Human Resource Performance in Hospital: A Bibliometric Study

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ABSTRACT

In Indonesia, medical disputes can result in criminal prosecution, despite the private nature of the relationship between patients and medical personnel. This is to safeguard the public from non-standard medical practices. Infractions of the regulations governing standard medical treatment procedures and requirements for acquiring medical personnel can result in criminal penalties. Occasionally, however, criminal penalties are not applied and a restorative justice approach is used in trials. This study seeks to examine the application of restorative justice in the resolution of medical disputes. This is a normative legal study that investigates secondary data. The research findings indicate that the implementation of restorative justice in Indonesia is already a part of the nation’s culture through the use of problem-solving discussions. Nonetheless, the essence of the justice system in Indonesia tends to be retributive, that is, it emphasizes retribution over justice. Generally, medical disputes can be avoided if the doctor-patient relationship is maintained correctly, informed consent is obtained, and standard procedures are followed. In Indonesia, medical disputes are typically resolved legally by filing reports with the Indonesian Medical Discipline Honorory Council (abbreviated MKDKI), filing civil lawsuits or pursuing compensation, and filing criminal reports. In this paper, the author argues that restorative justice is an effective method for resolving medical disputes due to its emphasis on recovery, the nature of medical disputes, which are generally not the result of deliberate actions, the nature of criminal law as an ultimatum remidium, and restorative justice’s status as a paradigm of contemporary criminal law.

INTRODUCTION

As a result of technological advancements in the present day, organizations that provide healthcare face significant obstacles in maintaining accessibility. They are also expected to develop their businesses to maximize profits and achieve success constantly. They will always face a significant and fundamental problem: how to survive in the present and prepare for future competition. In order to succeed in the industrial rivalry, organizations must be able to enhance their organization performance, be adaptable to change, and outperform all existing competition. Human resources’ involvement and performance become crucial in this regard (Krijghsheld et al., 2022; Lohana et al., 2021; Sembiring et al., 2019).

Professional human resources will enhance the quality of the given health services. Human resources are organizational assets, and their performance is one of the measures of organizational success; therefore, the field of organizational human resources must pay particular attention to them (Kanyaku, 2019; Lohana et al., 2021; Surji & Sourchi, 2020).

Related studies discovered a positive relationship between human resource management and hospital performance (Gile et al., 2018; Nafari & Rezaei, 2022). Human resource management, particularly the manager, must confidently comprehend human resource tasks such as organizing, recruiting, staff training, managing performance assessment, and evaluation (Aini, 2018). Training, for example, has a substantial impact on organizational communication. Training is essential in accomplishing organizational goals, with activity requiring employees to be more communicative and perform more effectively and efficiently (Sudarwati et al., 2022). Based on the findings of other prior studies on human resource performance, hospitals can determine what steps to take to improve their
organizational performance (Aujirapongpan et al., 2020). Based on this information, this article aims to determine the development of the research trend related to human resource performance in hospitals.

METHODS

This research utilizes the Scopus search engine to discover hospital human resource performance literature. The Scopus database will serve as the primary source for this investigation. The date of the data gathering was February 7, 2023. Scopus Analyzing Tools examined the search results by

RESULTS AND DISCUSSION

The total number of documents received from the Scopus database was 1754. This study identifies data beginning with the year of publication, the country or region that contributes to scientific publications, the subject area, the affiliation, and the source of the documents.

Figure 2 represents the publication trend in this research. The year 2021 generated the most publications, with 323 studies. The number of publications has steadily increased from 69 studies in 2012 to 323 studies in 2021, the number of publications has steadily increased. It then declined slightly in 2022, with 294 studies.

Figure 1. Research Flow.

Figure 2. The number of documents by year.
Source: Scopus database
Figure 3. The top 10 countries contributed to the research.  
*Source: Scopus database*

Several countries contributed to the publications associated with this research. According to Figure 3, the United States is the country that contributes the most publications, with 598, followed by the United Kingdom, with 274 documents. China is in third position with 141 documents.

