

Identification of HRM practices to Improve work engagement of medical staff of government hospitals

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Abstract

Background: The work burdens on public hospitals of Pakistan have increased enormously in the recent past, due to which healthcare providers experience a higher level of burnout than other human service sectors of white-collar jobs. Government hospitals make different efforts to provide quality care with efficiency to poor patients. Healthcare employees operate in unsafe work environments, having less but overloaded infrastructure at the same time as private sector hospitals. In this scenario, employees of public hospitals are often found to be less engaged, stressed, and less attentive at their workplaces.

Purpose: This study will help in some way the management of public hospitals of Punjab to understand those Human Resource Management practices that may boost work engagement of primary care providers, i.e. both Doctors and Nurses and provide evidence that Human Resource activities that are carefully designed may increase work engagement of healthcare staff which may pay back in the form of higher quality care and safety. For this purpose, this study identifies and tests those Human Resource Management practices in the Pakistani context on which Ontario Hospital Canada (OHA), Canadian Research Corporation (CRC), the National Health Service, UK and the Health Sector of the USA have given great emphasis, and which may enhance work engagement of employees. This study also highlights some possible barriers that cause variation in staff engagement.

Methodology: This is a descriptive-analytic study that was conducted in 12 Tertiary and Tehsil level public hospitals (6 each, respectively) among on-duty Doctors and Nurses. A sample of 161 doctors and 137 nurses was collected through Stratified Random Sampling (Disproportionate Method) by using the Employees Experience Survey Questionnaire and

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the Quality Healthcare Workplace Model of the Ontario Hospital Association (OHA). Results were obtained by reliability analysis, correlation analysis, and regression. Employees' work engagement was measured through a cumulative percentage of positive responses on each dimension of human resource practices, which OHA and other researchers have stressed. The employees' Engagement Score was bifurcated into high, medium, and low levels. **Findings:** The study concludes that by following an employee-centric approach based on the social and economic exchange theories, High-Performance Work Systems (HPWS), if carefully designed by management through effective HRM practices, may enable employees of public hospitals to provide high-quality patient care to the general public. In summary, the findings make clear that engagement culture comes from carefully devised HR practices with positivity, compassion, and respect for healthcare employees. When staff deals with such practices, they can fulfill their intrinsic satisfaction, which is vital to creating high-quality patient care quality.

Keywords: HRM practices; Work Engagement; Staff safety; Quality of Care; High Performance Work Systems

1 Introduction

Hospitals are inevitable in society's patient/health care system (Bidoli et al., [2023](#)). There are institutions that have planned professional and medical staff who are responsible for delivering nursing and medical-related services 24/7 per week with the help of available medical infrastructure (Dawson et al., [2022](#)). These public organizations deliver varying types of acute, recuperative, and other necessary care by using diagnostic and curative facilities in reaction to any acute and chronic circumstances arising from diseases, injuries, and genetic irregularities (Lawson et al., [2021](#)).

The delivery of satisfactory, accessible, suitable, and inexpensive health care is a fundamental right acknowledged by the world leadership under the umbrella of the World Health Organization (World Health Organization [WHO], [2021](#)). However, many people do not receive good patient care due to poor work engagement of medical staff. There have been complaints of dissatisfaction regarding patient care quality in public hospitals, which has led to a strong demand for improvement in the health care services of government hospitals (Almomani et al., [2020](#)). The majority of our patients depend on public hospitals, where they face poor quality of care, overcrowded facilities with short staff, and insufficient funds for healthcare facilities (Zhang et al., [2020](#)). Staff, including sweepers, medical technicians, and nurses, are observed either disappearing from their duty places or absent as ghost workers (Strong & Varley, [2022](#)).

Due to the rapid increase in population and migration from rural to urban areas, there has been more pressure of workload and stress on health care providers of public hospitals within the same available old capacity of staff, bed space of emergency and general wards, technical facilities and medicine (Yang et al., [2020](#)). Most doctors in government hospitals run their private clinics and hospitals as well, where they lure their patients to see them in their private clinics (Kruse et al., [2018](#)). They charge their hefty fee without any approved fee schedule by any regulating authority of the government. In a research conducted in Jinnah Postgraduate Medical Centre, Karachi, in which 50 doctors were interviewed through a self-administered questionnaire, 84% of doctors reported inadequate salary to doctors and paramedical staff, 80% deficiency of amenities and safety of doctors, illiteracy, and poverty of patients as main reasons due to which patient receive poor quality of care. (Saeed & Ibrahim, [2005](#)).

Hospital Human Resources, including doctors, nurses, and paramedical and administrative staff, devote a significant share of their time to this work (Gul et al., [2021](#)). They also perform their

duties on night shifts, during emergencies, and in normal cases (Battu & Chakravarthy, [2014](#)). Dealing with ill human beings requires the ability to work under high pressure and stress.

Therefore, employee satisfaction is more than just providing a job and salary; the quality of their work life increases their level of happiness, job satisfaction, and engagement with work, which strengthens their commitment to productivity and improves the quality of care (Javanmardnejad et al., [2021](#)). Prior research findings also pointed out that HR practices like opportunities for professional development, employee promotion systems, permission for degree programs, and insufficiency of medical supplies for patient care are related to hospital staff dissatisfaction (Battu & Chakravarthy, [2014](#)).

On the basis of different research conducted in different areas of the world, two critical themes dominate this issue, which are as follows. (Eaton, [2000](#)):

1. Despite public criticism, the quality of care of public sector hospital residents is poor
2. Employees do not perform their duties fully engaged and motivated due to the work environment (Quality of Work life) and the fixed nature of job benefits.

Pakistan has witnessed a number of cases related to medical negligence of medical staff, resulting in ill-trained medical professionals who lack knowledge, competence, professional integrity and poor engagement with their work at public hospitals (Baig et al., [2018](#); Waraich, [2018](#)). There is no way one can develop a healthcare system where there are no errors and negligence. Human beings are not perfect and are bound to cause some errors. However, there is a need to identify and develop such HR practices, which may create a high-performance work system for individuals to enable them to perform with total commitment with less probability of errors to provide high-quality patient care. This suggests that a study of public-sector hospitals should be conducted to rectify the issues and to learn the viewpoints of human resources in those hospitals that hinder them from working with more enthusiasm and engagement.

Research Problem Statement

Most patients receive poor-quality care in public hospitals as they cannot afford the costly treatment of private hospitals, which has enormously increased the workload of government hospital staff (Mohiuddin, [2020](#)). This workload pressure is increased even more when severely ill or complicated cases are referred from BHU or THQ levels. Further, the lack of funds for health also creates problems for government hospitals in producing quality output.

In this scenario, the quality of care in public hospitals is generally considered poor. Further researchers have increasingly realized that employee work engagement is essential for high-care performance. On the other hand, patients deem health care technical Quality, interpersonal behaviour and waiting time” as the most critical quality care measurements. (Soares & Farhangmehr, [2014](#)).

These factors influence the medical staff of government hospitals specifically for excellent or poor organisational output due to variations in outcomes and work systems for taking care of resident patients. This variation suggests that different results related to a patient's life may come through the same service to a similar “Customer.”(Eaton, [2000](#)). These issues were resolved after I gained a deep insight into the medical staff of governmental hospitals as healthcare service providers. I have analysed the ongoing HR practices of the selected Tertiary and tehsil-level public hospitals.

Research Objectives

The following objectives were achieved at the completion of this study.

- i. Studied HRM practices (Job Characteristics – Work Environment – Training and Development Opportunities – Compensation System and Organizational Support (at two levels, i.e. Supervisor Support – Senior Management Support), which may or may not

- cause low or high employee engagement.
- ii. Measurement of work engagement and retention level of healthcare employees
- iii. Identification of strengths, improvement priorities, and opportunities for improving government HR policies as sources of engagement or disengagement of medical staff that cause poor or high quality.
- iv. Suggestions of good HR practices for public hospitals to improve the image from Low-Quality Care Hospitals into High-Quality Care Public Hospitals

Research Gap

HRM practices of medical staff have not been effectively studied in Pakistan by researchers to improve the quality of care in public hospitals.

Normally, financial benefits and regularization of service are seen as the most important sources of motivation in Pakistan. However, other HRM practices are given less emphasis, such as Job Characteristics, Work Environment, Training and Development Opportunities, Compensation System, and Organizational Support (at three levels: supervisor Support, Senior Management Support, and Quality of Work life). This study will study the same.

Significance of the Study

Therefore, the conclusions derived from this study made a substantial input to formulating public health administration policies that may enhance the quality of patient care in public hospitals, thus potentially benefiting a large population of underprivileged patients. The rising need for quality care services in public hospitals makes it more important to enhance human resource management. This study contributes to this knowledge by outlining critical micro and macro HRM practices that enhance employee engagement, including career development, employee participation and training and development, as outlined by Ma'arof ([2023](#)) to recommend strategies that could improve the engagement and commitment of medical staff with a view of providing dedicated and quality care.

Hospital administrators and management could be informed on the aspects they must address to improve organisational performance. These research findings raise the question of enhancing the workplace environment to promote employee involvement and improve patient care. The study's findings are important in changing the perception of public hospitals as 'death traps' to become facilities that offer efficient health care services.

2 Literature Review

Staff Work Engagement and Quality of Care

Engagement is the heart of this research's theoretical model, defined as the "motivational and energetic work-related state of a worker." It mediates between perceptions of HRM practices and quality of care and safety (Bakker & Demerouti, [2008](#)). To achieve the most critical outcome, "Quality of Care," the National Health Service, UK, and the Ontario Hospital Association of Canada (OHA) have recognised staff work engagement as a main priority. (Care Quality Commission, [2013](#); Department of Health, [2010](#); Lowe, [2012](#)).

Achieving a great employee engagement level is the most desirable objective for any progressive organisation, including the healthcare industry. Employees with full engagement are dedicated to their organisation, pleased with their tasks, and desirous of putting additional energy into attaining their goals. Evidence suggests that high work engagement affects human resources goals like retention, job performance, and reduced absenteeism. (Memon et al., [2021](#); Yu et al., [2020](#)).

