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Exploration of the Association between Technostress and Burnout among Healthcare Professionals

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ABSTRACT

This study uses case studies as the research design and uses relevant literature from secondary sources. The study found that technological advances are the backbone of any organization, and the healthcare industry is no different. The literature revealed that due to newly developed technologies, medical facilities have become more developed than before and can provide clients with simpler and more efficient health care. This review explores the association between technologically related stress and its association with burnout syndrome among healthcare professionals (HCPs). The results show the effect of digitization on the psychological well-being of medical professionals. The findings and the practical consequences of the study show a linkage between long-term hospital digitalization initiatives that take technostress and its effects on burnout into account. The results indicate that the utilization of technological digitalization is linked to distinct psychological needs and the corresponding psychobiological stress responses. Consequently, the study found that because epidemiological research on this type of technostress is lacking, it is still unknown if it contributes to mental problems such as burnout. The review shows that a growing body of research indicates that technology may improve overall performance if it maximizes workplace structure, permits more flexibility, and boosts employee authority and autonomy. The review found that *employee mental health appears to be in danger from both the benefits and problems associated with the technology of work. The study recommends that more investigation be conducted on the subject to provide a more accurate description of the benefits and drawbacks.*

KEYWORDS: *Technostress, Burnout, occupational stress, information and communication technologies, digitalization.*

1.0 BACKGROUND INTRODUCTION

The study provides a critical review of the link between technostress and burnout in general workplaces and technological advancement in organizations, and the healthcare industry. The study also explores how medical facilities have become more developed and provide patients with a variety of medical services. The study reflected on the association between technologically related stress and its association with burnout syndrome among healthcare professionals. The pressures of modern healthcare, with its demanding workloads and complex technologies, can take a toll on our dedicated medical professionals. Burnout, characterized by emotional exhaustion, detachment, and a sense of futility, is a growing concern that jeopardizes both healthcare providers and the patients they serve. While traditional stressors like workload are well-known contributors to burnout, the increasing reliance on technology in healthcare introduces a new dimension: technostress. Digital tools like electronic health records and communication platforms offer advantages, but they can also lead to frustration, information overload, and technical difficulties, especially if training is inadequate. The adoption of new technologies is challenged by unexpected barriers as the working environment becomes more digitalized. Computers, wearables, AI, and virtual and augmented reality are some of these technologies. These new technologies are causing work processes and relationships to accelerate and intensify, which presents significant problems for organizations and employees. Healthcare organizations are more advanced than ever because of

new emerging technologies, which are associated with easier and more effective patient care. Currently, a common issue that many healthcare professionals are facing is burnout.

Stress at work is linked to poor mental health, including burnout. [1–5]. Many significant work-related stressors have been recognized, and decades of intensive research have focused on the characteristics of employment that cause stress and stress-related disorders [6,7]. They can be broadly divided into categories related to work activities; social interactions with clients, coworkers, or superiors; work organization, including scheduling of working hours; or employment connections. On the other hand, studies on work-related stress did not initially concentrate on technology as a cause of stress. The digital revolution has brought about a change in this. Digital technologies are now common in practically every industry and profession, and their spread has a profound effect on business models, employment relations, organizational structures, and communication. It is nearly a given that these modifications will have an impact on specific employees. It is crucial to know the elements of digitization, which cause stressful conditions and, consequently, are associated with a negative impact on well-being from the standpoint of occupational health and safety [8]. This study suggests a link between technostress and burnout in general workplaces, but this hasn't been thoroughly explored in healthcare, a field with unique pressures and a complex technological environment. This study aims to investigate this potential association. The objective of the study is that understanding their connection will help researchers develop strategies to manage technostress and promote their well-being.

2.0 LITERATURE REVIEW

This study made a critical and careful review of relevant literature on the relationships between stress, mental health, and workplace digital technologies. This section defines concepts related to this study. Concepts such as digitalization 'technostress' and 'Burnout' have been provided with detailed definitions to enable readers of this study to have a robust understanding of the article. The study also provides an overview of relevant findings in the empirical section. The empirical findings suggest that there may be benefits to digitalization for mental wellness in addition to the potential harm that some aspects of working with digital technologies may cause to workers' mental health.