Figure 4. The top 5 number of documents by subject area.  
*Source: Scopus database*

Medicine, with a total of 1,559 studies, has published the most study on human resource performance in hospitals, according to Figure 4. With 167 studies, biochemistry, genetics, and molecular biology is the second area with the most research.

Figure 5. The top 10 number of documents that contributed by affiliation.  
*Source: Scopus database*
Based on Figure 5, Harvard Medical School is the institution that has contributed the most to this research, with 53 studies indexed by Scopus. The University of Oxford has 42 studies, whereas all other institutions have fewer than 40.

Figure 6 shows the top ten sources related to this study. With 84 documents, BMC Health Services Research has the most publications. Then there were 58 documents in BMJ Open. Scopus must index all sources of these publications, which is a concern. Scopus has a ranking calculation that applies to Q1-Q4. The lower the last number, the higher the journal's ranking, and the stricter the article's publication requirements for the article (Subekti et al., 2022). The top six journals are ranked Q1, while the remaining four are ranked Q2. Based on this, the sources of these publications are, on average, highly reputable publishers at Scopus. It means articles about human resource performance in hospitals released at the publisher’s sources are carefully checked. The article's quality is excellent.

In this study, the minimum number of keyword occurrences in all included research publications analyzed with VOSviewer was 20. Figure 7 represents 65 keywords that can be classified into five clusters.
The colors represent the clusters. The size of the point represents the keyword's occurrence frequency. Each point is linked by a line representing both keywords in the same article. Clustering describes bibliometric grouping, while mapping is used to acquire a comprehensive network image. Each cluster and its items are described in Table 1.

Table 1 The clusters of bibliometric analysis.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Keywords</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activity, contribution, cost-effectiveness, efficiency, health service, hospital performance, key performance indicator, patient satisfaction, performance indicator, problem, productivity, progress, quality, service, strength, weakness (17 items)</td>
<td>Red</td>
</tr>
<tr>
<td>2</td>
<td>Attitude, demand, employee, human resource, intention, interaction, job, motivation, opportunity, professional, relationship, response, safety, satisfaction, support, work, workload (17 items)</td>
<td>Green</td>
</tr>
<tr>
<td>3</td>
<td>Effort, experience, framework, goal, implementation, improvement, initiative, participation, process, quality improvement, success, target, technology (13 items)</td>
<td>Blue</td>
</tr>
<tr>
<td>4</td>
<td>Communication, coordination, difficulty, focus, knowledge, lack, leadership, patient care, skill, team (10 items)</td>
<td>Yellow</td>
</tr>
<tr>
<td>5</td>
<td>Ability, best performance, facility, healthcare resource, hospital resource, priority, resource allocation, risk (8 items)</td>
<td>Purple</td>
</tr>
</tbody>
</table>

Clusters 1 and 3 have the highest occurrences and total link strength. Table 2 shows that the number of quality occurrences in cluster 1 is the highest, with 384 incidents. Then service, which also had 287 incidents from cluster 1, came next. Keywords from Cluster 3, which is process, rank third with 239 incidents.

On the other hand, VOSviewers uses the primary colors of red, green, and blue (RGB) in every visualization it makes. Density visualization is utilized to view an issue under study's density level or quantity. The redder a node is, the more research has been conducted on that topic. Conversely, the greener a node, the less research has been carried (Eck & Waltman, 2014). Figure 8 represents the Scopus mapping density for the topic of this research.

Table 2 List of top 3 keywords based on occurrences and total link strength.

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Occurrences</th>
<th>Total Link Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>384</td>
<td>1658</td>
</tr>
<tr>
<td>Service</td>
<td>287</td>
<td>1270</td>
</tr>
<tr>
<td>Process</td>
<td>239</td>
<td>1143</td>
</tr>
</tbody>
</table>

Figure 8. Mapping density. 
Source: VOSviewer

It has been discovered that density level is indicated by the number of keywords that frequently appear and are highlighted in red, such as quality and service areas. The blue color surrounding quality improvement and initiative areas indicates that many of these keywords are used. The green color surrounding intention, attitude, and workload indicates...
that the topic needs to be thoroughly researched. Then, the opportunity to study the latter topic remains plentiful.

