

Research Article

Effectiveness of Induction Training on Newly Joined Employee Knowledge and Hospital Performance

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ABSTRACT

Introduction: Every organization needs well-trained employees to perform job activities effectively and efficiently. Training and development is a continuous process that helps to develop skills, knowledge, and abilities in its workers, which leads to better performance of employees. This study aims to assess the effectiveness of an induction training program for hospital employees as well as the impact on employee knowledge and performance in the clinical field according to quality indicator benchmarks. **Methods:** A sample of individuals ($N = 775$) who were newly hired, promoted, or re-categorized at our institution in 2021 were included in the program. The effectiveness of the induction training program was assessed with a pre- and post-test and feedback form. Topics covered in the training program will help employees know about the institute and increase knowledge and skills. **Results:** The average pre-test score was 60%, which increased to 84% after the training ($p = 0.0001$). There was a significantly positive relationship between the quality indicators and the clinical audit results ($p = 0.006$). **Conclusion:** The induction training program effectively improved the employees' knowledge regarding their rights and responsibilities as well as clinical knowledge (i.e., Infection control and prevention, quality, disaster management, biomedical waste management, and facility safety).

Keywords: induction training, new employee orientation, employee knowledge, clinical quality benchmarks

INTRODUCTION

Training and development is a continuous process for any organization and its employees. Employees are important assets for any organization because they can build or destroy the image of any organization. An organization's first impressions are to shape an individual's image for the organization throughout their employment. Thus, it is important that new employees quickly feel like they belong and are valued members of the organization^[1].

The process of integration of new employees into an organization helps them adapt to the work environment and their jobs. Orientation is a training opportunity to promote organizational effectiveness from the start of a person's employment.^[2] Training helps to improve the knowledge and skills of employees, and development enhances the behaviors and attitudes of the individual employee. Thus, training and development is the

process of improving the knowledge and skills of each employee.^[3–5]

Induction is defined as the introduction of new employees, transferring staff, re-categorizing and promoting staff to the organization, and newly joining the staff in their work units and their jobs. Employees receive an induction from co-workers from the organization in which new employees learn how to function efficiently within a new organizational culture by obtaining the information, values, and behavioral skills associated with their new role in the organization.^[6, 7]

The main objective of this study was to analyze the effectiveness of the Induction Training Program for newly Joined Staff at U N Mehta Institute of Cardiology & Research Centre (UNMICRC) (emergency-related tertiary cardiac care super specialty teaching hospital), including the impact of induction training on employee knowledge and employee performance in the clinical field according to a quality indicator benchmark.

Table 1. Induction training program schedule (~13 hours over 2 days)

Training Day	Activity or Topic	Time Required
1	Pre Exam	20 min
1	Introduction of UNMICRC	1 h
1	Soft Skills, Patient Rights, and Education	1 h
1	Human Resource Management	1 h
1	Infection Prevention and Control	1 h
1	Emergency Preparedness and Disaster Management	1 h
1	Ergonomics at Workplace and Dietary Habits	1 h
2	Quality Management (NABH, MCI, JCI, Kayakalp)	1 h
2	Basic Life Support and Patient Care	1 h
2	Biomedical Waste Management	1 h
2	Facility Management and Safety	1 h
2	Hospital Round (New Building + Old Building)	1 h
2	Reading Time	0.5 h
2	Post Exam and Feedback Form	1 h

UNMICRC: U N Mehta Institute of Cardiology & Research Centre; NABH: National Accreditation Board for Hospitals; MCI: Medical Council of India; JCI: Joint Commission International.

METHODS

This study was observational and qualitative in nature and was exempt from institutional ethics committee approval.

Our institution is one of the biggest single super-specialty cardiac teaching hospitals in the world. Over a period of 2 days in 2021, an induction training program was given to 775 staff including new hires, transfers, and recategorized/promoted employees (Table 1). The program required proper planning and execution to cover the history, vision, and mission of the organization, as well as structure, fringe benefits, rules, and regulations.^[8]

The effectiveness of the training program was checked with a pre- and post-test and feedback forms (self-developed), which were distributed to all staff members enrolled in the program ($N = 775$). In addition, an evaluation was done with quality indicator audits in the clinical field according to several quality indicators as benchmarks.

