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Evaluation of Challenges and Barriers of Green Human Resources Management in Healthcare among clinical mangers: at Saudi Arabia

Mansour Atallah Almotairy[1], Nasser Saad Alotaibi[2], Nasser Miqad Alotaibi[3], Mateeb Ghazi Alnofaee[4], Safa Deab Alokhaili[5], Ahmad Mohamad Ahmad Alghamdi[6], Faisal Abdulghani Abdulkhaliq Alghamdi[7], Saleh Suliman Saleh Alghamdi[8], Mamdouh Ali Jamaan Barakat Al-Ghamdi[9], Fahad Gham Allah Al-Zahrani[10]

1. Senior Health Administration Specialist, Jeddah Second Health Cluster King Fahd Hospital, Saudi Arabia.
2. Senior Health Administration Specialist, Riyadh Third Health Cluster, Director of Thadiq General Hospital, Saudi Arabia.
3. Senior specialist hospital manager, Taif Health Cluster, Saudi Arabia.
4. Bachelor of management of health services and hospital, Ministry of Health- Patient Experience Center, Saudi Arabia.
5. health services management, King Salman Center for Kidney Diseases Hospital and
6. Medical secretarial technician, King Fahad Hospital Albaha, Saudi Arabia.
7. Health management specialist, King Fahad Hospital Albaha, Saudi Arabia.
8. Health administration specialist, Albaha Health Cluster, Saudi Arabia.
9. Health management technician ,King Fahad Hospital Albaha, Saudi Arabia.
10. medical Records, King Faisal Complex in Taif, Saudi Arabia.

Abstract
At the moment, Saudi Arabia is going through a period of transformation. The constantly growing Saudi population and the aging population place a great deal of strain on the Saudi healthcare system to provide better healthcare services. The dearth of qualified healthcare personnel and the over reliance on foreign labor are important issues that policymakers should take into account. It is also critical to reevaluate healthcare Human Resource Development (HRD) programs in order to supply a vast pool of competent and appropriately trained healthcare personnel.Aligning traditional HR procedures with environmental objectives and regulations is known as "green HRM." It seeks to accomplish the organization's environmental goals, boost productivity, cut expenses, and draw in top talent who understand sustainability procedures. **The purpose of this** study is to evaluate clinical mangers' perceptions on the difficulties and obstacles associated with green HRM in the healthcare industry.Descriptive, cross sectional research study was utilized in this research, it was conducted at King Fahad Armed Forces Hospital.two tools was developed to assess barriers and facilitators of GHRM among clinical mangers.All 100 clinical managers who were available served as study participants. Tools: The Green Human Resource Management Knowledge Questionnaire and the Perceived Challenges and Barriers by Clinical mangersregarding the Green Human Resource Management Questionnaire were the two instruments utilized to collect data.
Results : Most clinical mangers lacked sufficient understanding about green human resource management. Additionally, fewer than two-thirds of clinical mangers thought favorably of the difficulties and obstacles associated with green HRM. Lastly, among clinical mangers, there was no statistically significant relationship between their overall perception and knowledge of green HRM. Conclusion, the majority ofclinical mangers had a favorable opinion of the difficulties and obstacles associated with green HRM. **Recommendations**:Incorporate environmental sustainability objectives into the healthcare organization's vision, purpose, and values, and implement green HRM policies and practices. To further raise nursing students' awareness of environmental sustainability and green management, incorporate environmental sustainability subjects into the nursing curriculum.
Keywords: Green human resources management, Challenges, Barriers, Clinical mangers.

Introduction

In the Kingdom of Saudi Arabia, healthcare facilities have advanced significantly (KSA). Saudi Arabia now has 487 hospitals with 72,981 beds, or about 2.2 beds per 1000 people in the Kingdom, dating back to the royal edict that established the first public health department in Mecca in 1925 and the Ministry of Health (MOH) in 1950 [1]. The government has prioritized the development of primary, secondary, and tertiary healthcare services, demonstrating its strong commitment to enhancing the health of the Saudi populace [2]. These days, the world needs to improve people's welfare through social welfare, economic progress, and the advancement of technology and innovation. Additionally, this problem is related to maintaining ecological safety, which is a component of sustainable development. The nations should create a sustainable and ecologically friendly economy as part of the framework

for economic recovery. In order to stop detrimental climate change worldwide, decisive action must be taken. As a result, businesses who invest in the green transformation would succeed more, while those that stick to the old system would lose market share (Top et al., 2020; Duby & Singh, 2023).