Healthcare organizations like hospitals must continuously improve their services to enhance organizational performance. Hospitals provide services through human connection (Surji & Sourchi, 2020). Hence, human resource performance is crucial to enhancing the hospital’s offerings. In recent years, research on human resource performance has grown overwhelming due to the rapid growth of technology. This research is necessary to describe its trend.

Studies related to this research found that human resource performance could assist hospitals in achieving success. As an example, nurses, as one of the hospital’s human resources, are involved in the hospital’s primary programs for patient safety, infection control, and achieving quality. They minimized medication errors, eliminated patient falls, and increased patient mobility. This study demonstrates that nurses’ job performance significantly impacts hospitals’ ability to achieve performance excellence (El-Gazar & Zoromba, 2021). Another study indicated that human resource performance affects organizational performance by impacting abilities, motivation, and opportunity, supporting this finding (Saha, 2018).

The bibliometric analysis was used to figure out the direction of the research. This bibliometric method will determine how well research and publications work in a particular research area (Nederhof, 2006; Qiu & Lv, 2014). Therefore, this study focuses on human resource performance in hospital publications discovered in the Scopus database. This study identified 1754 documents from the specified database.

According to this study, although the trend of this research topic declined in 2022, this research trend increased in recent years. It also implies that the United States contributes the most publications. It may be reinforced that fifty percent of the top ten publication numbers supplied by affiliations were in the United States, with Harvard Medical School having the most significant number of publications. A bibliometric study supports this finding titled “Analysis of Human Resources Scorecard Research using Vosviewer” which shows a growing trend in research related to human resources over the past five years; the United States also carried the most research. Medicine is the subject area that discusses articles the most related to human resource performance in hospital. At the same time, the study shows that business management is the most common field that discusses articles related to human resources (Ferryana & Aini, 2022). It is because of the limitations of the keyword search query in this study.

VOSviewer, on the other hand, integrates the RGB primary colors in every visualization it generates. Density visualization views the density level or quantity of a topic under study. The redder a node is, the more study has been conducted on that topic. Conversely, the greener a node, the less research will be conducted on that topic (Eck & Waltman, 2014). As a result, this study demonstrates that areas such as intention, attitude, workload, hospital resource, healthcare resource, cost-effectiveness, and performance indicator still have the potential to become research topics associated with hospital human resource performance.

Quality, as the most occurrences keyword, correlates with the research topic. Quality can refer to many terms such as quality of human resource management (HRM), quality of performance, quality of healthcare services, quality of patient care, quality of the plans and organizational structures, or monitoring the quality itself (Khatri et al., 2017; Mohamed & Hameed, 2015). Those qualities connect and can strongly impact hospital performance. The role of quality has become ever more significant for organizations to compete in a global marketplace (Akdere, 2009).

HRM, for example, is a vital task in the healthcare delivery system, where the customer faces challenges because of employee’s performance who have the experience and the quality of performance. HRM plays an essential role in the success of healthcare organizations (Mohamed & Hameed, 2015). Many studies have been done in the past on the importance of HRM to achieve the goal of healthcare organizations and emphasize the importance of training and development for all levels of the employee at periodic intervals to improve the quality of healthcare services (Pillai et al., 2019). Training and development for example, are necessary efforts by an organization to improve quality and meet global competition. Previous research has proven that training and development have a positive effect on organizational performance, helping to improve quality, customer satisfaction, productivity, morale, management succession, and business development. Therefore, it is important to emphasize the implementation of routine and relevant workshops and training for human resource development (Bolarinwa, 2020). Since human resource performance is one of the measures of organizational success, the hospital’s HRM field must pay particular attention to them. Nevertheless, hospitals must first ensure the quality of HRM itself because HRM may influence organizational outcomes that range from proximal (e.g., human resource outcomes) to more distal (e.g., quality of products/services or financial performance) (Khatri et al., 2017).