2.1 CONCEPTUAL REVIEW

The Concept of Digitalization at Work

Studies have shown that one basic technological transformation is digitalization. Its origins are in the advancement of digitalization technology and its growing widespread distribution across every aspect of life [9]. According to research, one important area of digitization is work. For instance, studies done by scholars in this field revealed that between 2005 and 2015, the proportion of workers in Europe who said they frequently used digital devices increased from 36 to 57% [10]. The most popular technological advancements in workplaces are wearables (like smart glasses), smart factories in industry, automation, software-driven workplaces, and procedures (for example, company management programs), and technological advancements in communication and information like mail, networking sites, and mobile devices.

Relevant literature and empirical findings show that in the health sector, digital information and communication technologies are being utilized more often and are developing quickly [67]. Personalized medicine [69], wearables, telemedicine, health portals, wearable health information technology, and the digitization of many health services [68] and practices are some examples of this. Digitization can lower expenses, raise total cost efficiency in the health field, and enhance patient care [70]In the past, studies have shown that newer technologies have been quickly adopted and frequently improved upon to improve patient outcomes [71]. According to research, 38% of urology physicians in Germany who provide inpatient and outpatient care already join the tumor conferences web-based, 12% use video consultations, and 70% of respondents already use digital medical data. Furthermore, 78% of respondents think the digital transition is (very) helpful, while only 6% disagree [72]. Over the next 20 years, Researchers have predicted that technology is predicted to progress in several other areas in

addition to digital health records, particularly in the areas of robotics, imaging, minimally invasive technology, and diagnostics [73]

These advancements proved to be effective agents of change, which affected each component of an enterprise. This change is including in the way each job is completed, (such as communicating in place of face-to-face meetings), the way of arrangement of work, labor communication, and offered products [11–13]. Studies show that the need for new qualifications and the technological replacement of existing vocations cause changes in labor markets as well [14]. There are effects of this digital revolution on the psychosocial work surroundings of employees. These can be either positive or bad in terms of stress reduction brought on by helpful digital tools, improved work organization made possible by technology, or stress associated with technology. There is a question about the relationships between digitalization and physicians' burnout and stress because the development of digital transformation of the health system must prioritize building environments that promote health and well-being for healthcare workers. More information is being revealed about the potential effects of digitalization on mental health as these technologies are used more frequently in the healthcare industry. This is particularly the case when it comes to the use of technology and variables that are associated with mental problems. The ongoing digitalization and technology of work in the current health sector have major consequences. Therefore, it is critical to investigate if using technologies and digital devices at work causes 'technostress' or increased stress, and whether this has an impact on mental health such as burnout. The terms 'technostress' and 'Burnout' are defined in this article, along with potential benefits and consequences of using digital devices at work as well as how they affect mental health.

2.1.1 The Concept of Technostress

Craig Broad [20] proposes that computer technology use may contribute to stress. He provided a term called 'technostress to describe the psychological reactions to negative computer-related experiences.' His treatment as a psychotherapist was primarily based on follow-up, according to Broad in 1982, Technostress is defined as 'a modern disease of adaptation and stress experienced by end users of technologies in the workplace triggered by a failure to adapt to the advancements in technology in an appropriate way'.(Ragu-Nathan et al., 2008). Scholars have worked to track the concept's development because of technological advancements, creating new definitions and explanatory models. (Tarafdar et al.,2019) described technostress as a procedure that includes participating within an information-driven setting" that is perceived by the individual as demanding or stressful. This requires the individual to implement changes and activate coping mechanisms, which can result in behavioral and physical problems. (Nisafani et al.,2020) have demonstrated a model that proposes a wide range of uses technologies can induce technostress, which in turn can result in the symptoms of strains and affect aspects of worker life. This model is meant to be complementary. The same author claims that certain organizational and individual barriers limit how much technostress a person persists. Multiple studies on technostress appeared with the usage of technical methods in different organizations. (e.g., [15] [16] [17]). A study conducted by Tarafdar et al. (2007) explained the creators of technostress in the work environment by adopting role theory and socio-technical theory which identified five technology-related factors associated with technostress.[18].

