



THE IMPACT OF DIGITAL INTERVENTION ON HEALTHCARE INDUSTRY EMPLOYEES: A REVIEW

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Abstract

Healthcare workers play an important role in meeting community needs. Low productivity and poor performance will fail to meet the needs of the community. This study focuses on the literature review, addressing the problems that healthcare employees confront. A total of 27 research articles published between 2015 and 2022 were evaluated for this review. PubMed and Google Scholar were the databases used. The study was likewise limited to non-technical and administrative healthcare workers, with a sole focus on their digital technology-based training. Evaluating an employee's performance and determining the root cause of poor performance remains challenging. It is vital to prepare healthcare workers to fulfill the technical needs of the healthcare industry.

Keywords - *healthcare, digital technology, training, employees, performance*

1. Introduction

The global market requires a talented workforce. Employees improving their knowledge and skills characterize the organization's performance, especially in the public sector (Gadalla&Mukhtad, 2021).

The role of healthcare employees is crucial in addressing community needs. Low productivity and poor performance will fail to meet the community's needs (Adnan Bataineh, 2019). Therefore, in the case of the healthcare sector, training and development are the key components. Every aspect of the healthcare industry involves a huge section of the public addressing their unique needs (Molina-Arrebola et al., 2020). To meet the required quality and standards, employee performance development is a significant factor (Ogbonnaya et al., 2018). With the pandemic's rise, healthcare employees face stressful and hazardous situations (Rana et al., 2020). These employees include administrative staff, nurses, pharmacists, non-technical staff, and others. Since the healthcare industry offers intangible services, a lack of patient satisfaction poses a threat to hospital management (Ko et al., 2018). Today, the healthcare industry is supported by technology. The popularization of the Internet has expanded the integration of digital technology in healthcare services (Chang et al., 2021). Technology is applied in health management, community assistance, technology-based diagnosis, etc. (Han et al., 2019). Professionals practice Tele-health as an important tool. The era of the industrial revolution has made no exception for the healthcare industry (Hübner et al., 2018). Healthcare institutions around the world deploy digital technology in the form of robots, smart sensors, artificial intelligence, etc. to improve their quality of care (Yan et al., 2020). Investigating the effect of these advancements on healthcare employees remains a challenge (Han et al., 2019). This paper focuses on the literature survey, addressing the below-mentioned research questions.

Research Questions

1. How does training programme improve the performance of healthcare workers?
2. What are the challenges that healthcare workers confront?
3. Is digital training improving their experience in addressing community needs?

Recent surveys on information technology have focused on the billing and resident care functions sector (Gadalla&Mukhtad, 2021). Furthermore, there is a lack of evaluation to comprehend the difficulties and opportunities that have arisen among healthcare professionals as a result of the implementation of digital technology. Understanding the experiences of frontline workers allows for greater utilization of technology in the workplace.

2. Conceptual Framework

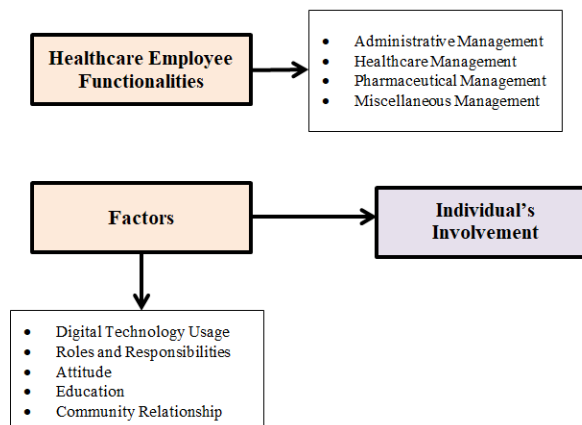


Fig. 1 Conceptual Framework on the Impact of Digital Intervention on Healthcare Industry Employees