Therefore, engaged workers are vital for achieving organizational success. Progressively, the management of the hospital should take action to support this link. Organizations that perform at

a high level have engaged and healthy employees (Chanana & Sangeeta, [2021](#)). The designing of work patterns for those workers is planned in such a way that the capacity of people is used for the development and success of the organization. Culture in this regard is critically essential in terms of work participation, compatibility, mission, and flexibility, which give worth to employees, goals of personnel development, and systems that help staff to outshine their workplaces. (Ontario Health Quality Council, [2010](#)).

Schaufeli and Bakker ([2004](#)) stated that engagement is a “positive, fulfilling, and work-related state of mind that is characterised by vigour, dedication and absorption” (p. 295). The motivational process suggests that job resources lead to engagement because job resources (1) assist employees in achieving work goals, (2) reduce the costs associated with demands faced on the job, and (3) stimulate personal development. Such resources invigorate employees, leading them to engage with their work, which translates into positive outcomes.

High-level engagement is a strategic goal for many organizations, including healthcare. Engaged employees become more committed to their employers, who become satisfied with their assigned work, and are willing to make extra efforts to achieve their organization’s goals. Evidence shows that work engagement influences primary human resources goals, like retention, job performance, and absenteeism (Memon et al., [2021](#); Yu et al., [2020](#)).

The Link between HRM Practices and Employee Engagement

This process starts with employers' HRM practices (employee practices), such as job, task design, training opportunities, compensation system, performance management, and career growth. Psychologist William Kahn studied work roles and organizational socialization to probe the degree to which employees “occupy” their job roles. He used two terms, i.e., “personal engagement” and “personal disengagement.” At the “personal engagement” end, individuals occupy their job physically, intellectually, and emotionally in their work role. At the “personal disengagement” end, they detach themselves and extract from the role. (Kahn, [1990](#)). The concept of HRM practices and Employee engagement has been fresh since its inception. Many researchers have applied this concept in different situations and industries in recent years. Some of the latest examples to be mentioned are as follows: Mustaffa et al. ([2022](#)) examined employee engagement during COVID-19 in Malaysia. Nair et al. ([2022](#)) explored factors affecting employee engagement in the Malaysian private sector during the COVID-19 pandemic. Ibrahim et al. ([2021](#)) investigated factors influencing employee engagement in a financial institution. Heinsch et al. ([2022](#)) emphasized placing equity at the heart of eHealth implementation.

Job Characteristics and Employee Work Engagement

Inspiring employees by making tasks more meaningful, challenging, and satisfying enhances work outcomes (Loher et al., [1985](#)). The job characteristics model Hackman and Oldham ([1975](#)) identifies five dimensions that motivate employees: skill variety, task identity, task significance, autonomy, and feedback. These dimensions foster job meaning, responsibility, and awareness, leading to positive attitudes and outcomes like engagement, satisfaction, productivity, and lower turnover. Studies show job autonomy correlates with positive engagement (Malaysia), while poor work-life balance negatively impacts nurses. Social job characteristics also influence behaviour, reducing turnover and absenteeism (Krishnan et al., [2015](#)). Positive work engagement relates to autonomy and feedback.

Public hospitals can enhance engagement and care quality through motivating job characteristics and social support. Balancing organisational goals and personal satisfaction, a healthy work environment encourages staff to deliver excellent care (Disch, [2002](#)). Physically healthy workers provide better patient care (Eisenberg et al., [2001](#)). The Magnet Recognition Program by ANCC improved patient care by fostering a healthy work environment. Studies link staff satisfaction and

retention with better care quality (Collins et al., [2008](#)). High staff engagement leads to better financial outcomes and care quality (Michie & West, [2004](#)). Research shows that the quality of the work environment impacts care quality and patient experiences (Disch, [2002](#); McHugh et al., [2011](#)). Engaged employees promote a healthy work environment and improved performance outcomes (Bakker & Xanthopoulou, [2009](#)).

H1: *Job Characteristics (Job Clarity, Flexibility, Autonomy, work-life Balance, Staff Communication, Work Load Distribution, and Feedback) positively correlate with employee work engagement.*

Workplace Environment and Care Quality

The work environment, including both the physical environment and communication, is viewed as the most crucial aspect that influences the level of employee engagement at work. (Miles, [2001](#)). Such work settings where medical staff can attain organisational goals and cultivate personal satisfaction from work may be called healthy work environments. Such an environment transfers signals in which medical staff is challenged to practice their proficiency, clinical knowledge, and all skills. Moreover, medical staff working in such an environment are stimulated to deliver excellent patient care. (Disch, [2002](#)).

A workplace is healthy when it enables its employees to deliver high-quality care to workers and patients because patients' care quality and workers' health are reciprocally supportive. Physically healthy workers may emotionally foster high-quality care (Eisenberg et al., [2001](#)). Together with HR practices, QWL and employees' work engagement have a positive relationship with employee and patient satisfaction. The American Nurses Credentialing Center (ANCC) started the Magnet Recognition Program in the early 1990s. It was focused on improving patient experiences, care, and safety by creating a healthy and pleasant work environment for nurses. Research has shown that patients' experiences are significantly better in healthy work environments. (Gardner et al., [2007](#)). It seems that when staff is provided with a healthy work environment, patients also express positive experiences.

Studies showed that improved satisfaction and retention of employees may increase the quality of care. (Collins et al [2008](#)). The research documents of the National Health Service, England, describe that hospitals with highly engaged staff who deliver high-quality care have good financial positions. (Michie & West, [2004](#)). The relationship between work environment and patient experiences was also examined in a cross-sectional study done in 430 hospitals. (Disch, [2002](#)). This study used data from 20,984 nurses, which showed that the quality of the work environment affects the quality of care and patient experiences. This finding also resembles another cross-sectional study in which 95,499 nurses from 428 hospitals participated. The researchers concluded that nurses' dissatisfaction with the work environment was connected with significantly lower quality of patient care. (McHugh et al., [2011](#)).

It has been recognized that highly engaged employees foster their vigor and passion for other employees, which creates a generally healthy work environment and improved performance outcomes. (Bakker & Xanthopoulou, [2009](#)).

H2: *The Work Environment (Workplace et al. Commitment to Staff Safety, Resource Availability, and Stress Management) positively correlates with employee work engagement.*

Training & Development and its Impact on Work Engagement

Training and Development is an HR practice that stimulates personal development. It supports employees in attaining work goals by providing them with the necessary skills to do their job. Bartlett ([2001](#)), training encourages employees to feel encouraged and makes them more competent in carrying out their tasks. Therefore, they may be more engaged at their workplaces.

Research in this area showed that the availability of resources for training by organizations leads to employee engagement at work, which results in a higher level of effectiveness. (McHugh et al., [2011](#)).

When organizations offer developmental opportunities to their employees, this is considered equal to rewarding them for their efforts. Training and development are essential intrusions that should be part of organizations to increase employee competence, ability to handle job demand, and motivation to perform more effectively. (Executive, [2007](#)). This viewpoint is also consistent with Murphy and Denisi's (Murphy & Denisi, 2008) Theories of psychosomatic conditions, where training is deemed essential to provide employees with essential resources like skills and knowledge to empower them to fully engage in their tasks to increase the quality of care. Training and development may boost the quality of care and patient safety because they help reduce human error. (Helmreich, [2004](#)). Healthcare staff may be more conversant and, therefore, may be better able to perform their work. Training relevant to healthcare is necessary to keep the workforce well-informed about medical developments and new technologies. (Eaton, [2000](#)).

H3: *Training and Development opportunities have a positive relationship with employees' work engagement.*

Compensation Practices and its Impact on Employee Engagement

Recognizing and rewarding employees for their struggles is critical towards making them engaged. (Saks, [2006](#)). According to Sak's study, when employees are pleased with rewards from their administration, they feel grateful to their organization, which stimulates loyalty and engagement. Rewards like bonuses, holiday pay, and performance-based pay are not currently paid to employees of public sector hospitals as part of compensation policies, which potentially increase the engagement level of staff. The non-availability of such reward policies may lead to hard-working doctors and nurses' disengagement. The impact of poor policies in this regard may be harmful to the hospital's performance, and the quality of care is highly affected.

The most effective compensation policies support achieving the organization's objectives. A carefully designed compensation plan helps to attract and retain the best job candidates and motivates them to perform at their maximum level for a long time. Encouraging employees through compensation policies to "go the extra mile" rather than doing just the minimum to achieve a reward should be continued HRM practice. Through such practices, employees not only learn job-related skills and knowledge but also use their abilities at maximum to produce quality results the organisation needs. It can improve the commitment and work engagement of medical staff.

H4: *Employee compensation policies have a positive relationship with employee work engagement.*

Organizational Support

2.7.1 Supervisor Support

Employee engagement drives innovation, productivity, competitive advantage, and retention. Supervisors play a crucial role in influencing this engagement. If supervisors fail to build positive relationships, top performers may leave. A supervisor's management style can impact engagement. Controlling and micromanaging behaviours lead to disengagement, while a facilitative and participative style empowers employees.

Kibambila ([2024](#)) found that effective supervisors help organisations achieve strategic goals by providing guidance and support. Openness, regular meetings, and opportunities for employees to share ideas foster engagement. Ongoing feedback from supervisors is critical. A 2009 Gallup survey showed that even negative feedback is better for engagement than no feedback. Trust in supervisors significantly impacts engagement, promoting high performance, innovation, and

learning.

2.7.2 Senior Management Support

The way senior management treats its employees directly influences how staff members treats their customers. (Baker, & Kim, [2020](#)). Employee engagement is a degree of employees' readiness to put in their discretionary efforts, which helps the organization attain its goals. While leadership is vital in building employee engagement through different supportive actions, it is more crucial. In extremely engaged organizations, leaders are supposed to be meaningfully more effective (by approximately 1.7 times) than their fellows at low-engagement level organizations. These seniors set the right direction and organize the workforce (Hewitt, [2011](#)). Frequent communication and strong leadership are always important, but they are more vital during difficult situations employees face to maintain employee engagement at the current level. Regarding leadership communication, the most important thing is to be frequent and immediate in answering their questions as feedback. There are also certainly other senior management behaviours that affect employee engagement beyond communication, like commitment to high-quality patient care, workplace safety, improvement of HR practices, and uninterrupted resource supply. In fact, successfully implementing such steps in the long term requires visible deal and commitment from senior management.