Statistical analysis was performed using SPSS, version 26.0 (Chicago, IL, USA). The paired sample t test and ANOVA test were used to compare continuous variables. Data were presented as number percentage. The p-value less than 0.05 was considered to be significant. Person Correlation and was used to measure the relationship between primary and secondary variables.

RESULTS

Table 2 shows pre- and post-test results of the induction training. Each area of knowledge increased after the training. The average score on the pre-test was 60%, which increased to 84% after the training ($p = 0.0001$).

Working in hospital environment, employees must know how to communicate with patients as well as with

Table 2. Participant pre- and post-test scores ($N = 775$)

Name of Section	Average Pre-Test %	Average Post-Test %
Introduction of UNMICRC	72	86
Human Resource Management	72	83
Soft Skills, Patient Rights, and Education	67	72
Quality Management (NABH, MCI, JCI, KayaKalp)	47	79
Facility Management and Safety	39	84
Biomedical Waste Management	54	93
Infection Prevention and Control	73	87
Emergency Preparedness and Disaster Management	76	88
Basic Life Support and Patient Care	65	91
Hospital Round	47	77
Ergonomics at Workplace and Dietary Habits	53	81
TOTAL SCORE	60	84*

*Statistically significant difference compared to pre-test score ($p = 0.0001$).

UNMICRC: U N Mehta Institute of Cardiology & Research Centre; NABH: National Accreditation Board for Hospitals, MCI: Medical Council of India, JCI: Joint Commission International.

colleagues and leadership. Skills in communication and patient handling was 67% on the pre-test and increased to 72% after the training. Knowledge regarding NABH was 47%, and after training it increased up to 79%.

Biomedical waste handling is essential part of the infection prevention and control. Employee knowledge of biomedical waste management improved from 54% to 93%, and infection prevention and control knowledge improved from 73% to 87%. Knowledge regarding safety in the hospital increased from 39% to 84%.

Employees must know how to handle and manage patients in an emergency situation or pandemic. Knowledge regarding disaster management was 76% on the pre-test and 88% on the post-test. Knowledge of Basic Life Support was 65% before training and 91% after training.

Hospital employees should also know about a comfortable work environment and dietary habits. For this topic, pre-test knowledge was 53% and post-test was 81%. Pre-test scores about hospital infrastructure before the training was 47%, which increased to 77% afterwards.

Figure 1 indicates the feedback from staff after the induction training program. Most employees agreed that the objectives for the training were clearly defined, participation and interaction were encouraged, the content was organized and easy to follow, and the experience was useful. The specific lectures were also well received according to the feedback.

Table 3 shows the clinical audit results for 2021 compared with benchmarks for quality indicators. All audit results were at or below the benchmark with one exception (mock drills), which indicates that staff understand the institute's policies and are capable of maintaining quality clinical practices. The correlation between quality benchmarks and clinical audit results was statistically significant ($p = 0.006$).