The concept of technostress associated with eustress and distress the interaction of users with technology and receiving the appraisal as challenging is Techno-eustress, while the negative experience of users with bad stress as a threat is Techno-distress (Tarafdar et al., 2019). Ayyagari et al argue that a prior idea was not clear where stressful and technological features ended [15] he claimed that the individuals and their surroundings link both forms of misfits—the supply-value mismatch and the demand-ability mismatch—between an individual's qualities and their surroundings to a rise in pressure [15]. The main stressful situations at work identified by the research as contributing to technological distress include professional overloading, career uncertainty, privacy invasion, role ambiguity, and work-home conflict. Additionally, the study identifies usability, dynamism, and intrusiveness as the three characteristics of technology that contribute to technological stress [15]. Studies have revealed the detrimental effects of technostress, such as lower performance and work dissatisfaction [16, 18]. Califf et al. showed that technological stress was an extensive procedure made up of the technostress subprocess and the

technostress subprocess [19]. According to the comprehensive technological stress procedure, a person uses a method of evaluation to mentally evaluate a stressful event form. The evaluation decides if the source of stress is advantageous or detrimental and classifies it as either a challenge stressful event, which is useful for place of employment duties, or a hindrance stressful event, which is detrimental to job-related responsibilities [19]. Following that, the person has a good or unfavorable emotional response, depending on whether the stressful event is a challenge or a barrier. Ultimately, the person modifies their conduct on the job [19].

Most studies have concentrated on the negative stressor's effects on work outcomes and constraining tasks of the work which is clarified by users as destructive (Tarafdar et al., 2019). There are multiple examples of technostressors such as technology information overload, complex technological systems, multitasking with digital tools, excessive work demands due to technology, interruptions from digital devices, and uncertainty about technology. Other factors that lead to technostress include excess data (Eppler and Mengis 2004 & Tarafdar et al. 2007), work interruptions by information and communication technology (Galluch et al. 2015 & Ninaus et al., 2015), and multiple tasks (Reinecke et al., 2017). There is a wealth of information in the literature about the organizational, technical, and individual elements that might either raise or lower the likelihood of experiencing a technostress reaction. Numerous research studies have demonstrated the significance of individual characteristics, including age, gender, and proactive personality traits (La Torre et al., 2019 & García-González et al., 2020). Furthermore, (Nisafani et al.,2020) identified the user's expertise ease of use, and technology usage as influential technology aspects. Regarding organizational issues, research has identified time constraints, a lack of breaks, access to technical support, peer support for literacy, and social support from peers as significant elements that can trigger technological stress condition (La Torre et al., 2019 & Wang and Li, 2019 & García-González et al., 2020).

2.1.2 DEFINITION OF TERMS

Techno-overload is the term used to characterize workers' view that modern technologies force them to work harder and faster.

Techno-invasion is the term used to describe how employees feel they are unable to separate work from their personal lives and find it difficult to set boundaries between their professional and personal lives.

Techno-complexity is the term used to describe an employee's perception that they are unable to handle new technologies because they lack the necessary abilities, information, and comprehension of them.

Techno-insecurity: This is related to an employee's perception that they are always at risk of being replaced—either by automation or by technologically advanced coworkers.

Techno-uncertainty is the term used to describe an employee's belief that the rapid advancement and change of accessible technologies requires constant adaptation to new ones

Techno-unreliability: Monitoring work environments using technology and tension in communications between humans and machines.

3.0 METHODS AND MATERIALS

In this study, we used a case study as the research design. The selection of this design is based on the fact that it has been much-admired by many scholars as a dominant tool in the field of social science to study human phenomena. We selected a case study research design because it provided us with the opportunity to explore multiple phenomena in the context of this study. We also review journal articles and use the descriptive method as the data analysis style.

4.0 EMPIRICAL REVIEW

The Effects of Technology Stress

Regarding the consequences of technostress, HCWs may be affected by reduced productivity, decreased job satisfaction and performance, and lack of work engagement, in addition to increased technology use resistance, decreased intentions to use it, and adverse emotions (Nisafani et al., 2020 & Batista et al., 2022). According to (La Torre et al.,2019), these repercussions may cause antisocial conduct, emotional tiredness, role stress, lack of motivation, and absenteeism (Chiappetta, 2017). Additionally, the immune system is impacted by technostress, making a person more susceptible to illness (Riedl, 2012). Studies have shown that psychological strain reactions in employees such as burnout and exhaustion, physiological effects such as stress hormones release, cognitive symptoms such as decreased concentration, and behavioral impact on productivity at work (La Torre et al. 2019 & Dragano and Lunau 2020 & Berg-Beckhoff et al. 2017 & Riedl 2012 & Borle et al. 2021).