In another research conducted in India, the researchers found that quality of work life (QWL) in public and private hospitals has significant importance in increasing the level of happiness and gratification of employees, which may result in the solidification of organisational commitment to improving the quality of care with productivity at the individual as well as organisational level (Battu & Chakravarthy, [2014](#)). Quality of work life is generally measured by work situations such as employees' salaries, health and safety issues, facilities, training opportunities, participation in decision-making, job diversity, and flexibility. Contrary to this, poor work quality may lead to stress, workload, tiredness, impatience, and inadequate communication, which result in most adverse events and treatment errors in hospitals. Quality of work-life measures was concluded by Adhikari et al. ([2011](#)), which were job security, safe and healthy working conditions, satisfactory pay and benefits, and meaningful and autonomy in the job.

A descriptive study to investigate the relationship between QWL and hospital productivity was carried out among 360 nurses working in the hospitals of the Tehran University of Medical Sciences. The results of this study revealed that the Quality of Work Life is at a moderate level among 61.4% of participants. Only 3.6 % of nurses reported that they were satisfied with their quality of work life (Nayaeri et al., [2006](#)). According to literature and studies conducted in different parts of the world, job satisfaction, working conditions, organisational climate, work stress, and communication among medical staff in public hospitals are needed to analyse the major factors affecting employee engagement.

H5a: *Organizational Support (Supervisor Support) positively correlates with employees' work engagement.*

H5b: *Organizational (Support et al.) Support has a positive relationship with employees' work engagement.*

3 Theoretical Framework

To support these ideas, human resource practices backed with evidence from Pakistani public hospitals are required. A model that suggests how the performance of public hospitals in Pakistan may be improved through a committed and engaged workforce and healthy work environments for doctors and nurses is also required. After having employment in a good work environment with relevant job characteristics and organisational support, an employee becomes able to secure his

physiological needs, which are vital for his survival, like water, air, food, and sleep. He may be able to meet all these needs only when he is provided with a handsome financial return in the form of a salary against his / her services at hospitals. He may not be motivated to perform his duties if not appropriately catered to.

The research results of 16 hospitals of Ontario Hospital Association (OHA) employees (n=10702) of Canada show that more engaged employees have strong rational, behavioural, and emotional attachments to their tasks and organisation. They feel pride in their jobs, are inspired by their assigned tasks, and are excited about improving the quality of care through their initiatives. (Lowe, 2012). National Health Service conducted a similar study in the United Kingdom for a staff survey (n=69,018). The findings disclosed that training and development opportunities, participation in decision-making, and communication were positively related to the quality of care through work engagement. To check the relationship between employee engagement and the quality of care in public hospitals of the government of Punjab, we shall examine the human resource practices of selected public hospitals through this conceptual model:

Conceptual Model

Conceptual Model for Achieving Improved Work Engagement for High-Quality Care

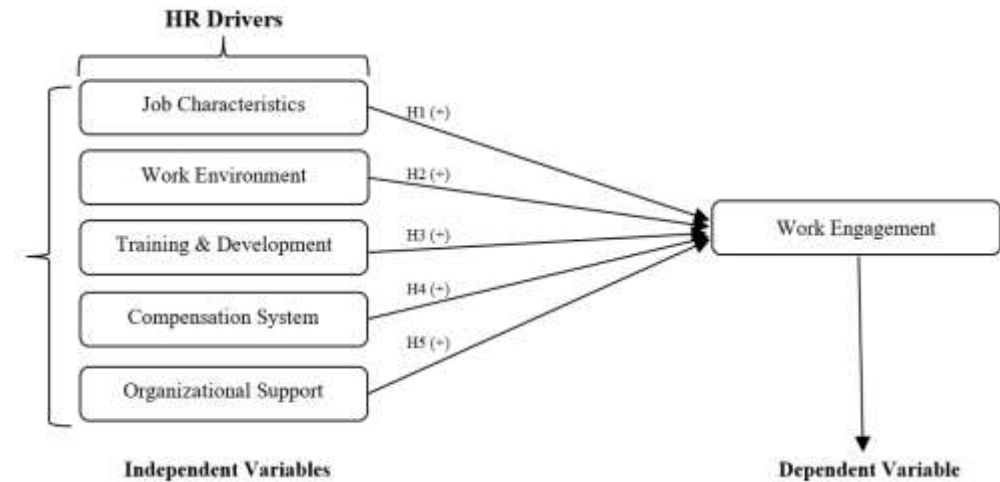


Figure 1: Conceptual Framework

4 Research Methodology

Sampling Method

Employee engagement has emerged as a critical factor for organisations seeking to enhance productivity, foster employee well-being, and gain a competitive advantage. Human resource management (HRM) practices are vital in driving employee engagement. Based on social exchange theory, the current study explores the interaction between HRM practices and employee engagement. Goyal et al. (2023) conducted a study in which a standardized questionnaire was administered to employees (n= 187) working in information technology companies and on the same basis, keeping in view the workload/busy routine and availability of respondents stratified random sampling (Disproportionate Method) was used to get the viewpoint of on-duty doctors and nurses.

The number of respondents varied across the survey because of the availability and willingness of respondents at specific duty shifts when hospitals were visited for data collection. On-duty

respondents were contacted in person and requested their participation in the study. However, busy respondents were handed over questionnaires and were requested to return filled questionnaires to those in charge of the respective wards. The collected questionnaires were placed separately in box files specific to each stratum. 175 questionnaires were distributed for each category, i.e. doctor and nurse. In response to this, 161 questionnaires were collected by doctors with a response rate of 92% and 137 questionnaires were collected by nurses with a response rate of 78%. In this total sample, 298 of both samples were used. Employee participation in the survey was voluntary. Participants gave informed consent, and ethical considerations were followed.

Table 1: Summary of Received Samples

Total Questionnaire Distributed	Received Questionnaire	Not Received
Doctors (175)	161 (92%)	14 (8%)
Nurses (175)	137 (78%)	38 (22%)

Sample Size

The total sample size for this study was 298, of which 161 doctors and 137 nurses were from 6 tertiary care hospitals and 6 tehsil headquarters-level hospitals whose valid questionnaires were analyzed.

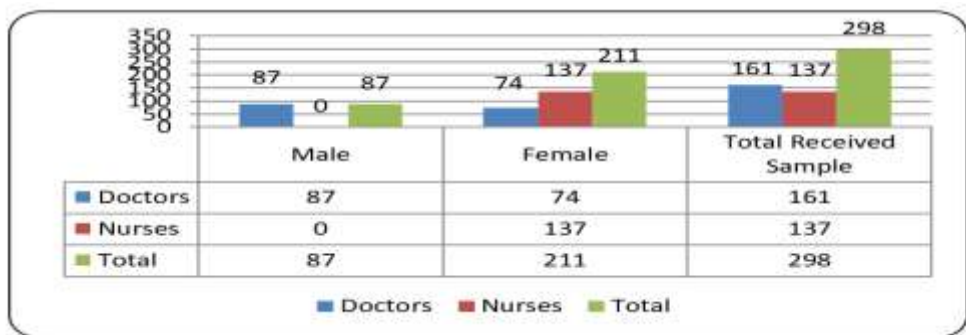


Figure 2: Graph summary of received samples

Figure 1 shows the gender-wise sample details of each category of respondents. The sample composition shows that 54% (n = 87) of doctor's respondents were male and 46% (n = 74) were female, while 100% (n = 137) respondents were female. There was no male nurse among the respondents.

Sampling Target Audience & Geographic Location

To conclude this study, the sampling target audience was front-line care providers, e.g., on-duty doctors and nurses of indoor wards with at least one year of post-qualification experience from 06 Tertiary / Teaching hospitals and 06 THQ level hospitals in Faisalabad. To protect respondents' confidentiality, the names of the individual respondents were not asked unless they agreed to be identified.

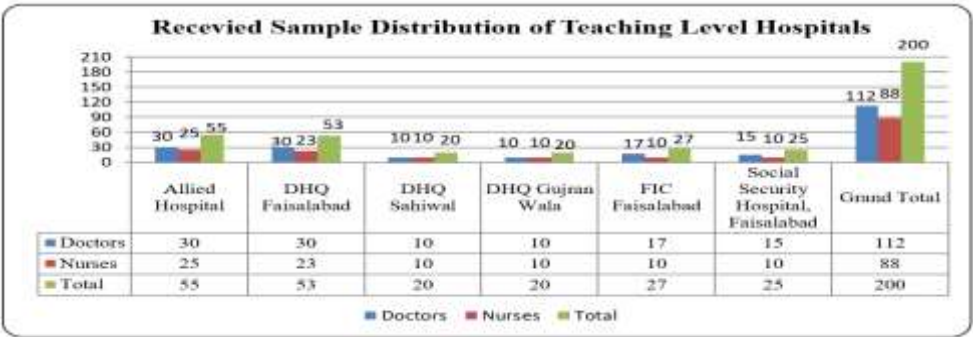


Figure 3: Received Sample Distribution of Tertiary Care Level Hospitals

Figure 2 reflects the number of samples of both categories received from each tertiary-level Hospital. The received sample of doctors was a maximum of 30 and a minimum of 10, and the number of nurses’ respondents was a maximum of 25 and a minimum of 10.