According to Aly Abd-Elhamid and Gaber (2023), green management in hospitals is the process of incorporating ecologically friendly policies and practices into the management and operation of medical institutions. The origin of the word "green management" must be traced in order to comprehend it. This idea evolved gradually over time as a result of the pressing necessity to raise people's "environmental awareness" given the aggressive violations of nature occurring worldwide (Elshaer et al., 2023; Saleh et al., 2023).

Employees, or human resources, are the organization's most valuable asset and are in charge of implementing any changes in businesses. The key activity that deals with people and trains them to do their jobs more effectively is human resources management, or HRM. An emerging substitute for conventional human resources management is green human resources management, or GHRM. In addition to fostering a green culture, GHRM practices, policies, and frameworks support environmental sustainability and preservation (Malik et al., 2020; Martins et al., 2021; Aukhoon et al., 2024).

The harmonization of traditional HR procedures (such performance reviews and training) with environmental objectives and regulations is known as "green HRM." Green human resources management is considered to be on par with human resources management when it comes to hiring, selection, training, performance review, teamwork, and the environment (Pham et al., 2020; Ali et al., 2023; Gomes et al., 2023; Joshi et al., 2023). As with any new practice, there are obstacles and difficulties in implementing green HRM. Accordingly, these obstacles can include a lack of a thorough understanding of the use of green HRM and the availability of inexperienced and uninspired staff for its execution (Birbirsa&Worku, 2022; Mohamed et al., 2022).

Furthermore, it takes time and a substantial initial expenditure to implement the green ideology (Sapna & Gupta, 2021). The challenges of hiring and training new employees in green HRM practices, assessing staff behavior through performance reviews, rapidly transforming employees' conventional to green attitudes, and a lack of green thinking are some of the other issues that hinder the implementation of green HRM (Mousavi et al., 2020; Tanova&Bayighomog, 2022; Senthilkumar et al., 2023).

Significant of the study:

KSA is extremely susceptible to the negative effects of climate change, including droughts, increasing sea levels, and water scarcity. The Egyptian government has unveiled the National Climate Change Strategy to aid in the transition to a more environmentally friendly and climate-resilient economy. The business sector will be crucial to this shift and is stepping up adaptation efforts. KSA has also issued the first sovereign green bond in the area to fund clean transportation and sustainable water management projects in an effort to grow the green finance industry. the Kingdom of Saudi Arabia is coordinating international efforts to mitigate, adapt, and finance climate change. Furthermore, addressing the effects of climate change is emphasized in the kSA Vision by fostering a thriving and sustainable environment that supports the conservation and restoration of the kSA Natural Resources and Eco System and motivates others to take action in the direction of a more sustainable and greener future (Hamzawy et al., 2023; Wyns., 2023).

In order to create an eco-friendly corporate culture and reduce environmental effects in this advanced period of industrial development, real human resources management is being quickly implemented by many enterprises. Economic gains, uniqueness, and particularly benefits for human resources will result from green HR management. Additionally, companies with higher environmental performance will be seen more favorably and draw in more prospective workers.

The goals of modern human resources management are to strengthen environmental sustainability, encourage resource conservation, and boost employee dedication to environmental preservation. Healthcare businesses are thinking about methods to become more sustainable in an era where environmental sustainability is receiving increasing attention.Therefore, in order to improve ecological balance, the healthcare industry is urged to accept accountability for its future environmental impact and participate in sustainability initiatives. Ab & Wahyuni, 2023; Allam & Mansour, 2022; Abdulrahman et al., 2023

The aim of the study:

The following goals were used in this study to evaluate clinical mangers' perceptions of the difficulties and obstacles associated with green HRM in healthcare:

Assess the degree of familiarity with green HRM that clinical mangers.

2. Determine the perceived obstacles and difficulties that clinical mangers have with regard to green HRM.

Subject and Methods

Research design:

A descriptive, cross sectional research design was used in this study.

Settings:
It was conducted at King Fahad Armed Forces Hospital. The hospital provides a wide range of primary, secondary and tertiary medical services to members of the Saudi Arabian Armed Forces and their dependents. The Cardiac Center, situated within the main hospital, is the only adult cardiac surgical facility in the Western Region. In-service training and education are actively promoted by the Departments of Medical Education and Nursing Education and from within the individual departments. The program includes a weekly hospital Grand Round, monthly Nursing Grand Rounds and regular nursing study days. Inter- and intra-departmental activities include seminars, case presentations and Journal Clubs. The hospital is also a designated training center for junior medical and nursing staff. All departments and units, both medical and non-medical, have written Policies and Procedures to ensure delivery of consistent levels of quality care and service.