According to studies of psychobiological stress reaction, in general, stress studies, cardiovascular system vital signs, and glucocorticoids—including the hormone cortisol—are the predominant markers for a stress reaction [30]. Specific research has been done on the physiologic stress responses associated with technostress [31]. Riedl et al. (2012) [32] demonstrated that stress bioindicators, such as cortisol, skin conductance, and adrenaline levels, can rise significantly in response to technostress events, such as system failures. Therefore, a person experiencing technostress may feel a variety of pressures. This strengthens the hypothesis that stress reactions are triggered by technostressors. Market al. [33] demonstrated that employees who have temporary interruptions to their email access show less stress reaction (as indicated by heart rate variability) than those who do not. Galluch et al. [34] investigated whether frequent interruptions from Information Technology led to stress reactions. The authors choose salivary alpha-amylase as their outcome measure. This study demonstrated that alpha-amylase scores increased in conjunction with disruptions associated with information technology.Research shows that examples of physical symptoms such as eye strain (Nisafani et al.,2020), elevated heart rate, gastrointestinal and cardiovascular issues, pain from tense muscles, sleep disorders (such as insomnia), headaches, persistent exhaustion, cervical sprain, menstrual and hormonal manifestations in women, and skin problems (Chiappetta, 2017). In terms of cognitive stresses, memory problems and poor focus are possible (La Torre et al., 2019). Regarding the psychological stresses, agitation, melancholy, indifference, sobbing fits, reduced libido (Chiappetta, 2017), rage, worry (Nisafani et al.,2020), and fatigue from making use of technology (La Torre et al.,2019).

There are advances in applying various technologies and digitalization in the healthcare workplace, associated with exposure to high stress at work that lead to a negative impact on health (Dawe et al. 2016 & Adriaenssens et al. 2015 & Kaltenegger et al., 2022). (Abbott & Weinger 2020). Technostressors may have a significant effect and negative consequences on employee job satisfaction, stress experience, impaired mental health productivity, work performance, and healthcare worker well-being which affect the psychosocial work environment (Dragano and Lunau 2020 & Parker and Grote, 2022). The benefits for workers' health and well-being, such as improved information availability, increased organizational flexibility, and automated technology (Dragano and Lunau 2020 & La Torre et al., 2019).

4.1 The Evolution of Burnout

Herbert Freudenberger introduced the concept of burnout in 1974. Christina Maslach later redefined it as a syndrome caused by prolonged exposure to persistent stressful work that is accompanied by diminished individual achievement, detachment, and psychological fatigue (Maslach et al., 2001 & Lastovkova et al., 2018). Since then, several fresh formulations have surfaced, all of which share the viewpoint that exhaustion is a multifaceted construct at its foundation. For example, (Schaufeli & colleagues, 2020).

Furthermore, burnout can be described as a 'a condition understood to be brought on by ongoing job-related stress which was not effectively addressed', and it consists of the following categories: '(1) a sense of weariness or low energy; (2) a mental detachment from one's work, or feelings of pessimism regarding the work; and (3) feeling of inadequacy and unfulfilled expectations' [76] Burnout is frequently defined in the medical field as a syndrome or condition that adversely impacts a doctor's performance, level of professional satisfaction, and ability to balance

their personal and professional lives. [86] Commonly recognized signs of burnout in the medical profession are an absence of enthusiasm, negativity, detachment, mental fatigue, low self-esteem, tension disorder, and disengagement. The most thorough explanation of burnout syndrome is provided by Christina Maslach burnout is an issue that can affect anyone who performs any type of people-work. It is a reaction to the continuous psychological tension of social interaction on a large scale, especially when they are distressed or experiencing issues. Consequently, it qualifies as one form of job stress. Stressors including more non-direct patient care, additional paperwork associated with electronic medical records, longer workdays, and a worse work-life balance are all contributing factors to the growing issue of physician burnout in the modern period [50]. US urologists have also noted that high medical and patient expectations, government regulations, insurance and reimbursement, and other variables all contribute to burnout [78]. According to estimates, 4–20% of doctors in Germany, representing all specialties, suffer from burnout [79]. However, urologists who participated in the study reported burnout at a rate of 63.6%, increased by 22 % in a survey done in 2011 [80]. This indicates that urology has a higher rate of burnout in the US medical specialties.