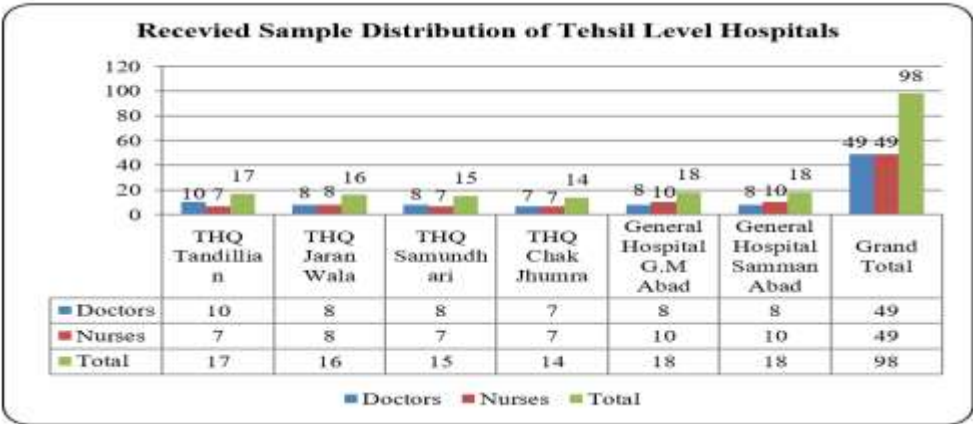


Figure 4: Received Sample Distribution of Tehsil Head Quarter Level Hospitals

Figure 3 reflects the number of samples of both categories received from each tehsil-level Hospital. Each THQ hospital received a maximum of 10 and a minimum of 10 doctors and nurses.

Data Collection

Doctors and Nurses on duty in Public Hospitals were requested to participate in the study. Primary data was collected through structured questionnaires for each category of respondents. **Survey Technique:** The primary data collection questionnaire was designed on an ordinal Likert 5 scale. In this study, a survey technique was used for primary data collection. The questionnaire was filled out through ward/office visits of each hospital, during which individual and focus group studies were conducted. Formal permission from each Head of the Hospital was sought through an official letter before sampling. **Questionnaire Development:** An adaptive approach was used for questionnaire preparation in this study. The employee Experience Survey used by the Ontario Hospital Association, Canada (OHA) has been mainly adopted for this research along with the questions of another similar context research previously completed in the UK, USA, Greece, India and Iran. However, 45 questions were selected that were contextually relevant to the work environment of Public Hospitals in Pakistan to determine their relative impact on individuals.

This is important theoretically to increase the instrument's face validity. To this end, the

Questionnaire was discussed with academic experts and Senior Doctors and Nurses in a focus group.

Questionnaire Design

The problem was exploratory in nature, requiring in-depth interviews of medical staff. Therefore, a structured questionnaire was used to collect the primary data from each segment. The Employees Experience Survey, a 36-item questionnaire (HR practices) used by the Ontario Hospital Association (OHA), was adopted after minor modifications as per the Pakistani Public Hospitals Scenario. There were separate 4 questions to measure the Work Engagement of respondents, which was adopted from the Oldenburg Burnout Inventory (Mihail & Kloutsiniotis, 2016). A pilot study was also conducted prior to distribute the study questionnaires to evaluate the appropriateness of the questionnaire design.

In first part of questionnaire, 9 questionnaires were also added consisted on biography of respondents.

The second part of the questionnaire is to collect the information regarding different Human Resource Management practices i.e. Job Characteristics (7), Work environment (6), Training and Development opportunities (4), Compensation System (8), Organization Support (11), Work Engagement (4).

Table 2: Adapted Questionnaire Constructs

Sr. No.	Construct	Items	Reference
1	Job Characteristics	7	(Lowe, 2012)
2	Work Environment	6	(Eaton, 2000)
3	Training and Development	4	(Lowe, 2012)
4	Compensation System	8	(Lowe, 2012)
5	Organizational Support	11	(Lowe, 2012)
6	Work Engagement	4	(Eaton, 2000)
			(Oldenberg Burnout Inventory, 2010)
Total		40	

5 Data Analysis

Data analysis was completed through SPSS (V.20) software. The following techniques were used for this purpose:

Descriptive Statistics of Respondents

Doctors; Gender and Age: There was a good representation of Male and Female Doctors in the study. Male doctors were 54% (n=87) and female doctors were 46% (n=74). The number of Doctor Respondents with age < 30 years was 51% (n=83), between 31- 40 were 29% (n=48), 41-50 were 15% (n=25), and 51-60 were 3% (n=5). In this way, we may assume that 81% of the respondents were young doctors and only 18% (n=30) doctors were in their last phase of public service. **Service Structure:** Accordingly, 75% of doctors (n=122) were in the Basic Pay Service structure, 7% (n=12) were on Special Scale, and 16% (n=27) were on others. While 50% (n=82) were on permanent job status, 38% (n=61) were on contractual, 2% (n=4) were on part-time, and 8% (n=14) were on other scales. **Experience / Length of Service:** 44% (n=71) had 1-3 years of experience, 24% (n=39) had 4-6, 10% (n=16) had 7-9, and 22% (n=35) had more than 10 years' service experience. **Residency Status:** As per residency status, 69% (n=111) of doctors were on duty stations where they were local, and 31% (n=50) were on duty stations where they were non-resident. **Nurses; Gender and Age:** All samples were female nurses. There was no male nurse

among the respondents. The number of nurse respondents with age < 30 years was 45% (n=64), between 31- 40 was 32% (n=44), 41-50 were 19% (n=26), and 51-60 were 2% (n=3). In this, we may assume that 77% of the nurse respondents were in her young age. **Service Structure:** As per service structure, 86% (n=119) of nurses were in the Basic Pay Scale service structure, 4% (n=5) were on the Special Scale, and 10% (n=13) were on others. While 63% (n=87) nurses were on permanent job status, 29% (n=40) were on contractual, 2% (n=2) were on part-time, and 6% (n=8) were on other scales. **Experience:** Nurse respondents had a good combination of all stages of professional experience. For example, 31% (n=42) had 1-3 years of experience, 24% (n=33) had 4-6, 18% (n=25) had 7-9, and 27% (n=37) had more than 10 years of service experience. **Residency Status:** 73% (n=100) of nurses were at their local duty stations, whereas 27% (n=37) were at their outstation.

Reliability Analysis

Reliability estimates of each construct and overall questionnaire were measured by Cronbach's Alpha, which is as under:

Table 3: Cronbach's Alpha Reliability

Constructs	Cronbach's Alpha	No. of Items
Job Characteristics	.705	7
Work Environment	.758	6
Training & Development	.714	4
Compensation System	.782	8
Organizational Support (Supervisor Support - Senior Management Support)	.846	11
Work Engagement	.854	4
Overall	.829	40

Table 3 shows that Cronbach's Alpha for the above five items ranges between .705 and .854, and overall reliability α is 0.829, which is near the values reported by Lowe (2012).

Uni-dimensionality Test

To investigate the constructs' further validity, Unidimensional was also tested. According to Slocum-Gori and Zumbo, Unidimensional occurs when an eigenvalue is greater than one rule and the ratio of the 1st to 2nd eigenvalues. All employed constructs met these criteria.

Table 4: Uni-dimensionality Test

Constructs	Eigenvalues		Variance Explained	
	1 st Comp	2 nd Comp	1 st Comp (%)	2 nd Comp (%)
Job Characteristics	2.778	1.164	39.680	16.630
Work Environment	3.109	0.842	51.822	14.037
Training & Development	2.026	0.914	50.645	22.861
Compensation System	3.550	1.213	44.372	15.160
Senior Support	2.545	0.585	63.636	14.633
Senior Management Support	3.171	1.081	45.302	15.439
Work Engagement	1.385	1.230	34.635	30.759

Table 4 describes the intensities of each construct. Uni-dimensionality was tested by employing a principal component (factor) analysis. According to Kaiser's criterion, Uni-dimensionality holds if an eigenvalue higher than one is attained in the first principal component. All the constructs used met the suggested criteria; moreover, the principal component accounts for most of the variances.

Pearson Correlation Analysis

Table 5: Pearson Correlation Analysis

	JC	WE	T_O	CS	SS	SMS	WC
JC	1						
WE	.601**	1					
T_O	.381**	.508**	1				
CS	.480**	.589**	.459**	1			
SS	.394**	.397**	.301**	.457**	1		
SMS	.544**	.662**	.399**	.591**	.517**	1	
WC	.189**	.257**	.207**	.251**	.127*	.218**	1

***. Correlation is significant at the 0.01 level (2-tailed)*, **. Correlation is significant at the 0.05 level (2-tailed)*.

Measurement of Staff Work Engagement through Satisfaction Level

Engaged staff have strong behavioral and rational attachments to their assigned tasks and their organization. They feel safe, satisfied, pride with their job and enthusiastic at their work places. Such employees become the ideal employees. They try their best to benefit patients.

To measure staff work engagement individually by means of each HR practice satisfaction level, Questionnaire asks respondents to evaluate 36 human resource management practices related to their job, i.e. Job Characteristics of Work Environment, Training and development Opportunities, Compensation System, and Organizational Support at three different levels i.e. Supervisor Support, Senior Management Support and Quality of Work life. These factors may be considered as key drivers of employee work engagement.

To measure the work engagement of both respondents for reporting, four (agree) and five (strongly agree) scores of both respondents were grouped to get the engagement score of each respondent on each questionnaire item. In this way, the engagement scores were distributed into high, medium, and low levels by adopting following ranges of cumulative positive scores (Bulkapuram et al., 2015). The following Table shows the said ranges and how staff engagement was determined.

Table 6: Distribution of Engagement Scores

No. Positive Responses *	Engagement Level
> 24-36	High Engaged
> 23-18	Medium Engaged
> 18-below	Low Engaged

*Combination of 4 & 5 rankings on a 5-point scale, in which, 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree (Lowe, 2012)

Table 6 shows the range of positive ratings of respondents and the determination of their engagement level. The employee engagement scores were characterized into low, medium, and high levels based on the bifurcation of scores used by the Ontario Hospital Association. Based upon the referred distribution, the high-engagement category was the group of individuals with responses of four and five on a five-point Likert scale (> 24 out of 36). The medium-engaged category comprises scores between 18 and 23. The low-engaged group scored 18 or lower.