Subjects:
The study subjects included all clinical managers in King Fahad Armed Forces Hospital (N=100) who had at least one year of experience as nurse mangers in the current position and agreed to participate in the study during the time of data collection. In addition they did not attend a previous training about green human resources management.

Tools of data collection

Two tools were used for collecting data in this study.
Tool I : Green Human Resource Management Knowledge Questionnaire: It was developed by the researcher after reviewing the relevant literature (Sobaih, 2019; Bombiak, 2020; Hamod& Majeed, 2021;&Tsymbaliuk, 2021) and consulting experts in related field. It consisted of two parts:

Part 1: Personal data: This part was used to assess personal data of clinical mangers as age, gender, level of education in nursing, years of experience, working department and If he/she attended a previous training about green human resources management.

Part 2: Green Human Resources Management Knowledge questionnaire:
Using a series of multiple-choice questions about green HRM, including its definition, its significance, and its drawbacks, this section was designed to gauge clinical mangers' level of familiarity with the concept. System of scoring: the final score is 14, with a cutoff of 10 points, or 71%. Two points—two for correct and one for incorrect—were used to score the responses of clinical mangers. Knowledge level was taken into consideration as follows: ‘ Unsatisfactory level ≤71% (≤10 points) ‘ Satisfactory level >71% (>10 points).

Second Tool: Perceived Challenges and Barriers by Clinical mangers about Green Human Resources Management Questionnaire:
After examining pertinent literature (Sobaih, 2019; Bombiak, 2020 & Mousavi et al., 2020) and speaking with subject-matter experts, the researcher created it to gauge clinical mangers' perceptions of the difficulties and obstacles associated with green HRM in the healthcare industry. Among its 56 pieces were the following: A. The perceived difficulties of green HRM for clinical mangers, comprising 26 items, were broken down into three categories: organizational (10 items), environmental (10 items), and personnel (6 items). Clinical mangers' perceptions of obstacles to green HRM, comprising 30 items, were arranged along three dimensions: personnel = 7, environmental = 10, and organizational = 13.The replies of clinical mangers were scored using a three-point Likert scale, with three representing agreement, two neutral, one disagreeing, and D- D-With a cutpoint of 118 points, or 70%, the overall score for perceived obstacles and problems related to green HRM is 168. Perception of the score was: ≥ Positively ≥ 70% (≥118 points).Adversely less than 70% (less than 118 points); Level of dissatisfaction ≤71% (≤10 points).

Tool validity: The study instruments' face and content validity were examined. A panel of three experts evaluated the instruments' face and content validity after they were translated into Arabic and given an opinion questionnaire. The jury's opinions about the format, arrangement, and part clarity of the tools were used to determine face validity. The jury's recommendations led to a few minor changes.

Tool reliability:
Cronbach's alpha coefficient was used to assess the study tools' reliability and ascertain how closely the questionnaire items were related to one another. Cronbach's alpha for the reliability test of the clinical mangers' knowledge questionnaire was 0.89, indicating a satisfactory level of internal consistency. Additionally, the test reliability for the clinical mangers' observed obstacles and difficulties with the green HRM questionnaire was 0.86, indicating strong internal consistency.

Ethical consideration:
Prior to conducting the study, authorization was acquired from Scientific Research Ethics Committee. Additionally, the director of Hospital's medical and nursing departments gave their agreement for the data collecting. Subjects were fully told about the study and their involvement prior to completing an informed consent form, and participation in the study was entirely voluntary. They received assurances that the privacy and security of their data

would be protected. An explanation of the study's nature and goal, together with the option to discontinue participation at any moment, was part of the ethical considerations. Respect was shown for ethics, morals, culture, and beliefs.

Pilot study:

Five managers, or 10% of the study participants, participated in the pilot study. The pilot study's objectives were to verify the study instruments' applicability and clarity and to gauge how long it would take to complete the questionnaires. The first tool took five to ten minutes, while the second tool took ten to fifteen minutes.

The final version was ready for distribution to clinical mangers, with no changes made in response to the pilot research. The study sample comprised those participants.