A further study discovered that whereas private hospital physicians in the urology department and at the mid-career level reported higher levels of emotional weariness, trainees experienced diminished degrees of individual accomplishment and significant rates of detachment [78]. In a German survey based in Schleswig-Ho. Böhle et al. assessed doctors of urology in both the private sector and in hospitals. Regarding the different levels of detachment and psychological tiredness, they discovered that physicians in the urology department working in hospitals, and trainees showed higher levels of burnout. [81]. Comparable findings about this alarming trend have also been reported by European research on burnout in urology [82]. But the current study was conducted in Germany more than 20 years ago, which clearly shows that additional research in this field is needed.

4.1.1 Consequences of Burnout

Burnout is linked with decreased job performance, errors in diagnosis, depression, substance misuse, strained social relations, and even suicidal thoughts. Successful prevention strategies include resiliency training, balancing work and life with leadership support (e.g., working out, studying, reading, and practicing hobbies), collaborative work, and assistance schemes like resident guidance. [78,83,84]. Meta-analyses revealed that organizational interventions, as opposed to individual interventions, had a significantly greater impact on preventing physician burnout [85]. These measures consisted of changing job processes, implementing additional breaks and fewer hours of work, encouraging open communication and feedback, helping supervisors, and providing mentorship.

Workers who experience job-related burnout may exhibit excessive fatigue, a diminished capacity to control their emotions and thoughts, and psychological detachment, this is how the concept was recently revised. Additional manifestations, including mental difficulties and depression, may also appear in addition to these basic features. In addition, burnout can be viewed as an evolving process that can take years to fully manifest. It often develops as a kind of imperceptible psychological deterioration that a person does not become aware of (Nagy & Takács, 2017 & Queirós et al., 2020). As a result, people who have displayed some degree of burnout may be experiencing an exacerbation of their symptoms (Shigemura et al., 2020).

The development of burnout has been linked to several professional and personal problems. Individual variables include issues such as erratic feelings (Nagy & Takács, 2017), inadequate satisfaction with life (Vazquez et al., 2019), inadequate sleeping conditions (Rothe et al., 2020), pessimism, neuroticism, and low conscientiousness (Schaufeli et al., 2020), and not having enough opportunity to spend with family members and fun. Gender is another factor that is often mentioned, however, the research on this factor is inconsistent (e.g., Prado et al., 2017 & Teles et al., 2020). However, factors associated with the workplace include long hours, working under pressure, the perceived load, an unfavorable atmosphere, and inadequate tools (Nagy and Takács, 2017 & Sardinha et al. al., 2019 & Vazquez et al., 2019).

Physician burnout is caused by a variety of circumstances, such as demanding work schedules, a lack of autonomy, and a misalignment between the leaders of the organizations and the values of the physicians [45,46]. It is less clear how technology, and particularly health information technology (HIT), plays a part in physician burnout. Electronic health records (EHRs) are a significant factor in burnout, according to doctors, and having a bad experience with an EHR is linked to wanting to reduce the clinical work hours and quit one's current practice

[44,45,47], In the electronic medical environment, computerized physician order entry was demonstrated to be a significant predictor of burnout by Shanafelt and colleagues (2013). Because of the difficulties in effectively navigating the user interface, EHRs can lead to burnout [48,49]. The extra time needed to record information in an EHR as opposed to a paper chart,[50] the quantity of information a doctor might potentially access for every clinical encounter and medical decision, [51] the rise in administrative duties assigned to doctors, [43] the flexibility to work from any location, and impact of electronically stored medical data on the interaction between patients and doctors. [52,53]

Regarding the progressive nature of burnout's origin, (Salvagioni et al.,2017) conducted a systematic review that linked burnout to many physical pathologies, including but not limited to overweight, high blood sugar, elevated levels of blood pressure, cardiovascular system abnormalities, and musculoskeletal illnesses, altered irritable perception, extended weariness, and lung infections. The same investigators found strong correlations in the psychological domain between sleep disturbances (such as insomnia), depressed symptoms, and mental illness-related hospitalization. In terms of the professional domain, burnout can result in decreased productivity, presenteeism, absenteeism, and intention to leave the company (Salvagioni et al., 2017 & Schaufeli et al., 2020). Burnout has a multiple outcome in the healthcare industry, affecting patients, doctors, and the framework for health services. Numerous kinds of literature indicate that burnout is a term used to describe extreme, ongoing stressful healthcare facilities that affect the wellness and health of healthcare professionals. Burnout is linked to a higher risk of heart attacks, strokes, substance misuse, strained interpersonal ties, melancholy, and self-harm. Additionally, it is associated with a decline in professionalism that results in disruptive behavior. [86] Research has shown a high association between healthcare professionals' burnout and safety concerns for patients' risks, medical malpractice, and the care of patients [86]. These findings have similarly alarming implications for patient care. From the standpoint of a healthcare system, organizations are challenged by physician burnout. The system is strained by excessive turnover, absenteeism, and professionalism problems [86]. According to Loerbrokes and colleagues, 'burnout impairs a physician's capacity to perform at work and maybe a factor in instances of chronic illness and sick leave'. The costs of the system are further raised by these problems and physician turnover that is linked to burnout. According to Hamidi and colleagues, the two-year cost of hiring lost to burnout-related departures ranged from $15,544,000 to $55,506,000 [86]. The overall expense during 20 years for prematurely retiring and a decrease in practice time linked to burnout for all medical professionals in Canada is estimated to be $213.1 million, based on an approximate figure obtained from a 2014 Canadian study.