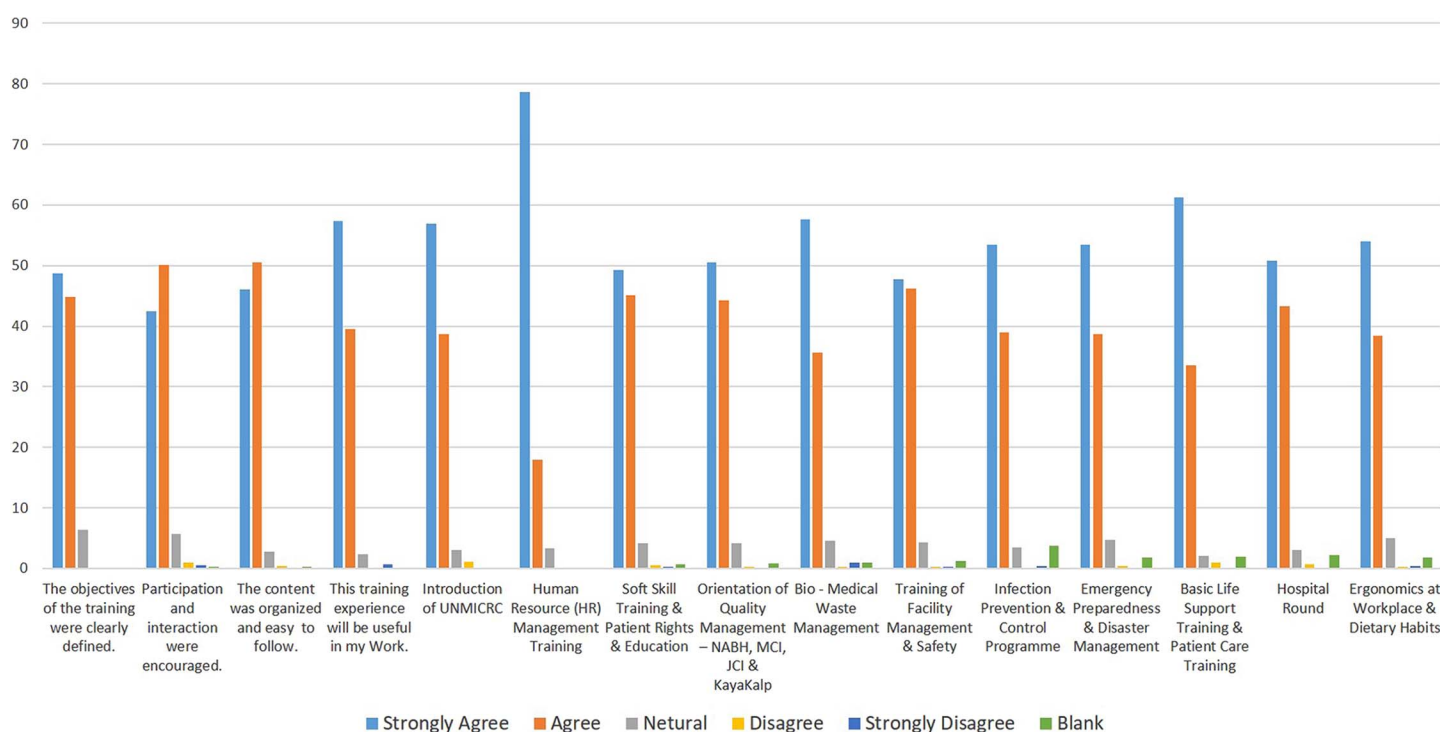


Figure 1. Induction training feedback ($N = 775$). Values are percentages of responses to each survey item.

DISCUSSION

As part of a changing health service system, health workers need to keep up with the evolving health needs, policies, technologies, and knowledge^[9]. Training and development of employees can lead to many benefits for both individuals and the organization. This study examined the impact of training and development on employees knowledge and performance.

Most organizations offer an employee orientation training program coordinated by the human resource department^[10]. Organizations must develop a formal training program and policy for all employees regardless of whether they are new to the organization or changing positions. In this study, we included a wide

variety of topics in the induction training program, such as the introduction of the organization, human resource department policies, clinical quality indicators, bio-medical waste management, basic life support training, and ergonomics. The same topics were also included by the Indian Ministry of Health & Family Welfare's Training Division.^[12]

A similar study by Ayana et al.^[13] reported that 53.1% of employees perceived that the induction training affected their performance' and 55.7% indicated that the training affected their job satisfaction' In our study, 96% of employees strongly agreed or agreed that the training was useful.

