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Staffing Strategies in Laboratory Environments: An Overview

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ABSTRACT
This study aims to determine the impact of staffing model in laboratory environment and specific factors/method were adopted, which includes investigating the factors affecting staffing needs, methods for determining staffing levels, benefits of a well-defined staffing model, challenges of determining staffing needs in a lab shortage,strategies for managing staffing in a lab shortage, benefits of a well-defined staffing model, challenges of determining staffing needs in a lab shortage, strategies for managing staffing in a lab shortage. It was found that workload analysis, Staffing Ratios, Benchmarking, Forecasting are variousmethods of staffing models in the laboratory environment and in conclusion, staffing model in laboratory environment is totally the job of the human resource department which requires careful consideration of various factors/methods.

Keywords: Staffing model, factors affecting, methods, challenges involve

I. INTRODUCTION

Due to the globalization movement, the competition to provide quality and low-cost products has been increasing day by day (Carnevale&Hatak, 2020). In this situation, the human resource department has to plan to provide quality staffing to compete in the market. The staffing process must be sufficient to ensure the healthy operation of the organization. Otherwise, the stated goals and objectives cannot be accomplished on time. Human resource planning is one of the crucial aspects of human resource management because it helps to ensure the needed manpower for organizational goals (Haque, Hazra& Roy, 2016). One of the popular tools used by organizations is staffing strategy which involves recruitment strategy, selection strategy, and placement strategy (Heneman, and Judge, 2014; Sultan, 2015; Aljader and Sayhud, 2017). Staffing decisions that are not based on strategic plans have adverse effects in the long term, such as high training costs, high turnover, and low quality of service, which in turn will reflect on employee morale and hinder the competitiveness of the organization (Richardson,2012). Recruitment, selection, and placement strategies are considered the most important aspects of a company's global resourcing strategies to identify and protect the people needed for the company to survive and thrive (Daniel et al., 2014). Organizational excellence depends on adopting and using a programmed staffing strategy, starting from the recruitment and placement of qualified people in order to induce them to achieve company goals. In (Hashemya et al., 2016), organizational excellence is seen as growth and improvement in all aspects of the organization, taking into account the balance between all the beneficiaries' needs and expectations, while respecting the highest levels of their satisfaction.Consequently, the purpose of the current study is to determine the impact of staffing strategy in terms of recruitment, selection, and placement in achieving organizational excellence in the private companies that received the King Abdullah II Award for Excellence during the periods 2014-2015 and 2016-2017 in Jordan.

STAFFING MODELS IN LABORATORY ENVIRONMENT

The human resource staffing model in a laboratory environment is aimed at determining the number and types of personnel needed to perform various tasks efficiently and effectively, which involves analyzing workload, defining roles, and ensuring adequate resources to meet the laboratory's goals.

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STAFFING

Staffing is the process of acquiring, deploying, and retaining a workforce of sufficient quantity and quality to create positive impacts on the organization's effectiveness (Heneman and Judge, 2006).

FACTORS AFFECTING STAFFING NEEDS

There are several key factors that management must take into account when determining the number of staff needed in a laboratory. These factors can vary depending on the size and type of the lab, as well as the volume and complexity of the tests being conducted. Some of the main factors include:

Workload Analysis:

This involves assessing the volume and complexity of tests and procedures performed, as well as the time required for each task.

Technology and Automation

The level of technology and automation in the laboratory can also impact staffing needs. A lab that has modern equipment and automated processes may require fewer staff to perform tests, as much of the work can be done by machines. On the other hand, a lab that relies on manual processes may need more staff to handle the workload.

Regulatory Requirements

Regulatory requirements play a significant role in determining staffing needs in a laboratory. Compliance with Regulations that may require staff to perform specific tasks and maintain accurate records. Failure to meet these requirements can result in fines or loss of accreditation, so management must ensure that they have enough staff to meet regulatory standards.

Skill Mix:

Ensuring that the staff possesses the necessary skills and expertise to perform their duties, including training and certification requirements.

METHODS FOR DETERMINING STAFFING LEVELS

There are several methods that management can use to determine the optimal staffing levels in a laboratory setting. Some of the most common methods include:

Workload Analysis

A workload analysis involves analyzing the volume and complexity of tests being conducted in the lab to determine the number of staff needed to handle the workload. This method takes into account factors such as test volume, test complexity, and turnaround time requirements to calculate the optimal number of staff needed.