There is a lack of knowledge regarding the potential for strains arising from the usage of other technological devices to exacerbate burnout among medical professionals by disrupting the equilibrium between professional and private lives. EHRs (electronic health records) have been linked to a higher risk of medical professional burnout, according to current studies. This is mostly because using an EHR raises the workload and can interfere with compassionate care for patients. ICTs have played a role in the 'every place continually on' phenomenon preferably in the past decade, and even previously if we consider the growing popularity of personal computers. Communications that are private, familial, and home-related as well as professional and job-related are no longer confined to a workplace or a particular location and time. Rather, there has been a growing convergence of work and family life. Boundary spillage is the term used to describe this merging of work and home life [86]. Because certain technological advances are intrusive, workers may experience to feel as though they are being invaded by technology, which can cause a blurring of the lines between work and other areas of their lives. This is how scholars define technostress.

4.1.2 Technostress, Burnout, and Other Mental Health Problems Outcomes.

Researchers have reported a clear association between workplace 'technostressors' and burnout symptoms, emphasizing prevention and intervention strategies are needed to reduce the risk of stress related to the use and apply new technology. A small amount of research has looked at the direct connection between technological pressures with mental health problems such as burnout. Technostress and burnout were positively correlated, according to multiple literature [36-37]. For example, a recent study by Park et al. revealed a link between burnout and using a smartphone for business-related purposes after work. To prevent burnout, the authors highlight the

'right to disconnect' after work and suggest that this should be minimized. A study conducted by the Ludwig Maximilian University of Munich in Germany, studied the relationship between technostressors and burnout symptoms, focusing on 'hindrance technostressors' such as techno-overload, techno-complexity, and digital interruptions.

Abeliansky and Beulmann's research [33] studied the potential effects of the rise in robotics in industry and the psychological wellness of workers. They demonstrated a correlation between a decline in mental health and a rise in machine intensity, or the ratio of robots used in industry over employment. They developed a mental health index by combining several mental health symptoms. Other psychological problems, such as problems with cognition or signs of depression, are also studied in certain research [39-40]. In a 2-year follow-up, a longitudinal study investigated whether Information technology demands (such as an excessive number of emails or continual interruptions from emails) predicted cognitive problems [40]. Even when possible, confounders like education or physical illness were considered, they continued to predict cognitive symptoms. A more recent longitudinal analysis using the same dataset found that males, but not women, experience a gradual decline in their self-rated health because of frequent exposure to high Information technology demands at work [41]. A study by Helena C. Kaltenegger et al. demonstrated the association between techno overload and information overload with burnout manifestations in workers of the hospital related to university summary, there are a few studies demonstrating early evidence that workers' mental health may be negatively impacted by technostress; these studies are mainly cross-sectional in design. Further research is required that uses clinical outcomes (e.g., major depression), rigorously controls for confounders, and tests the assumptions longitudinally. Most of these technostressors demonstrated a harmful relationship with burnout symptoms considering the work overload. Furthermore, both overloads of technology information and technocomplexity were associated with the development of burnout symptoms like headaches. Various studies reported increased information caused by the use of technology as a clear stressful factor associated with multiple psychological health consequences such as burnout. Multiple strategies are implemented to help cope with technostress such as improving digital literacy, establishing norms, and providing efficient IT support. Some interventions such as Physical exercise in the workplace is useful in reducing employee burnout in general.