Keeping in view the above distribution of engagement level scores, most of the respondents (both doctors and nurses) are in low engagement category which is alarming and require the attention of policy makers. Table shows the levels of engagement of both respondents:

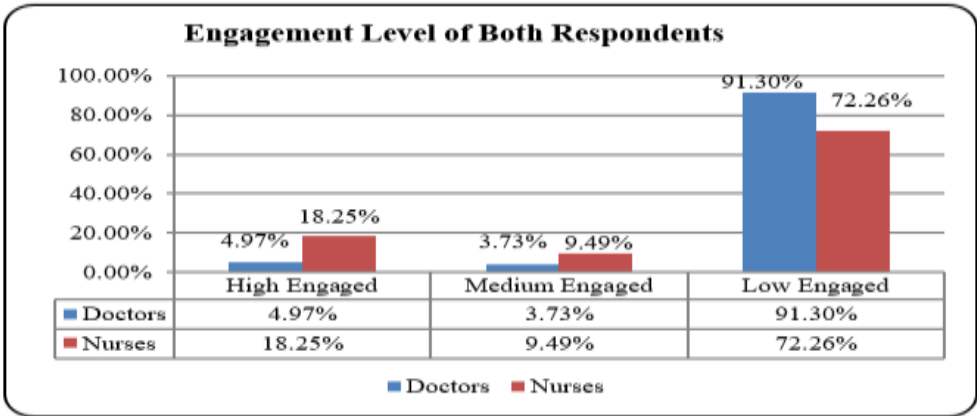


Figure 5: Engagement Level of Both Respondents

Figure 4 reveals that only 5% (n=8) doctors and 18% (n=25) nurses were in the highly engaged category, while 4% (n=6) doctors and 6% (n=13) nurses were in the medium-engaged category. A significant number of doctors, 91% (n = 147) and 72% (n = 99) nurses were in the low-engaged category, respectively.

Evaluation of the Impact of Different HR Practices on Work Engagement of Medical Staff and Identification of Strengths, Improvement Priorities, and Opportunities of Improvement of Government HR Policies for Public Hospitals

To simplify further analysis and identify the causes of significant low-level engagement of respondents, an analysis of each HR practice (IV) was made through regression analysis to check its impact on Work Engagement (DV). Then, the percentage of positive answers on each observable item as a driver of staff work engagement was discussed to identify “Strengths,” “improvement Priorities”, and “Opportunities for Improvement” in Government HR practices for doctors and nurses. For this purpose, items (Green) that received a 60% or higher positive rating by overall respondents called “Strengths”, items (Yellow) that received 40%-59% positive ratings called “Improvement Priorities,” and the items (Pink) that received below 40% positive ratings were identified as “Opportunities for Improvement”.

Regression Analysis

Job Characteristics – Work Engagement

Table 5: Regression Results of Job Characteristics-Work Engagement

Variable Name	R-Square	F-Test	Sig of F	Beta	Significance
Job Characteristics	.33	10.944	.001	.189	.001

a. Dependent Variable: WE (Work Engagement), b. Independent Variable: JC (Job Characteristics)

H1: A relationship between Job Characteristics and Work Engagement was observed as positive with R 0.33 and a p-value of 0.001

Discussions; The results highlight that job characteristics like clarity, flexibility, autonomy, work-life balance, job security, work distribution, and interdepartmental coordination are key to enhancing work engagement in public hospitals. Table 6 shows overall satisfaction ratings and areas needing improvement.

Table 6: Rating of respondents on current Job Characteristics

Sr. No	Dimension	Question	Observable HR Practice	Positive Responses of Doctors (%)	Positive Responses of Nurses (%)
1	Job Characteristics	Have you been given a clear job description?	Job Clarity	48.45	52.55
2		Am I satisfied with the rest of my duty?	Flexibility	40.37	40.88
3		I will be more committed and motivated when given a chance to make my duty shift schedule.	Autonomy	80.12	70.80
4		I am satisfied with making a balance between my personal and professional life.	Work-life Balance	36.65	57.66
5		I am satisfied with my job security.	Job Security	31.06	48.18
6		Distribution of work is fair in hospitals?	Distribution of Work	21.12	40.88
7		Is there good coordination in all departments?	Interdepartmental Coordination	27.95	45.99

Job Clarity; Although item no. 01 has good ratings (48.45% Doctors and 52.55% Nurses), so the ratings of both respondents are in the “Improvement Priorities” category. However, there is a minor difference in the job clarity of both respondents; ratings show that Nurses are clearer in their job description than doctors. Poor defined and conflicted roles may be stressors for staff. Lack of clarity in the job’s objectives, key accountabilities, and area of jurisdiction may create ambiguous conditions for employees. Therefore, there is a need to improve job clarity for respondents.

Flexibility; Rest breaks for hospital employees significantly affect their tiredness and fatigue and, consequently, their capacity to provide quality care. The results of item no.02 (40.37% Doctors and 40.88% Nurses) show that rest during duty shifts is a critical issue for both respondents because of the heavy work burden in public hospitals, which hinders them from working with more commitment. However, item no. 02 falls in “Improvement Priorities” for both categories.

Autonomy; The highest positive rating (80.12% Doctors and 70.80% Nurses) from both respondents' job characteristics point of view is item no. 3, which may be a “Strength” of motivation for both respondents if implemented and which has no cost: “I’ll be satisfied and motivated when given a chance to make my own duty shift schedule.” Normally, supervisors prepare staff duty rosters in advance. They do not consider the staff’s personal needs. This is notable if the autonomy given to employees may significantly enhance their motivation.

Work-life Balance; The results (36.65% Doctors and 57.66% Nurses) show that the work-life balance of doctors is less good than that of nurses. This concept is the proper balance between your professional and personal life, including one’s health, leisure, family, and spiritual life. Only 36.65% of doctors were satisfied with their work-life balance. That shows that they were overburdened at their duty places, which is not good for their quality of output. While nurses were more satisfied than doctors, who rated 57.66% satisfaction with their work-life balance,

Item No.5 Job Security; The results (36.65% Doctors and 48.18% Nurses) show that doctors were less satisfied with their job security than nurses. Nurses were more satisfied than doctors, who rated 48.48% satisfaction with their Job Security. The government should provide job assurance

to young doctors, which will assure them that there is no unemployment risk. Continuity in service may be a good source of work engagement for doctors.

Distribution of Work; Fair distribution of workload is essential for reducing job stress. The variation in results (21.12% Doctors and 40.88% Nurses) shows that doctors were less satisfied with the workload distribution than nurses. However, nurses were more satisfied than doctors, who rated 40.88% satisfaction with the work distribution at their duty places. Therefore, the workload balance is significantly causing doctors' low commitment behavior. A doctor who has been assigned heavy work in long shifts may be unable to provide quality services. This also shows fewer doctors compared to the workload in public hospitals.

Interdepartmental Coordination; Interdepartmental coordination plays a significant role in producing quality care. Weak coordination between departments may affect a patient-oriented safety culture and the proper flow of care-related tasks. Improper information handoff and ineffective information flow may delay the treatment process. The quality of each department's support is perceived as most important at the process level. The results of both respondents (27.95% Doctors and 45.99% Nurses) significantly vary in this dimension. Only 27.95% of doctors rated that there is good coordination between departments.

Work Environment – Work Engagement

The increasing workload pressure and the complex nature of patient care require a safe and patient-centered work environment. Different researchers have found a strong relationship between employee work engagement and their positive work environment. In this context, various factors, e.g., workplace safety, organizational commitment towards staff safety, availability of resources, temperature, hygiene conditions, and staff health safety measures, have been identified as critical drivers of a positive work environment for hospital employees. These factors have a significant correlation with engagement. Employee performance may increase as a result of improvement of those aspects of engagement and may efficiently increase the quality of care in public hospitals.

Regression Analysis

Table 7: Regression Results of Work Environment-Work Engagement

Variable Name	R-Square	F-Test	Sig of F	Beta	Significance
Work Environment	.561	20.913	.000	.257	.000
<i>a. Dependent Variable: WE (Work Engagement), b. Independent Variables WE* (Work Environment)</i>					

H2: A positive relationship between Work Environment and Work Engagement was observed with R 0.56 and a p-value of 0.000.

Discussions; The positive relationship between work environment and work engagement shows that work environment dimensions such as Workplace Safety, organizational commitment to Staff Safety, Resource Availability, Workplace Temperature, Hygiene—sanitation of the Workplace, and Health Safety Measures are essential components of a healthy work environment for medical care providers of public hospitals to enhance their work engagement. Table 8 shows the respondents' overall positive / satisfaction ratings about their Work Environment and its categories that require the attention of policymakers.

Table 8: Rating of respondents on current Work Environment

Sr.No	Dimension	Question	Observable	Positive	Positive
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			HR Practice	Responses of Doctors (%)	Responses of Nurses (%)
1.	Work Environment	In case of sensitive situations, like patient suffering, death, etc., I am satisfied with the safety measures management has arranged for me.	Workplace Safety	15.53	25.55
2.		Do you think Hospital Management sincerely provides you with a secure workplace?	Org. Commitment towards Staff Safety	21.12	37.23
3.		Are the facilities at this hospital sufficient for a load of patients?	Resources Availability	10.56	19.71
4.		Is the temperature of your workplace suitable for your needs?	Workplace Temperature	24.84	43.80
5.		Is the duty place's hygiene/sanitation level satisfactory for staff and patients?	Hygiene - Sanitation of Workplace	24.22	45.99
6.		Is hospital management sincere in saving employees from infectious diseases?	Health Safety Measures	16.15	37.96

All Items

Doctors rated all aspects of the work environment in public hospitals below 40%, while nurses prioritized "Workplace Temperature" and "Hygiene Conditions" for improvement. Workplace safety is crucial, as staff feel insecure in critical conditions, with some nurses reporting physical assaults by patient attendants. Both doctors and nurses doubt management's sincerity in providing a safe workplace and protecting against infectious diseases. Public hospitals must improve the work environment to boost staff engagement and care quality.

Training and Development Opportunities – Work Engagement

Training and development are crucial for keeping healthcare providers updated with medical advancements. The government should provide these opportunities to public hospital staff to enhance their knowledge and skills. Proper training can inspire doctors and nurses, improve patient care, and reduce life-threatening errors.

Regression Analysis

Table 9: Regression analysis of T&D and WE

Variable Name	R-Square	F-Test	Sig of F	Beta	Significance
T & D Opportunities	.443	13.227	.000	.207	.000

a. Dependent Variable: WE (Work Engagement), b. Independent Variable: TO (Training & Development Opportunities)

H3: A relationship between Training and Development Opportunities and Work Engagement was positive with R .443 and a p-value of 0.000.

