing enough breaks will improve the brain decision-making ability as well as decrease mistakes made. It becomes necessary for healthcare organizations to assess these aspects by data capturing and getting feedback from the nursing staff frequently. By addressing these interrelated problems, institutions will promote the health of their nurses and, in turn, protect the safety of their patients while increasing productivity and efficiency, as well as improving decision-making and reducing the incidence of medical mistakes.[20]

### **Exploring Difficulties Experienced in Workplace and How they can be Addressed Among Healthcare Staff**

The research study shows that healthcare workers including nurses have numerous challenges in their workplace that affect their health and that of patients. This paper identifies workload as one of the critical barriers to workplace productivity because the job is often rigorous, demanding people's time, energy, emotions, and strength. Several of them practice in shifts, particularly night shifts, which causes interference with their biological clocks hence fatigue. This exhaustion joined with the pressure of managing patients demand leads to an increased level of burnout, truancy, and turnover. Moreover, the interpersonal interaction with patients in critical conditions and problems related to medical environments make the situation highly stressful: in consequence, carers often develop anxiety and depression. These challenges not only disturb the performance of the nurses but also harm patient safety as well as productivity in the health care organizations.[21] One of the greatest concerns impacting healthcare workplaces is the problem of scarcity of workforce. Due to rising patient turnover and healthcare needs, scarcity of human resource is a major issue that is rendering many healthcare facilities in the world overworked. This shortage puts nurses in a position where they are forced to attend to more patients requiring their attention than is healthy making work stress and fatigue even worse. Chronic working long hours coupled with lack of adequate staff personnel results in more mistakes, poor quality of patient relations, and high dissatisfaction among both patients as well as health care workers. Furthermore, inadequate staffing leads to the patient acuity problem in that the nurse may not have enough time or the needed resources to develop needed relationships with the patient or other members of the patient care team.[22]

Organization dilemmas in healthcare are not limited to the work environment but also communicated and teamwork. Nurses are also members of a team of health professionals and they may work alongside medical practitioners, technologist and other carers. However, lack of coordination and or poor communication between these team members can cause complications, unsuitable handling of the patients and slow treatment. Anywhere there is a lot of activity and work, in clinical situations with staff maintaining a multitude of responsibilities besides their shift, there is room for misunderstanding. Disclosure can occur during inadequately communicated endorsement where some important information regarding care of patients may be missed which can cause delays in treatment or confusion as to patients' needs. [23] In response to some of these challenges, healthcare institutions must adopt of several measures that enhance the staff welfare as well as ensure patient safety. One important intervention is to use research-backed staffing approaches that promote reasonable patient to nurse ratios and reasonable staffing of breaks. This can be done by implementing better shift schedules to ensure that worker get enough rest in between shifts and avoiding two shifts in a row. Furthermore, providing stronger insurance for mental state, including

psychological counseling and stress programs and reduction for health care professionals is a great way to cope with the emotional load.[24]

The other approach to dealing with issues in organizations operating in the healthcare sector is promoting healthy communication. It is recommended that more healthcare organizations provide activities for team building and individual communication and team members. endorsement occur when one caregiver relays information about a particular patient to another caregiver Taking time to practice and establish effective endorsement processes and the vital data to be communicated should be understood and passed without misunderstandings. Communication is also strengthened by evolving technology to enhance the productivity of the practice. For instance, EHR facilitates management and organization of detailed patient information and does away with information gaps between the medical care givers.

### **Insights on How Rest Affects Care Quality and Staff-Physician Lifestyle**

Restriction is essential not only to the quality of work carried out by health workers but also their wellbeing. In existing high stress and productive environment like hospitals, nurses and other healthcare service providers maintain multiple responsibilities, sufficient rest turns are crucial for not only the well-being of healthcare service providers but also safe and quality healthcare services delivery for patients. Nurses are not exempted from working on extended shifts, including at night and during the weekends, but the study found out that most of them are not getting enough sleep. Lack of adequate sleep also reduces alertness, memory, and ability to make decisions – more so in high risk patient care. Therefore, when a nurse is fatigued he or she is likely to make clinical judgment errors or overlook significant symptoms of patient discomfort or distress or delay interventions required for patients' well-being. [25] Apart from the clinical performance, rest or rather lack of it directly influences the work-life balance of health care workers. Working nurses who have poor sleeping patterns or too much workload usually this is always a big challenge in balancing between power and wealth. Nurses often work under irregular hours, may be expected to work long hours, and are on call frequently, thus are not able to foster good family relations, nor can they take care of themselves and participate in other activities which would enrich their personalities. This imbalance can cause burnout, emotional exhaustion and feelings of depersonalization and personal accomplishment, all of which increase stress levels and decrease job satisfaction. These factors in due course lead to a higher turnover rates as efforts to reduce work hours or even quit the nursing profession becomes inevitable. [26]