An induction program is part of an organization's knowledge management process and is intended to enable newcomers to become useful and integrated members of the team^[14]. An organization's responsibility is to familiarize new employees' technical and theoretical knowledge necessary to do their job efficiently or how their role fits in with the rest of the organization. Employers must educate employees regarding their roles, key result areas, and expectations in advance. This will help employees understand why they are hired and how they contribute to the success of the organization's goals.^[8]

In our institute, all staff complete our induction training program to learn about their rights and responsibilities as well as the organization's vision and mission. Employee knowledge significantly increased after attending the training lectures ($p \leq 0.001$), so we can conclude that induction training was effective.

Table 3. Clinical audit results (2021)

Quality Indicators	Benchmark	Results*
Medication error	5	1.82
Bed sore	4	1.30
Hand hygiene compliance rate (%)	80	75.67
Mock drills	10	12
Niddle stick injury	2	0.12
Employee attrition rate	2	0.75
Employee absenteeism rate	2	0.25
Biomedical waste management (%)	100	96.5
Lab safety (%)	100	98.00
Patient falls rate	1	0.08

Values are expressed as number or percentage depending on the indicator.

*Positive Pearson correlation between the quality indicators benchmark and its audited result was statistically significant ($p = 0006$).

CONCLUSION

The induction training program was effective. Overall knowledge increased significantly from 60% to 84% after the training. There was a positive relationship between clinical audit results and benchmarks for quality indicators.

References

1. Successful Orientation Programs. http://findarticles.com/p/articles/mi_m4467/is_4_54/ai_61949977/ (accessed Jan 1, 2023)
2. Barr S. Employee Orientation Programs. Jun 2011. <https://docplayer.net/7594595-Employee-orientation-programs.html> (accessed Jul 18, 2023).
3. Karim MM. The impact of training and development on employees' performance: an analysis of quantitative data. *Noble Int. J. Bus. Manage. Res.* 2019;3:25–33.
4. Fard MM. The impact of employee training and development on employee productivity. *Glob. J. Commerce Manage.* 2013;2:91–93.
5. Ismael NB, Othman BJ, Gardi B, Hamza PA. The Role of Training and Development on Organizational Effectiveness. *Int. J. Eng. Bus. Manage.* 2021;5:15–24.
6. Mabaso CM. The effectiveness of an induction programme for newly appointed staff at Coastal KZN FET College (Masters thesis). Durban University of Technology, Apr 2012. https://www.academia.edu/48083865/The_effectiveness_of_an_induction_programme_for_newly_appointed_staff_at_Coastal_KZN_FE (accessed Jul 18, 2023)
7. Karade M, Gankar S, Sam S. Impact of Induction Training on New Joiners: a Perception Analysis with respect to Age and Gender. (Special Issue). *J. Indian Manage. Res. Pract.* 2015;196–201.
8. Mchete T, Shayo F. The role of induction training on performance of new employees at workplace: Case study of the open university of Tanzania. *Int. J. Bus. Manage. Econ. Rev.* 2020;3:285–300.
9. Frenk J, Chen L, Bhutta ZA, Cohen J, Crisp N, Evans T, Zurayk H. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet.* 2010;376:1923–1958.
10. Sarma AM. *Performance Management System*. Himalaya Publishing House Pvt. Ltd., 2022.
11. Mugo WE, Guyo W. Training approaches and employee performance in state corporations in Kenya: A case study of the Kenya Revenue Authority. *Int. J. Econ. Commerce Manage.* 2018;6:649–673.
12. Induction Training Program for Nurses. Government of India; Ministry of Health & Family Welfare; Training Division, 2018.
13. Ayana SS, Alaro T, Gebissa F. Induction and Orientation Practices and Perceived Effect On Health Work Force Performance and Satisfaction in Public Hospitals of Ilubabour Zone, Oromia Regional State, South West Ethiopia, 2018: Facility Based Cross Sectional Study Design Was Employed. medRxiv, 2020.
14. Shilpashree CR, Chaudhary A, Mamatha HK. Role of Employees' Induction Program and Its Effectiveness in Smoother Integration of New Employees in Health Care Setup. *Psychol. Edu.* 2021;58:3596–3601.