Data collection: Beginning in June 2024 and lasting until the end of August 2024, the fieldwork actually began. Once all formal permits had been obtained, the researcher visited with the Elaraby Hospital director to explain the purpose of the study and secure authorization to collect data. By visiting with clinical mangers and outlining the goal of the study to them in the study environment, the researcher gathered data on her own. Clinical mangers filled out the questionnaire forms.

In order to respond to any questions pertaining to the study, the researcher visited the hospital one day a week during the day shift and was there when the questionnaires were being filled out. Following the completion of each sheet by the clinical mangers, the researcher verified that there were no missing information.

Statistical analysis:

The Statistical Package of Social Science (SPSS) software version 25 was used for data analysis after the data was gathered, coded to make data manipulation easier, and double-entered into Microsoft Access. The mean, standard deviation (SD), median, and range values were used to display the numerical data. Frequencies (N) and percentages (%) were used to display qualitative data. Significant relationships between several quantitative variables were found using Pearson's correlation coefficient. When comparing quantitative measurements between more than two independent groups of quantitative data, the one-way ANOVA test is utilized. The tool's dependability was assessed using Cronbach's alpha coefficient.

Results:

With a total mean ±SD of 31.6±3.2, it is evident that over half (58%) of the study participants were between the ages of 30 and 35. Fifty percent of them had fewer than ten years of experience. Additionally, over half (54%) of them had a bachelor's degree, and roughly two thirds (66%) of them were men. Less than half (46%) of them worked in other departments, while only 6% were employed in the outpatient department and 28% were employed in the inpatient department.

Table (1): Frequency and percentage distribution of clinical mangers' personal data (N=100).

Socio demographic data	No	%
Age /Years		
< 30	28	28%
30-35	58	58%
> 35	14	14%
Mean ±SD 31.6±3.2		
Years of experience		
< 10 25 50%		
10-15 22 44%		
> 15 3 6%		
Mean ±SD 9.9±3.5		
Gender		
Male	33	66%
Female	17	34%
Level of education		
Secondary School	2	2%
Technical Institution	26	26%
Bachelor	54	54%
Post graduate	18	18%
Working department		
Inpatient	28	28%
Outpatient	6	6%
Other	46	46%
Critical care units	20	20%

It is demonstrated in figure (1) that the majority of clinical mangers (80%) has inadequate understanding on green human resource management. However, only 20% percent were sufficiently knowledgeable.