The conceptual framework is being built based on an analysis of previous literature on healthcare-related applications, as

illustrated in Fig. 1. Initially, it is critical to determine the many functions in which healthcare professionals participate that are aligned with the study's purpose. Here, the various types of management functionalities include: i) administrative, ii) healthcare, iii) pharmaceutical, and miscellaneous. The study's findings (Ko et al., 2018) revealed that the biggest challenges healthcare employees confront include a lack of talent and expertise, training and development, and non-supportive hospital administration. Despite their desire for skill development, many healthcare facilities are resistant to the use of advanced technologies and staff training. All of these, however, are the result of an individual's involvement in the event. This can refer to either a person or an organization. Their digital technology usage, jobs and responsibilities, attitude, education, and community relationships all play a big role in their level of involvement. These factors demonstrate their dependability and acceptability in fulfilling community needs. If all of the above factors are addressed, the outcomes for an individual will be favourable. Further, the theme-wise analysis of this framework is described below.

3. Literature Review

To analyze the current research evidence, a review of the literature was carried out. To ensure outstanding benefits, the review emphasizes both research gaps and findings. For this review, a total of 27 research articles published between 2015 and 2022 were considered. The majority of the papers considered, however, were published between 2018 and 2020. The current study's keywords were "digital integration", "healthcare employee training", and "employee performance analysis". Studies published before 2015 were not included. In addition, only studies published in English



were considered for the analysis. The databases used were PubMed and Google Scholar. The study was also limited to healthcare non-technical and administrative employees, and its focus was only on their digital technology-based training and performance in addressing community needs. Furthermore, 10 papers were particularly abstracted from the 27 publications for information such as objectives, research questions, data Analytics techniques, findings, suggestions, and constraints.

4. Theme wise Findings

According to Table 1, the majority of the research used quantitative descriptive statistics. However, the mixed-methods analysis study remains a hurdle. The conclusions of the literature based on the various topics are summarized below. The following themes were identified in the literature:

4.1 Influence of Training on healthcare sector employees

Six studies in the literature were chosen to examine the impact of training on employees in the healthcare sector. One study (Gadalla&Mukhtad, 2021) looked at the performance of healthcare workers after they had completed a training programme. A cross-sectional study was considered. The questionnaire was taken from March through June of 2019. They used 51 healthcare workers as their study sample. There were 84% females and 16% males. The majority of healthcare workers had a low level of education, either an intermediate or a bachelor's degree. Therefore, they had only limited skills. According to the data, the majority of them were interested in participating in a training programme. The main difficulties were insufficient training time and inefficient information delivery. Furthermore, managers choose only certain

employees to receive training. Another study (Adnan Bataineh, 2019) looked at the relationship between work-life balance, happiness, and performance. Work-life balance is critical for both individuals and organizations. The study took a theoretical approach. Happiness, employee engagement, job satisfaction, and emotional commitment are the most important aspects influencing employee performance. The research looked at 315 employees in the pharmaceutical industry. There were 69% males and 31% females in this group. Only 1% had completed their doctorate. Employee performance and work-life balance have an excellent association. This has increased their organization's commitment. Job satisfaction and employee engagement, on the other hand, had a negative relationship with staff absenteeism and a positive connection with patient satisfaction (Ogbonnaya et al., 2018). According to organizational support theory, the teamwork of healthcare professionals influences patient happiness. Relationships can benefit from training. Everyone participating in the healthcare industry must work together. Employees who collaborate will improve the team's efficiency. Teamwork helps employees establish a good mind-set and improves their overall well-being. Training is essential for organizations because it helps employees develop their abilities. The survey looked at 66930 nursing home workers in England. Teamwork, job happiness, work engagement, retention, and training are all connected aspects. According to one study (Forsdike et al., 2018), flexible governance is required to enable skill development. The main impediments include a hostile culture, rigidity, and a lack of money. According to another study (Diamantidis&Chatzoglou, 2019), job environment and management have a significant impact on job performance. A strong culture can lead to skill flexibility. Job autonomy allows people



to communicate their innovative ideas and solve job-related challenges. Managers must also encourage their staff to complete all job-related tasks. The corporate environment has become more competitive as technology has been integrated (Salami et al., 2022). Many government-funded healthcare institutes hire more women than men. These women employees, when they go on maternity leave, directly affect the patient waiting time. Therefore, it is essential to provide orientation training to healthcare employees. This will reduce patient wait time in hospitals.