There is growing interested in using human resource performance in healthcare organizations to enhance healthcare performance, particularly concerning the quality of service delivery (El-Gazar & Zoromba, 2021). Human resource performance may lead healthcare organizations to achieve performance excellence. Performance excellence is a characteristic of today’s most outstanding healthcare organizations and is requisite for providing high-quality care and services (Evans, 2017; Evans & Lindsay, 2017). The field of HRM should analyze and improve human resource performance, as well as motivate them to always complete a series of tasks and responsibilities that have been given. HRM must attach importance to managing and improving human resources in various aspects, such as training employees and creating and placing them in an appropriate work environment to affect the organization’s long-term development (Surji & Sourchi, 2020; Zhou et al., 2020). Thus, hospitals can measure human resource performance, an essential factor that can be used to determine the organization’s development.

The importance of the quality of resources to achieve goals is the reason for the emergence of the human resource performance measurement system. One of the measurement systems is the Balanced Scorecard (BSC) introduced by Kaplan and Norton in 1992, which categorized the goals of an organization into four measurable perspectives: financial, customer, internal business process, and learning and growth (Kaplan & Norton, 1992). Later, these measurements developed by Becker et al. (2001) became the Human Resources Scorecard (HRSC) approach, which focuses on processes that connect individuals with the organization strategies in the form of key performance indicators and are described in each perspective (Kanayoku, 2019; Lohana et al., 2021). The measurements can benefit hospitals with recommendations based on the results, which will help
improve the quality of human resources performance and lead to hospital performance excellence. The quality of service provided is greatly influenced by the performance of human resources. For example, the quality of effective communication with patients has a positive relationship with their trust and satisfaction, and directly or indirectly can be a benchmark of the quality of healthcare services provided (Birkhäuser et al., 2017; Chandra et al., 2018). The quality of service will ultimately affect the performance of the organization, as shown by studies conducted by Abd-Elrahman et al. (2020) and Ojo (2021), both of which indicate that service quality has a significant and positive relationship with organizational performance.

Another example related to the keyword "quality" is the quality of information systems. Information system is a combination of work procedures, people, and information technology organized to achieve goals in an organization (Kadir, 2014). Research suggests that information systems have a significant and positive relationship with employee performance (Sukmawan & Wahdiniwaty, 2020). A good system in an organization will produce good information. An easily accessible and easy-to-learn system will produce good quality information. It is important for organizations to pay attention to the quality of the system in order to improve the quality of the information produced, which can ultimately improve the overall performance of the organization (Al-Mamary et al., 2014).

Based on the explanation above, keyword quality strongly correlates to human resource performance in hospital. Keywords of each cluster are also described, such as health service, key performance indicator (cluster 1); employee, human resource (cluster 2); experience, improvement (cluster 3); and patient care (cluster 4). This study about human resource performance in hospital must be updated to maintain the sustainability of healthcare organizations or industries during rapid global changes and modern technological development to remain accessible and generate the highest potential profit.

CONCLUSIONS AND SUGGESTIONS

This study shows that 2021 had the highest number of Scopus-indexed human resource performance in hospital research publications. The United States contributed the most to the publication of this research, with Harvard Medical School standing as an affiliation. Moreover, BMC Health Services Research is the leading source of publications, and medicine is where the most research was published.

In addition, an analysis with VOSviewers reveals that five clusters contain networks based on keywords, with quality and service having the highest frequency and total link strength. Furthermore, topics such as intention, attitude, workload, hospital resource, healthcare resource, cost-effectiveness, and performance indicator offer much room for further research.

This study has limited data sources; the only source is the Scopus database, and keywords are restricted. Even though Scopus indexes more journals than Pubmed, Web of Science, or Google Scholar, it only covers some available sources (Falagas et al., 2008; Iqbal et al., 2022). Therefore, suggestions for more research must combine these databases, yielding more interesting and valuable findings.

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Conflict of Interest

The authors declare no conflicts of interest in this study.

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