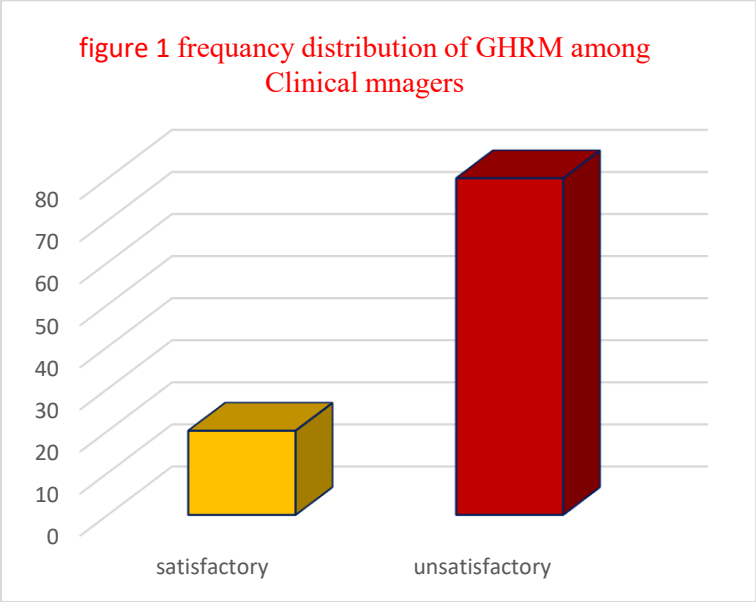


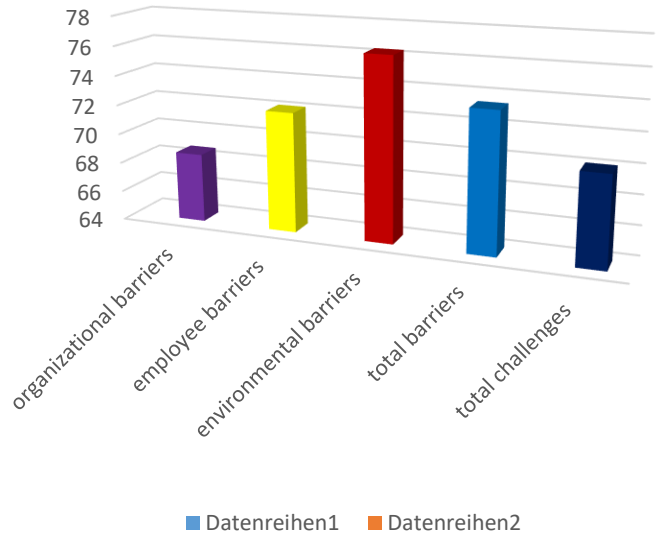
Table (2): Level of Perceived Challenges scores by clinical managers about green human resource management (N=100).

According to table (2), clinical mangers' mean proportion of all perceived difficulties with green HRM was 72.9%. The largest percentage, 76%, was attributed to perceived environmental issues, followed by organizational challenges (68%). Furthermore, the overall mean ±SD was 58.3 ±12.5.

perceived Challenges items	Mean± SD	Mean (%)
Organizational	22.1 ± 5.45	68.0
Environmental	24.5± 4.9	76.0
Employees	13.6±3.4	72.0
Total perceived challenges	58.3 ±12.5	72.9

The mean proportion of clinical mangers' perceived obstacles to green human resources management was 73.9%, as shown in Fig (2). Organizational barriers had the lowest mean percentage (68.8%), while environmental barriers had the greatest (76.3%). However, the average proportion of all perceived difficulties and obstacles was 73.5%. Furthermore, 70.5 ±15.4 was the overall mean ± SD of perceived barriers. However, the mean score and standard deviation of all perceived obstacles and challenges were 122.8 ±26.3.

figur 2: distribution of barriers and its sub dimensions and the challenges of GHRM



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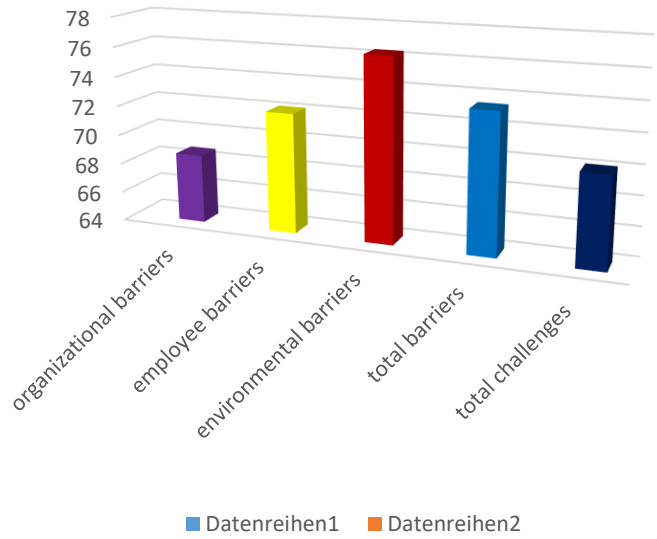

Discussion

By the end of 2024, the Saudi healthcare industry employed 600,000 people, including roughly 350,000 healthcare professionals and roughly 250,000 managerial and support personnel, according to the MGI research [15]. Given that the population of Saudi Arabia is predicted to double from around 3 to 6% over the next ten years due to demographic trends, the Kingdom is likely to continue investing extensively on its healthcare facilities in the years to come [9]. This indicates that a 25% rise in the need for workers in the health industry over the following ten years can result from an increase in life expectancy. Therefore, Saudi Arabia requires a significant increase in the number of healthcare professionals to satisfy the growing and aging needs of its population.

In terms of personal information, the findings of the current study showed that most clinical mangers were in the 30- to 35-year-old age range. The results of the current study were consistent with those of a study by Makarim&Muafi (2021), which was carried out in Indonesia and was titled "The Effect of Green Human Resource Management (GHRM) Practices on Turnover Intention: Mediating Role of Work Environment." The study revealed that the majority of the study participants were between the ages of thirty and thirty-five.

Conversely, Abdelrahman et al. (2023), who carried out the study in Egypt under the title "The Role of Green Human Resource Management Practices in Achieving Sustainable Development in the Hospital from Nurses' Perspective," reported that most of the study participants were under 30 years old. According to the researcher, these findings may be connected to the fact that all available clinical mangers met the inclusion criteria for the current study participants.