Discussions; The results show that Opportunities for Development through Training, Financial Benefits through Training, Career growth through T&D, and Management's Commitment to employees' capacity building are important components that, if improved, may enhance respondents' work engagement.

Table 10: Rating of respondents on current Training & Development Opportunities

Sr. No	Dimension	Question	Observable Practice	HR	Positive Responses of Doctors (%)	Positive Responses of Nurses (%)
1.	Training & Development Opportunities	Organization / Govt allows you to improve your profession-related education or training through scholarship.	Opportunities of Development through Training		22.98	26.28
2.		Do you get any financial benefits if you improve your qualifications or capacity?	Financial Benefit through Training		31.06	22.63
3.		The organization offers growth in my career through Training and development.	Growth in Career through T & D		36.65	39.42
4.		Management encourages employees to extend their abilities through Training and development.	Management's Commitment toward employee's capacity building		26.09	29.20

All Items

Training and development opportunities in public hospitals are rated below 40%, indicating significant "Opportunities for Improvement." Respondents noted that these opportunities are inadequate and offer no financial benefits for self-improvement. However, both doctors and nurses believe they could advance their careers through personal effort. Interestingly, they also reported that hospital management does not encourage capacity improvement through training and development.

Compensation System- Work Engagement

Although public policymakers' primary focus is maintaining attractive salary packages within the government's budgetary constraints, employee pay structures and rewards are related to staff cooperation, involvement, satisfaction, and work engagement. The retention level of both respondents has also been measured through Item No. 04.

Regression Analysis**Table 11:** Regression Analysis of CS-WE

Variable Name	R-Square	F-Test	Sig of F	Beta	Significance
Compensation System	.553	19.873	.000	.251	.000

a. Dependent Variable: WE (Work Engagement), b. Independent Variable: CS (Compensation System)

H4: A relationship between the Compensation System and Work Engagement was positive with R .553 and a p-value of 0.000.

Discussions; The dimensions of Compensation System for government employees of public hospitals such as Salary Satisfaction, Satisfaction towards Allowances, Satisfaction towards Annual Increment, Intention to Quit Job, Satisfaction towards Promotion Criteria, Good Work Appreciation, (Intrinsic Motivation), Satisfaction towards Govt Health Care Policy for employees, Satisfaction towards Retirement Benefits has been observed as essential components of

compensation system to enhance work engagement of medical staff.

In this section, we examined the satisfaction levels of respondents with the basic parts of the government's compensation system.

Table 12: Rating of Respondents on the Current Compensation System

Sr. No	Dimension	Question	Observable Practice	HR	Positive Responses of Doctors (%)	Positive Responses of Nurses (%)
1.	Compensation System	I am satisfied with my monthly salary.	Salary Satisfaction		30.43	66.42
2.		I am satisfied with the House Rent–Medical, and conveyance allowances.	Satisfaction towards Allowances		16.77	45.99
3.		I am satisfied with the rate of my annual service increment.	Satisfaction towards Annual Increment		9.94	31.39
4.		I shall leave my job if I get a good opportunity in a local or abroad hospital.	Intention to Quit Job		42.24	39.42
5.		I am satisfied with the current promotion criteria.	Satisfaction towards Promotion Criteria		16.15	38.69
6.		I receive appreciation for good work from seniors.	Good Work Appreciation (Intrinsic Motivation)		32.30	51.82
7.		I am satisfied with the Govt health care policy / for employees and their families.	Satisfaction towards Govt Health Care Policy for Employees		13.04	36.50
8.		I am satisfied with my current retirement benefits.	Satisfaction towards Retirement Benefits		13.04	35.04

Each item has been shown on a bar chart to understand these results better.

Salary Satisfaction; Figure 5 shows the satisfaction level of both respondents with their basic salary. This is important because nurses (66.42%) were more satisfied with their monthly salaries than doctors (30.43%). A more significant number of doctors were dissatisfied with their monthly salaries. Therefore, doctors have to work part-time at private hospitals and clinics to meet their life expenditures.

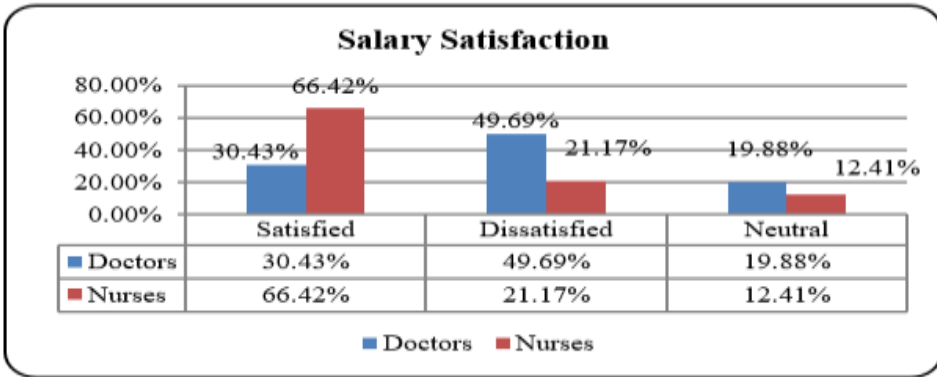


Figure 6: Salary satisfaction of respondents

Satisfaction for Monthly Allowances; Figure 6 shows the satisfaction level of respondents for their monthly allowances other than basic salary. As compare to with monthly salary, doctors are more dissatisfied with their monthly allowances than basic salary. While nurses who were more satisfied with their monthly salary, but were dissatisfied with their monthly salary allowances.

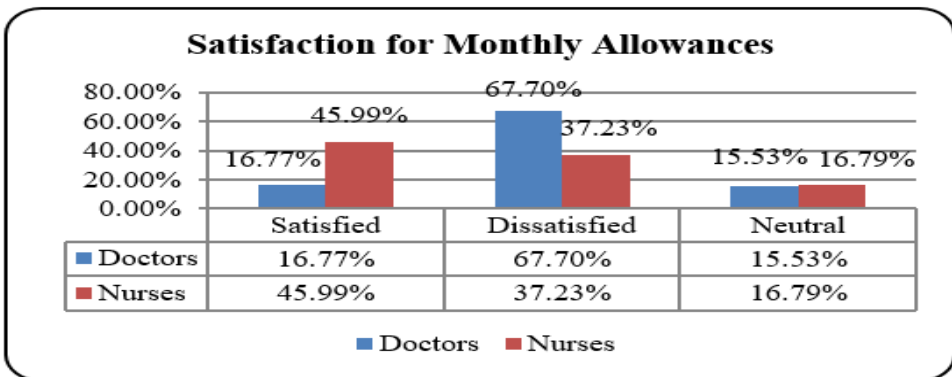


Figure 7: Satisfaction for Monthly Allowances

Retention Level; Figure 7 shows the retention level of respondents with government service. It is notable that despite public hospitals already in shortage of doctors, 42.24% of doctors are ready to quit their jobs in public hospitals in case they find new jobs locally or abroad. Young doctors whose average rating is in the “Improvement Priorities” category may not be retained with the government service if good salary packages do not attract them. They compare themselves with the average salaries of doctors working in other countries. Similarly, doctors, 39.42% of nurses also showed their interest in quitting their jobs if they got a good opportunity

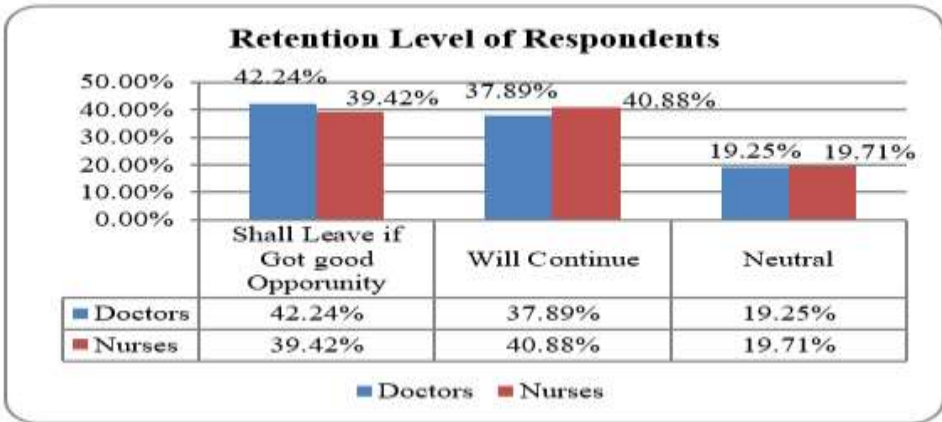


Figure 8: Retention Level of Respondent

Satisfaction for Promotion Criteria; Figure 8 shows respondents' satisfaction with the government's promotion criteria for doctors and nurses. There is significant variation in the satisfaction level of both respondents, which pointed out that a small number of doctors (16.15%) were satisfied with the government's promotion criteria. Meanwhile, nurses (38.69%) were more satisfied with their promotion criteria than doctors.

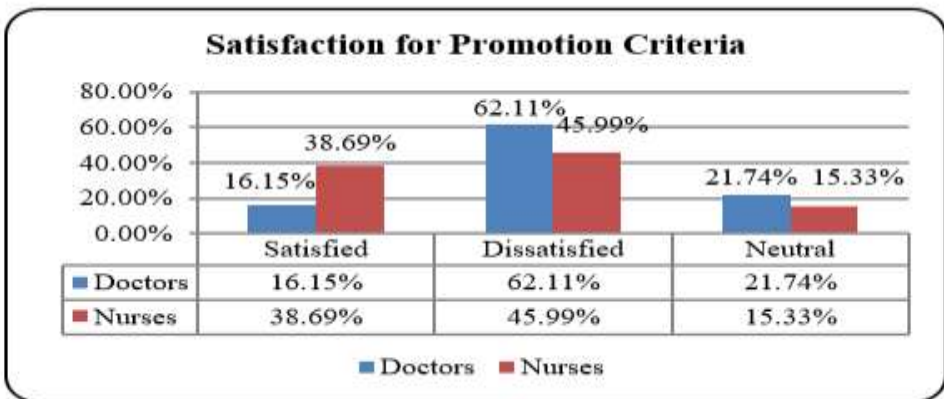


Figure 9: Satisfaction for Promotion Criteria

Good Work Appreciation; Figure 9 shows the percentage of respondents who received appreciation for their excellent work. Appreciation by seniors plays an essential role as intrinsic motivation. Nurses (51.82%) were more satisfied with this practice than doctors (32.30%). Yet, a significant number of nurses (34.31%) were also in data who rated that they usually do not receive good appreciation from their seniors. HR management of public hospitals is required to change this trend, starting with seniors.