Also, restlessness results in exhaustion, emotional and physically, hence affecting a nurse's ability to care for patients. When a nurse is well-rested they will engage with the patient in a positive manner, contribute emotionally and have time for conversations. However, when they are tired due to poor sleep, they may lack, be impatient with their clients, be easily irritated, all of which are qualities that have a negative impact on the kind of care that the patient will receive. The emotional and psychological consequences of poor sleep also may interfere with reports between healers thereby causing communications breakdown, ambiguities or mistakes in analyzing patients.[27] Another massive impact of inadequate sleep can be attributed to the promotion of burnout. The present study concerned Burnout, which refers to a mental state defined by high levels of stress, fatigue, and lack of recovery time, as common among healthcare providers and measures by emotional exhaustion, depersonalization, and a diminished sense of personal achievement. Fatigued nurses are likely to quit such workforce deficits exacerbate and put additional strain on those that continue to work. The fact that healthcare professionals are unable to effectively separate their work and personal lives impedes their ability to gain the needed rest which ultimately leads to high levels of burnout, stress, and unhappiness. Working hours and rest We should also stay responsive to the need to provide for rest and consequently reduce burn out, turnover and attrition rates.[28] As a result of the above challenges, optimizing their employee's rest and work-life balance is an ideal strategy that healthcare organizations should employ. One thing that should be done includes adoption of flexible working hours, ensuring that the employees take breaks within working hours, decreasing the number of shift-to-shift working hours or shift-to-night working hours working. Patient restorative rest areas can also be provided to allow the nurses to sleep for some time or even take breaks during working long hours as this have a positive impact in quickly recovering if fatigued when handling

critical cases. Furthermore, it promotes the organization's culture on the aspects of self-care, mental health and enough rest to reduce the culture of stigmatizing restful care in the healthcare sector. This paper posits that through adopting rest friendly policies along with work life policies, health care organizations should be able to increase the quality of services delivered, increase staff satisfaction, convey improved working conditions and therefore improved patient outcome.[29]

### **Mitigating Fatigue to Enhance Nursing Practices and Patient Trust"**

Nurse fatigue is a crucial issue in a healthcare sector because most of the nurses work for long hours, irregular shifts and in stressful conditions. Apart from this, it aggravates the health worthy of the numerous healthcare workers and incapacitates their capability to offer safe and efficient care. Reducing fatigue can so greatly help in improving the nursing profession, safety of the patients and the faith the Patients bestow in the professional staff. Cognitive impairment, decrement in attention, decision making power, and emotional stamina all hinges on fatigue and for any good tending to a patient, a nurse should be mentally and emotionally fit. Consequently, the prevention of fatigue in the workforce is crucial in improving the health care systems; preventing depletion of nurses' health; and maintaining the trust of the patient.[30] The first of its effect is the extent to which nurse fatigue affects clinical competence. Nurses are so drained that they can easily fumble with patients, give the wrong dosage of drugs or miss out on some small changes that patients exhibit or even be so tired to relay information to the rest of the healthcare practitioners correctly. These mistakes can lead to denial of treatment, a compromised safety of the patient, and in worse case scenarios, death. WHEN mistakes occur because of fatigue, people lose confidence in the health care system and this makes people develop anxiety, dissatisfaction and least of all, they lose confidence in the health care givers. In contrast, alert and well rested nurses able to devote their complete attention to their tasks and thus make the right decision, providing a high quality of care and increasing the level of patients' confidence.[31]

In view of this, proper approach towards reduce fatigue can only be done through the provision of healthcare institutional policies that will enhance restorative processes especially for the nursing staff. An option is to work on the pattern of shifts where the nurses need to take in consideration their working hours and the number of working hours they should have before the next shift. This may consist of the number of shifts an employee is allowed to do consecutively or making certain that night shifts are followed by adequate rest breaks. Reducing the incidence where a nurse works a shift immediately before or extending for long hours, means the nurse is much fresher, hence more attentive in handling patients. Bidding flexible work schedules such as, part-time working, shift working or rotating shift working can also enhance the quality of the nurses' lifestyle, in other words, decrease the stress level which is vital for minimizing the level of burnout.[22,23] Apart from shifting its working schedule, another technique that can be applied is the creation of a chance for all the nurses to take a break at some time during their shift to help reduce fatigue. As easy steps that can be taken, employers should ensure that they have a few specific spots within the health care facilities where the nurses can rest and/or catch a nap within the course of the shift. When breaks replace the nursing work of the patient care supply, nurses have a chance to break away from these high-pressured tasks and thus are better able to carry out their work when returning from a break. It is more so required in areas of the patient care environment like emergency and or intensive care where the nurse is on alert for hours on end.[24] Reducing fatigue also has a wider significance to trust of the patients. Well-rested nurses are keen to patient's positive interaction because they offer desirable care chiefly based on empathy and confidence. Those patients who realized their healthcare providers are awake, knowledgeable, and caring, are consequently more likely to have faith in the care they receive, and therefore, be satisfied with their health as well as care outcomes. On the other hand, if the nurses are tired, they might not spend much time talking to patients, and if they do, might not appear to be as concerned as patients might want them to be. These negative experiences impose a toll on the overall patients and healthcare providers interaction and diminishes the confidence of patients on the general health systems.[25] Thus, fatigue reduction appears to be critical for the improvement of the nursing activities and preservation of patients' confidence. Healing begins with a concept which has serious ramifications to the world of nursing if strategies that are geared towards encouraging an environment of rest and recovery