According to the study's findings, around two-thirds of the participants were men. According to the findings of the current study, roughly two-thirds of respondents were men, according to a study by Aldulaimi et al., (2022) titled "Implementing Green Human Resources Management to Promote Sustainability Development: Application from Telecommunication Companies in Kingdom of Bahrain." The study was carried out in the Kingdom of Bahrain.

However, the findings of the current study were at odds with those of a study by Suprapto et al. (2023) titled "Human Resource Development and Job Satisfaction among nurses" that was carried out in Indonesia and found that nearly three-quarters of spredsopsers were women. According to the researcher, these results might be the result of the hospital's remote location, which makes it challenging for women to work there.

Additionally, the current study's findings aligned with those of El-Gazar & Zoromba's (2021) investigation. Furthermore, the results of the current study were consistent with those of a survey conducted in 2023 by Saleh et al., which found that over half of the study participants held a bachelor's degree. According to the researcher, these findings could be because the study participants were clinical mangers, who should ideally have at least a bachelor's degree and nursing experience.

The combination of environmental and human resource management is known as "green HRM" (Faisal, 2023). The majority of study participants had an inadequate degree of overall understanding regarding green human resources management, according to the current study's findings. The findings of this study were consistent with those of a study conducted in 2021 by El-Gazar and Zoromba, which showed that fewer than three-quarters of nurses knew very little about green HR practices.

Furthermore, the results of the current study concurred with those of a study conducted in 2023 by Abdelrahman et al., which discovered that almost two-thirds of the nurses knew very little about green HRM.

However, the findings of the current study deviated from those of a study by Kamrunnahar et al. (2023), titled "The Employee Awareness of Green Human Resource Management Practices and Environmental Cooperation in Bangladesh," which was carried out in Bangladesh and discovered that most study participants had a satisfactory level of knowledge regarding green HRM practices.

The results of the current study also contradicted those of a study by Saaeb & Al-Saidi (2021) that was carried out in Iraq and was titled "The Practical Reality of Green Human Resources Management Strategies study found that over half of the participants understood the sustainability of businesses and green HRM practices. According to the researcher, these findings may be connected to the recently proposed idea of green HRM in the Saudi Arabian healthcare industry.

Less than two thirds of the survey participants had a favorable opinion of green human resource management, per the findings of the current investigation. Additionally, there was no statistically significant relationship between the personal data of clinical mangers and their overall assessment. The current results concurred with those of Abd El-M0nem et al. (2022), who discovered that most head nurses in the study had a favorable opinion of green HRM. Additionally, there was no statistically significant difference between personal data and overall perception levels.

Furthermore, the study's findings were corroborated by Tanveer et al.'s (2023) research, "Green HRM and Hospitality industry: Challenges and Barriers in Adopting Environmentally Friendly Practices," which was carried out in Malaysia and found that over half of the participants had a favorable opinion of the difficulties and obstacles associated with green HRM.However, the results of the study by Fawehinmi et al. (2020), which was carried out in Malaysia and was titled "Exploring the Interplay of Green Human Resource Management, Employee Green Behavior, and Personal Moral Norms," showed that most of the study participants had a negative opinion of green HRM. The results of the current study showed that there was no statistically significant relationship between clinical mangers' overall perception and level of knowledge regarding green HRM. The study by Ali et al. (2023), which showed a favorable link between total green human resources management practices, and these results were at odds.

Furthermore, the findings of the current study were in direct opposition to those of a study by Javed et al. (2024), which was carried out in Pakistan and demonstrated a significant positive correlation between knowledge and green HRM practices in the healthcare sector of Pakistan. According to the researcher, these findings might be the result of clinical mangers' awareness of the perceived difficulties and obstacles they might encounter when putting green HRM into practice, but their lack of familiarity with the concept as it is new to the healthcare industry.

Conclusion :

Instead of increasing cash or the quantity of hospital beds, equipment, or medications, it is necessary to implement adequate HRD capacity building in conjunction with strict policy regulation. Making sure that future investments in the health industry align with the demands of local healthcare HRD is also crucial. It will be a true test to introduce public-private partnership models in the selection of future institutions for resource sharing, including human resources. Nonetheless, the new plan's policy direction aims to foster collaboration amongst all parties involved and makes it easier to provide the necessary impetus to achieve the overarching goal of economic diversification and enabling the private sector to play a larger role. Regarding the inquiry into the extent to which this role occurs to be credible and coherent with the new initiative, only time will tell.

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