The work in healthcare fields associated with high pressure for accuracy, stress, and exhaustion shape daily work in clinical practice (Lebovitz et al., 2021). According to this, difficulty appeared in decision-making in knowledge-intense situations (Jussupow et al., 2021, 2022). Physicians should give fast results (Lebovitz et al., 2022) that should be accurate and justified by analyzing updated amounts of data (Mishra et al., 2012). Regarding, technology such as Artificial intelligence is going to change how jobs get done and create innovative kinds of blended jobs., which is characterized by power elevation and reduction in decision-making, due to AI's fundamental disruption and exponential development, work environments, business models, and procedures are evolving at an unexpected rate and with unpredictable types of changes. Because of these AI-related features, employees may experience higher levels of stress because of their high levels of insecurity and anxiety and regarding AI (Johnson and Verdicchio, 2017) and unstable work settings (Ernst et al., 2019) for the healthcare user.

5.0 RESULTS AND DISCUSSION

The advantages of digital technological advances for work

The study found that Modern technology can improve workers' overall wellness in the workplace. The results show that improved ICT-based job organization is linked to improved well-being among staff members [87]. The results of this study also aligned with the larger body of literature. The findings show that automation's benefits were observed in a pharmacy, where technologies helped to lower stress levels [88]. The results also aligned with studies by Kushlev and Dunn [89]. The finding revealed that a clear mail strategy (checking mail only at specific periods) reduces stress and enhances mental health.

The results also show that ICTs increase the possibility of conflicts between home as well as job existence. Consequently, the results revealed that they provide you with more flexibility in managing your professional responsibilities and scheduling your obligations during working hours [90]. The finding revealed that when careful

oversight is applied to demand excessive output or interferes with an employee's right to autonomy, it may be interpreted as stressful [91,92]. On the other hand, the studies found that health was unaffected in the scenario where workers believed that observation was done to enhance workflows [91,92]. Furthermore, the study revealed that some other instances highlight the significance of having a distinct perspective on the implications of technological advances. The study found that it is worth conducting more studies to see how thoughtfully created technological resources and supportive workplace conditions help employees who utilize technological tools regularly maintain their mental well-being.

6.0 CONCLUSION AND RECOMMENDATION

Conclusion

Current research is being done on the relationship between psychological well-being and pressure from technology. The number of empirical studies is small, and there is a lack of studies regarding the mental health problems and digital technologies work stressors associations with burnout (Dragano & Lunau, 2020), they frequently use small amounts of sample, cross-sectional approaches restricted measures and observations of psychological strain. One significant drawback is the glaring absence of long-term studies that renders it challenging to identify specific factors such as personality or education into account. Another obstacle is the deficiency of agreement over the precise meaning of technostress, leading to a wide range of terminology, concepts, and measurements. This is not surprising considering the involvement of researchers with widely diverse backgrounds from different fields. Another gap detected in technostress literature is studying the adverse impact of technostress on technology acceptance involves assessing the way simplicity of use and relevance are seen to affect technostress levels.

Furthermore, employees' intentions to work with technology are increased when they accept it and believe it will help them accomplish more in their daily tasks rather than when they find it complex or difficult to use and understand. This eliminates the element of technostress and fear from the situation. finally, there is a lack of research on the individual aspects of technostress and their relationship to technological acceptance. Technology acceptance and performance expectations might affect each of these dimensions differently because they are measured using different components and contain different items.

Recommendations

Taking these limitations into consideration, the conclusion showed that there may be a connection between poor mental health and specific forms of workplace technostress [42]. Research on biological consequences shows that technology and stress are related, and initial findings demonstrate a connection between stress brought on by technology and mental health specifically burnout [69]. Future research designs must be stronger to properly examine the risks associated with the widespread digital technology used in the workplace and other aspects of life. Healthcare jobs are very stressful and demanding. Healthcare professionals are trying to deliver high-quality care for their patients. The use of technology is crucial in healthcare. However, identifying technology-specific factors associated with burnout and understanding patterns of usage among healthcare professionals is a cornerstone step that helps health leaders formulate guidelines. Technology will not remove potential workplace barriers such as burnout, but it can alleviate the burnout effects, ease the physical and mental burden on workers, and improve patient safety and quality of care.

CONFLICT OF INTEREST

This study is done based on case studies and reviews of relevant literature on technostress in digital work, burnout, and psychological risk. No Financial support and sponsorship have been given. There are no conflicts of interest.

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