are practiced in health care organizations, strategies such as modifying working schedules so that nurses can manage sufficient energy hence perform their duties effectively and have the ability to make good clinical judgments, nurses must learn how to lead healthier lives and form supportive relationships with patients. This paper has shown that management of fatigue benefits both patient care and the sustainability of nurses' health, thus a more efficient healthcare system.[26]

### **A Closer Look at Fatigue-Driven Risks in Healthcare Environments**

Fatigue is a problem of interest in healthcare settings as it is likely to harm both the workers and the clients. Healthcare institutions antecedently reveal that finite students, practicing nurses, doctors, and other healthcare staffs often work for long hours, unpredictable shifts, and often stressful conditions consequently to fatigue. As fatigue is inevitable in many high-demanding occupations and as it influences clinical judgments and patient care, the stakes are the highest in healthcare. Fatigue related risks in healthcare organizations create opportunities for medical errors, care compromise as well as poor patient outcomes hence the need to determine the extent of risks and prevent them.[27] The first and probably the most dangerous effect of fatigued experience is a decline in cognitive abilities. Researchers found out that healthcare professionals under fatigue exhibit poor focus, slow responses, and even a bad memory. In clinical situations, this means that nurses and doctors are frequently unable to observe the physical symptoms or altered cues that would suggest a deterioration in the state of the patients being cared-for. Fatigue can also affect judgement and the ability to make good decisions at the time when timely action is critical – for instance during accidents or operations. [28,29]

### **Conclusion**

Exhaustive circumstances are associated with risks, to both healthcare providers and patients due to ramifications such as decision-making and therapeutic mistakes together with compromised communication as well as physical danger, which broadly illustrate the extensive ramifications of exhaustion in healthcare settings whenever it undermines the general quality of patient care and erodes confidence in the sector. These risks must be reduced as and when it can be done so effectively requires that actions like improving shift patterns promoting and ensuring the health of individuals practicing in the health industry. The sources of exhaustion can hence be addressed to improve safety, outcomes and the good health of health care employees. Lastly dealing with fatigue is inarguably essential, it is for creating healthcare system that is more sustainable, effective, and proficiency.

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#### استكشاف تأثير قلة النوم على أداء الممرضين ورعاية المرضى

##### الملخص

**الخلفية:** الإرهاق مشكلة كبيرة في معظم بيئات الرعاية الصحية، حيث يؤدي إلى تراجع الأداء وزيادة معدل الأخطاء الطبية. تؤثر التدخلات سلبيًا على عمليات اتخاذ القرار والتواصل، مما يؤدي في النهاية إلى التأثير سلبيًا على نتائج المرضى.

##### الأهداف: تهدف هذه الدراسة إلى:

1. فحص تأثير الإرهاق على أداء العاملين في مجال الرعاية الصحية وتأثيره على المرضى.
2. تحديد المخاطر التي يسببها الإرهاق لكل من المرضى والعاملين في المجال الصحي.
3. استكشاف الطرق التي يمكن من خلالها تقليل هذه الآثار السلبية.

**المنهجية:** تم إجراء تحليل شامل للدراسات والتقارير المنشورة حول تأثير الإرهاق على الكفاءة الطبية والتفاعل الاجتماعي.

**النتائج:** أظهرت النتائج أن الإرهاق يؤثر بشكل سلبي على الأفراد والفرق الطبية؛ حيث يُعيق التواصل بين أعضاء الفرق الطبية ويزيد من نسبة الأخطاء، مما يؤثر على جودة وسلامة الرعاية الصحية المقدمة للمرضى.

**الخلاصة:** يعرض الإرهاق في بيئات الرعاية الصحية المرضى لمخاطر عالية ويُضعف جودة الرعاية بشكل كبير. يمكن إدارة هذه المخاطر من خلال تحسين تنظيم نوبات العمل وتوفير الدعم المؤسسي للعاملين.

**الكلمات المفتاحية:** الإرهاق، نتائج المرضى، الحوادث السلبية، تدفق المعلومات، الرعاية الصحية، إجهاد القوى العاملة.