Staffing Ratios

Another common method for determining staffing levels is to use staffing ratios, which are predetermined ratios of staff to tests or patients. For example, a lab may use a staffing ratio of one technologist per 100 tests per day. These ratios can be adjusted based on the specific needs of the lab and the type of tests being conducted.

Benchmarking

Benchmarking involves comparing staffing levels and practices with other similar labs to determine best practices and identify areas for improvement. Management can use benchmarking data to assess their current staffing levels and make adjustments as needed to improve efficiency and productivity.

Forecasting

Forecasting involves predicting future workload and staffing needs based on trends and projections. By analyzing historical data and predicting future demand, management can ensure that they have the right number of staff in place to meet future needs and avoid understaffing

BENEFITS OF A WELL-DEFINED STAFFING MODEL:

Improved efficiency and productivity:

By optimizing staffing levels, the laboratory can perform tests and procedures more efficiently.

Reduced costs:

By minimizing unnecessary staff, the laboratory can reduce labor costs.

Enhanced patient care:

Proper staffing ensures that tests and procedures are performed accurately and timely, leading to better patient outcomes.

Improved staff morale:

A well-designed staffing model can help to reduce workload stress and improve job satisfaction.

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CHALLENGES OF DETERMINING STAFFING NEEDS IN A LAB SHORTAGE

Managing staffing levels in a laboratory shortage situation can be particularly challenging due to a number of factors. Some of the main challenges include:

Competition for Talent

With the ongoing shortage of laboratory professionals, competition for talent is fierce. Many labs are vying for the same pool of qualified candidates, making it difficult for management to recruit and retain staff. This can lead to understaffing and increased workloads for existing employees.

Budget Constraints

Budget constraints can also impact staffing decisions in a lab shortage situation. Hiring new staff or increasing existing staff may require additional funding, which may not be feasible for labs operating on limited budgets. This can result in understaffing and decreased efficiency in the lab.

Increased Workloads

In a lab shortage situation, existing staff may be required to take on additional responsibilities and work longer hours to compensate for the lack of staff. This can lead to burnout, decreased morale, and decreased quality of work. Management must balance the need for efficiency with the well-being of their staff.

Regulatory Compliance

Ensuring regulatory compliance is essential in a laboratory setting, but can be difficult when facing a Staff Shortage. Without enough qualified staff to perform required tasks and maintain accurate records, labs may struggle to meet regulatory standards and risk losing accreditation. Management must find ways to ensure compliance while operating with limited staff.

STRATEGIES FOR MANAGING STAFFING IN A LAB SHORTAGE

To address the challenges of managing staffing levels in a lab shortage situation, management can implement a variety of strategies to optimize efficiency and productivity. Some of the key strategies include:

Cross-Training

Cross-training staff to perform multiple tasks and handle different types of tests can help alleviate the burden of a staffing shortage. By having staff with a diverse skill set, labs can ensure that tests are completed in a timely manner and maintain Quality Standards even with limited staff.

Flexible Scheduling

Implementing flexible scheduling options, such as part-time or on-call positions, can help labs better manage fluctuations in workload and staff availability. By adjusting schedules based on demand, management can optimize staffing levels and ensure that tests are completed efficiently.

Investing in Automation

Investing in automation and technology can help labs improve efficiency and reduce the need for additional staff. Automated processes can streamline Workflow, increase throughput, and free up staff to focus on more complex tasks. While the initial investment may be costly, the long-term benefits can outweigh the upfront expenses.

Outsourcing

Outsourcing certain tests or tasks to external labs or vendors can help alleviate staffing shortages and ensure that tests are completed in a timely manner. By partnering with trusted third parties, labs can expand their capacity and access specialized expertise without hiring additional staff.

Employee Engagement

Engaging and empowering existing staff can help boost morale and retain employees during a staffing shortage. Providing opportunities for professional development, recognizing achievements, and soliciting feedback can inspire loyalty and commitment from staff, reducing turnover and maintaining productivity.

II. CONCLUSION

In conclusion, staffing model in laboratory environment is totally the job of the human resource department which requires careful consideration of various factors such as workload, skill mix, technology, and regulatory requirements. By using methods such as workload analysis, staffing ratios, benchmarking, and forecasting, management can determine the optimal number of staff needed to maintain efficiency and productivity. Despite the challenges of a lab shortage, implementing strategies such as cross-training, flexible scheduling, investing in automation, outsourcing, and employee engagement can help labs overcome staffing shortages and continue to deliver high-quality results.

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