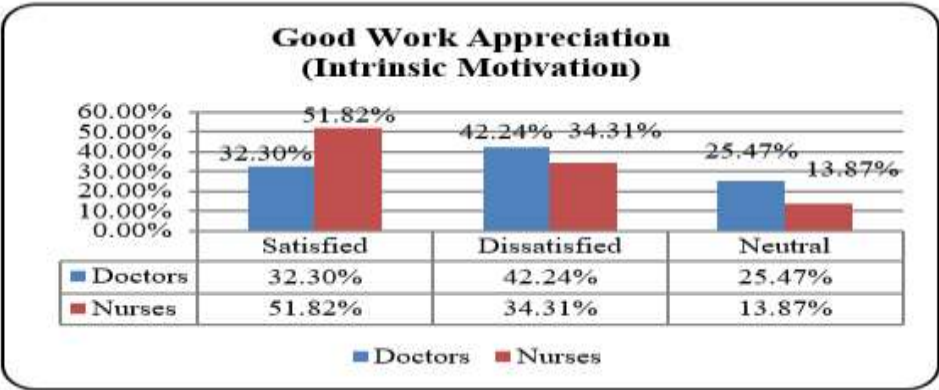


Figure 10: Good Work Appreciation

Government Health Care Policies for Public Care Employees; Figure 10 shows the percentage of respondents who rated the government healthcare policies for healthcare staff as government employees. A significant number of both respondents (65.84% doctors and 54.01% nurse) were not satisfied with government health care facilities for the staff of government hospitals. This is important that those people who deal with the patients of different nature have more health risks than other professions have not good health care facilities. In results of this, they may not be able to provide quality care to the patients of public hospitals.

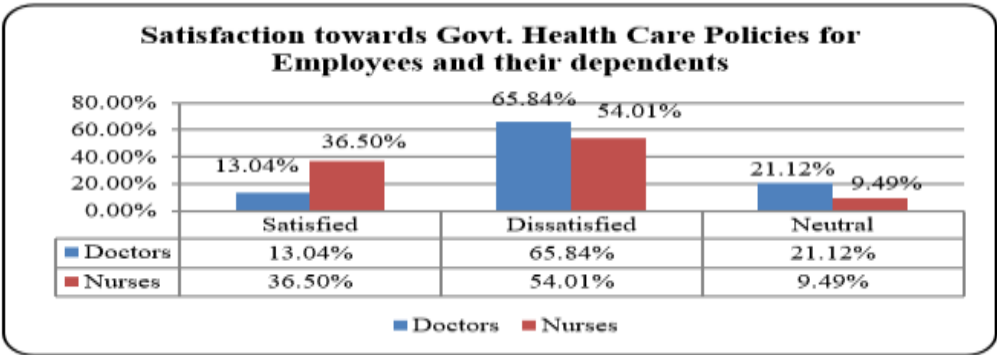


Figure 11: Satisfaction towards Govt. Health Care

Satisfaction for Retirement Benefits; Figure 11 shows the satisfaction level of respondents toward their retirement benefits. Results pointed out that almost an equal number of nurses were lying in each category of satisfaction, dissatisfaction, and neutral. But doctors were again significantly dissatisfied with this last item of the compensation system like previous items. This requires a thoroughly overhauling of HR policies by the government to make those significant number of dissatisfied young doctors so that they could serve poor patients with more enthusiasm and engagement.

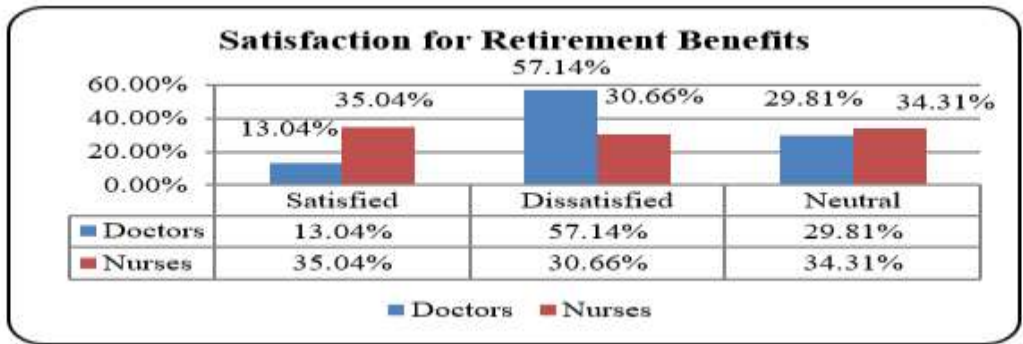


Figure 12: Satisfaction for Retirement Benefits

Organizational Support

5.5.1 Seniors Support – Work Engagement

In this section, organizational support at three levels for the employees of public hospitals is examined. First seniors support, then Senior Management Support to respondents.

Regression Analysis

Table 13: Regression Analysis of SS-WE

Variable Name	R-Square	F-Test	Sig of F	Beta	Significance
Supervisor Support	.116	4.852	0.28	.127	0.28

a. Dependent Variable: WE (Work Engagement), b. Independent Variable: SS (Supervisor Support)

H5: There is insignificant relationship was observed between Supervisor Support and Work Engagement with R .116 and p-value 0.28.

Senior support as a first part of organisational support and its dimensions such as supervisor's behavior, availability, feedback, performance appraisal has been observed insignificant as compare to with second part of organizational support which "Senior Management Support" to enhance work engagement of medical staff. The possible reason may be the already positive ratings in term of satisfaction are for observable items of Seniors Supports. The detail of ratings of those responses is as under which has only one area (Item No. 04) of doctors which needs most immediate attention by management of those hospitals.

Table 14: Rating of respondents on Senior Support

Sr. No	Dimension	Question	Observable HR Practice	Positive Responses of Doctors (%)	Positive Responses of Nurses (%)
1.	Seniors Support	Do seniors generally treat me fairly?	Senior's Behavior	52.80	52.55
2.		Seniors are available quickly to help me perform complex tasks.	Senior's Availability	54.66	67.15

3.	Senior provides me with routine feedback to improve my performance.	Senior's Feedback	49.07	62.04
4.	Seniors record annual performance appraisal (Annual ACR) fairly?	Performance Appraisal	35.40	51.82

All Items 1-4; As per the results of the doctor's respondents, all the items of Seniors Support are in the "Improvement Priorities" category except item.no.4, which is in the "Opportunity of Improvement" category. In comparison, item no. 2 and item no.3, as reported by the nurses, are in the "Strength" category. The variation in scores shows that the availability of seniors to nurses is better for performing complex tasks than doctors. Feedback from medical services is critical to saving one's life. Modifications in medical advice or process by results are crucial in care delivery.

The consistent transfer of a patient's condition from one shift to the next plays a pivotal role in medical services. Annual Confidential Report (ACR) is a routine practice of public institutes. It is the process of measuring and reporting the annual performance of public servants. Results show a significant difference between both respondents' satisfaction with item no. 4, which indicates that doctors are not satisfied with their senior's fair play in writing their ACRs,s. While it is also notable that a significant number of nurses are also not satisfied with their seniors on this practice.

Senior Management Support - Work Engagement; Hospitals in which senior management is itself more focused and engaged have good output in term if quality care for its patients. Private hospitals are good example of this point. This means engagement is started from top and without engaged senior management of public hospitals in term of providing positive learning environment, preparing quality care plans, ensuring consecutive supply of medicines and making efforts for improvement of HR practices for its employees.

Regression Analysis

Table 15: Regression Analysis of SMS-WE

Variable Name	R-Square	F-Test	Sig of F	Beta	Significance
Senior Management Support	.447	14.729	.000	.218	.000

a. Dependent Variable: WE (Work Engagement), b. Independent Variable: SMS (Senior Manager Support)

H6: A relationship between Senior Manager Support and Work Engagement was positive with R .447 and p-value 0.000.

Thus, Senior Management support in terms of provision of a Positive Learning Environment for staff, Quality Care Plans for patients, Senior Management Commitment towards the improvement of HR Practices for employees, Consecutive Supply of Medicines, Senior Management Commitment towards the improvement of Quality of Work Life, Quality of Staff Hostels, Quality of Staff Hostel's Foods were observed important factors for enhancement of Work Engagement Employees.

The following table show the respondent's level of satisfaction on these dimensions:

Table 16: Rating of respondents on Senior Management Support

Dimension	Question	Observable Practice	HR	Positive Responses of Doctors (%)	Positive Responses of Nurses (%)
Senior Management Support	Management positively supports staff learning through their mistakes rather than punishing them.	Positive Learning Environment		31.06	48.91
	Senior management regularly makes quality care plans.	Quality Care Plans		29.81	61.31
	Senior management is sincere in improving HR practices of employees to motivate them.	Senior Management Commitment towards Improvement of HR Practices		21.12	39.42
	Supply of medicine and other facilities are consecutive to perform duty?	Supply of Medicines		30.43	52.55
	Senior management is committed to improving my quality of work life.	Senior Management Commitment towards Improvement of Quality of Work-Life		19.88	45.26
	Are staff hostels good in quality?	Quality of Staff Hostels		6.83	18.25
	Quality of food at hostels is good?	Quality of Staff Hostels Foods		8.07	16.79

Learning Environment; The table shows that doctors rated all four items in the “Opportunities for Improvement” category, which is a severe sign. There is variation in the results of both respondents on item no.01, as 48.91% of nurse respondents agreed that their senior management positively supported them in learning through their mistakes rather than punishing them. While doctors rated this practice only 31.06%, it points out that on duty doctors have less learning through their seniors as they are likely to be punished if gone wrong.