4.2 Challenges that healthcare workers experience

Nine articles preferred to identify the challenges among healthcare workers. Three of these focused on the issues faced during the pandemic. Healthcare employees face verbal and physical assaults (Brophy et al., 2018). This is vulnerable in the case of female employees as carers in emergency units, psychiatric units, and dementia units. To understand the violence, descriptive qualitative research was employed. It was reported that violent incidents occur regularly. The risk factors identified are mainly due to the policies and procedures that prevail in hospitals. Insufficient staffing is another reason. Vindrola-Padros et al. (2020) explored the experiences of healthcare employees considering COVID-19 situations. The pandemic has increased the demand for healthcare workers. During this period, the regular employees were transferred to take care of the intensive care units. This created inconsistency and a lack of preparedness among healthcare employees. They reported stress, anxiety, and a lack of confidence. Therefore, it is necessary to consider the experiences of front line workers. Only a supportive working environment will motivate improvement in care delivery. It is being

argued that technology integration in the future will diminish employees' education (Lee & Yoon, 2021). Amazon's CEO reported that it is necessary to re-educate one lakh employees to get them prepared for highly skilled jobs. The training programme must be conducted with concern for care delivery with the latest technology (Ahn et al., 2019). Reported that the regulatory climate for training and incentive procedures for healthcare employees remains a challenge (Saqlain et al., 2020). Training programs should focus on technological developments, irrespective of the budget (Diab & Ajlouni, 2015).

4.3 Opportunities in digital training

Twelve publications favoured the use of digital technology in the healthcare sector, particularly in boosting performance. The incorporation of digital technology in hospitals has improved patient care and reduced wait times. The treatment instructions are simple to understand, which increases the productivity of healthcare workers. It can improve staff happiness and efficiency in meeting community demands (Bandara et al., 2018). The medical industry should investigate the benefits of virtual and augmented reality for improving staff performance (Clark, 2020). Employees must have specific knowledge and skills to meet the demands of emergency services and contribute to a decrease in mortality (Souza et al., 2019). Training is required for continuous functionality and competency (Koch et al., 2019). It is critical to identify the critical concepts and practical exposure in skill development training for dynamically enhancing treatment guidelines (Yan et al., 2020). Role-based training can be found, and such training will boost their self-esteem and verbal communication skills (Javaid et al., 2020).

5. Discussion



Healthcare institutions' managers must understand that the reason for low performance among healthcare workers is their lack of training. Because lack of knowledge and skill has only a small effect on their performance. Therefore, evaluating the employee's performance and identifying the actual cause of low performance remains a challenge. Healthcare workers' health issues and physical needs must be considered while recruiting them for the job (Norberg et al., 2019). It is necessary to examine whether knowledge and proficiency are sufficient for them to carry out their duties. For them to recognize their job needs and cooperate with their supervisor for timely completion, they require training. Based on their performance, they should be provided with incentives to provide better services. Training is a useful means to improve employees' performance. However, performance is influenced by a combination of factors. Beyond technology integration and the role of managers, work-life balance and happiness are also crucial (Rana et al., 2020). These have a significant positive impact on their performance. The employees need to feel comfortable and supportive in their working environment. A small level of stress will not affect their job performance. However, the roles and responsibilities they play influence their work-life balance. Organizations offering opportunities to balance work and family have a stronger performing team.

6. Limitations

There are only a few limitations to the study. The articles chosen were chosen with very limited peer review. More articles from previous years can be evaluated to broaden the scope of the study. Employee performance in other areas is overlooked outside of the healthcare sector. A comparative study could be carried out to

compare training performance in the healthcare sector to that of other fields.

7. Conclusion

According to the evaluation, it is vital to prepare healthcare workers to fulfill the technical needs in the healthcare industry. Stakeholders should devise a policy framework to integrate quality training regularly and evaluate the performance of their staff. With the integration of new technology needs, effective incentives and appraisal measures for healthcare workers must be introduced. There, they are successfully and efficiently meeting the demands of the community.

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