Quality Care Planning; Quality care planning should be a consecutive part of hospital activities. There is a significant difference between both respondents. As per nurse’s point of view, this practice is in “Strengths” category but at the same time “Opportunities for Improvement” by doctors. This shows that according to doctors’ respondent there is strong need in making quality care planning by the senior management of public hospital to improve quality of care.

Item No. 03 – Senior Management Commitment towards Improvement of HR Practices; At item No. 03, both respondents rated senior management as not sincere about improving public hospital HR practices. Although HR practices are devised by the government centrally but locally at the hospital level, respondents feel that their senior management is less sincere.

Item No. 04 – Supply of Medicines and Allied Facilities; The supply of medicines and facilities has been reported as “Improvement Priorities” by nurses, which is a sign that the government is trying to ensure a consistent supply of medicines in public hospitals. However, doctors have shown

their concern in this regard. Only 30.43% of doctors agreed with the same dimension. There is some gap to fill by the government in this regard. For example, some lab test facilities are costly and rarely available in public hospitals. Due to a shortage of facilities or a rush of patients, the reports of the tests were not received well on time. This delay hinders doctors from providing quality care. Another example is the scarcity of specialized hospitals for the treatment of fatal diseases like cancer and heart. These are the reasons for the overburden in public hospitals where these facilities are available.

Item No. 05 – Senior Management Commitment towards Improvement of Quality of Work-Life;

There is significant variation in the responses of both respondents for each item. No. 5. This shows that nurses are more satisfied with their management's commitment to improving their quality of work life than doctors. Near 20% of doctors were satisfied by the commitment of their senior management to improving their quality of Work Life, which required immediate attention to resolve.

Quality of Work Life; Quality care for patients in public hospitals is the main issue, and it depends on the human resources of those hospitals. The staff who work in those hospitals are the most important assets. They need quality life at being in public hospitals. The following table shows the respondents' satisfaction levels with two different dimensions of work life.

Hospital Management Commitments towards QWL: The results show that the quality of staff hostels/accommodations and food available to resident staff is inferior and needs management's immediate attention. These facilities got the lowest favorable rating from both respondents.

Respondent-wise Comparative Summary of 36-Items Ratings:

Typology for improvement in HR policies for Government Hospitals

Table 17: A typology for improvement in HR policies for medical staff of Public Hospitals

Dimension	Observable Item	Doctors		Nurse
Job Characteristics	Job Clarity	Improvement Priorities		Improvement Priorities
	Flexibility			
	Autonomy	Strengths		Strengths
	Work-life Balance	Opportunities	for	Improvement Priorities
	Job Security	Improvement		
Work Environment	Distribution of Work			
	Interdepartmental Coordination			
	Workplace Safety	Opportunities	for	Opportunities for Improvement
	Org. Commitment towards Staff Safety	Improvement		
	Resources Availability			
Training & Development Opportunities	Workplace Temperature			Improvement Priorities
	Hygiene - Sanitation of Workplace	Opportunities	for	
	Health Safety Measures	Improvement		
	Opportunities of Development through Training	Opportunities	for	Opportunities for Improvement
	Financial Benefit through Training	Improvement		Opportunities for Improvement
	Growth in Career through T & D			
	Management's Commitment towards			

	employees' capacity building			
Compensation System	Salary Satisfaction	Opportunities for Improvement	for	Strengths
	Satisfaction towards Monthly Allowances			Improvement Priorities
	Satisfaction towards Annual Increment			Opportunities for Improvement
	Intention to Quit Job	Improvement Priorities		
	Satisfaction towards Promotion Criteria	Opportunities for Improvement	for	
	Good Work Appreciation (Intrinsic Motivation)			Improvement Priorities
	Satisfaction towards Govt Health Care Policy for Employees	Opportunities for Improvement	for	Opportunities for Improvement
	Satisfaction towards Retirement Benefits			
Seniors Support	Senior's Behavior	Improvement Priorities		Improvement Priorities
	Senior's Availability			Strengths
	Senior's Feedback			
	Performance Appraisal	Opportunities for Improvement	for	Improvement Priorities
Senior Management Support	Positive Learning Environment	Opportunities for Improvement	for	Improvement Priorities
	Quality Care Plans			Strengths
	Senior Management Commitment towards Improvement of HR Practices			Opportunities for Improvement
	Supply of Medicines			Improvement Priorities
	Senior Management Commitment towards the improvement of Quality of Work life			
Quality of Work Life	Quality of Staff Hostels	Opportunities for Improvement	for	Opportunities for Improvement
	Quality of Staff Hostels Foods			

6 Conclusions

This study was mainly intended to identify HR practices directly influencing the level of engagement of medical staff and poor patient care quality. The results of this study provide evidence-based causes of low engagement of medical staff in public hospitals. Ontario Hospital Association (OHA) and National Health Service, UK, have examined almost similar variables in the form of HR practices to assess the engagement of employees.

Previous research has established that, according to the job characteristics theory, autonomy, feedback, social support, and task significance are strong predictors of employee engagement. (Krishnan et al., [2015](#)). It is broadly agreed that staff work engagement comes from environmental and other job-related characteristics. (Macey & Schneider, [2008](#)). In another study conducted among 102 employees working in Canada, it was observed that antecedents of job characteristics are positively related to work engagement and organisational engagement (Saks, [2006](#)). A recent study revealed that employee engagement was positively related to job characteristics (autonomy, feedback, coordination, flexibility) among 646 medical care providers in Malaysia. (Krishnan et al., [2015](#)).

It is expected that if public hospital management intervenes in providing job characteristics with motivational and social contexts, it may enhance the motivation level of the staff of those hospitals. In exchange for this high motivation, the medical staff of public hospitals enforce a positive attitude through high work engagement, which is necessary to achieve high patient care quality. At the same time, this study's results show considerable improvement in areas of job characteristics of the medical staff of public hospitals, which need immediate attention, resulting in less frustration, lower stress and higher morale.

Work environment in the form of a physical and safe workplace is considered a significant factor that influences the level of engagement of employees (Miles, 2001). According to Deci and Ryan (1987), management who provide a supportive work environment typically concerned with employees' feelings and needs enable them to achieve their organizational goals. Poor quality results are usually worse when staff become much under work pressure. Aggression by patients, harassment and abuse by their attendants, and political pressure have been reported by respondents, which make the situation more pathetic for care providers.

Considering the important role of the work environment for employees, the management of those organizations must establish a feedback system and positive communication to improve the work environment. A safe workplace environment may increase confidence and engagement levels. The environmental conditions of public hospitals have also been reported as "Opportunities for Improvements," causing lower engagement levels of employees.

Based on Bartlett (2001), Fletcher (2007), and Lowe (2012), I have concluded that training and development opportunities positively correlate with quality of care and employee work engagement. Better outcomes may arise in the case of higher training opportunities. The more medical staff receive safety and health training, the higher patient satisfaction may be. Employees of public hospitals either receive nominal training opportunities or have no benefits in the case of self-development. Both respondents' satisfaction levels vary, which shows that compensation policies are unfair. Both respondents were almost more satisfied with senior support than senior management support for patient safety culture. The items receiving the lowest ratings are the quality of hostels and their food.

In short, the study's findings clearly identified that there are many areas to create a culture of engagement for staff to enable them to be the most caring staff for patients and the public. When staff is cared for, they can fulfill their calling of providing outstanding professional care for patients. The Ministry of Health and the Government of Pakistan have the absolute responsibility to address these issues. They must provide satisfactory pay scales to both respondents, a safe work environment, and regular training opportunities. Otherwise, no change is expected in the employees of public sector hospitals.

Limitations of study

This research study is focused on public hospitals, seeking to find the root causes of poor care quality due to Human Resource Management practices framed and implemented for healthcare staff.

While the problem of measuring productivity as a service in terms of quality care is not easy way, education, mental health recovery, child care, and other similar social services that is how well these services are produced in terms of efficiency, however, basic HR/work related activities and their relevant psychological and physical results will be considered as a sign of poor or good quality care. Therefore, there will remain a lot of unanswered questions. Because no prominent studies have been executed in Pakistan focusing on the effect of HR practices and its outcomes in healthcare context in terms of quality of care. Further limitations are as under:

- a) Senior doctors, i.e. Assistant Professors and Professors, are not included in this study as

- they usually visit wards for short time due to their teaching / academic duties.
- b) Although the perceptions of doctors and nurses across twelve public sector hospitals have been measured, the viewpoint of senior management of those hospitals is not included in this study to know the reasons for so many problems at public hospitals.
 - c) c. The results differ between occupational staff members, such as doctors and nurses, which argue that both respondents may not be treated as a homogenous group, so they both need to deal with different HR practices.
 - d) This study does not cover the viewpoint of patients of public hospitals as to which aspects they consider a practice of staff as care of high quality.
 - e) The final limitation is that although data has been collected from different public hospitals of Faisalabad and its surroundings, the findings may be different from those of Provincial and Federal Capital Hospitals, where bureaucracy has more close supervision or management control.

Future Recommendations and Suggestions

Governments should conduct employee experience surveys annually in public hospitals to improve medical staff work commitment and compare HRM practices. Similarly, patient experience surveys should be conducted to gain insights into patient care and public hospital performance.

Governments should establish a permanent board to promote engagement culture and HR practices, working with public hospital employees to improve work engagement and patient satisfaction. While public hospital conditions have improved, safety concerns and political interference persist, causing stress for medical staff. Limiting attendants to one per patient could alleviate some issues.

Reducing duty hours and addressing outstation duty concerns, especially for female staff, could motivate employees. Doctors dislike the central induction policy, which leads to strikes. Mutually solving this issue would enhance work engagement and patient care. Infrequent visits by senior doctors increase patient stays and workload. More frequent visits and improved BHU-level hospital facilities could reduce the workload on higher-level hospitals.

Social Contribution

Despite improvements, public hospitals still face HR challenges that need management's attention. This study, based on Teaching and Tehsil level hospitals, highlights these issues. Evidence shows that enhancing HR practices and establishing high-performance work systems in a safe environment can improve patient safety, patient-centered care, and employee engagement. Many recommended HR improvements are cost-free, requiring only procedural adjustments. Policymakers and healthcare managers can use these findings to boost workforce motivation and overall hospital performance.

7 References

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