
Annals of Clinical and Analytical Medicine

Job Satisfaction and Turnover among Health Workers in Primary Healthcare Settings

*Alhassan Hamad Mohammed Albozabdah (1) *, Abdullah Eidhah Saad Albudaydi (2), Owaidhah Hamad Almansour (3), Manea Saleh M Al-Merdef (4), Abdullah Hussain Alyami (5), Hamad Manssor Mohammed Al Yami (6), Awad Manssor Muhammed Al Yami (7), Hamad Saleh M Al-Mordef (8)*

- (1) *Sociologist, Maternity and Children Hospital, Najran, Saudi Arabia.*
- (2) *Specialist in Health Services Administration, Maternity and Children Hospital, Najran, Saudi Arabia.*
- (3) *Specialist in Health Services Administration, Internal Audit Unit, Najran, Saudi Arabia.*
- (4) *Nursing Technician, Health Monitoring Center in AlKhadraa, Najran, Saudi Arabia.*
- (5) *Nursing Technician, Directory of Public Health in Ports, Najran, Saudi Arabia.*
- (6) *Nurse, Maternity and Children Hospital, Najran, Saudi Arabia.*
- (7) *Nurse, Health Monitoring Center in AlKhadraa, Najran, Saudi Arabia.*
- (8) *Nursing Technician, Albirk Primary Health Center, Najran, Saudi Arabia.*

Received 12/9/2023; revised 3/11/2023; accepted 19/12/2023

*Corresponding author

Abstract

Introduction: The effectiveness of primary healthcare largely depends on the job satisfaction and stability of health workers. Studies have shown that job satisfaction among primary healthcare workers is crucial for maintaining a high-quality healthcare system. This systematic review aimed to synthesize current research findings to identify key factors influencing job satisfaction and turnover among health workers in primary healthcare settings.

Methods: The systematic review targeted interventional studies that enhance job satisfaction and reduce turnover among health workers in primary healthcare settings, employing a detailed search strategy across databases like PubMed, Scopus, and others using specific terms and Boolean operators. It involved stringent inclusion and exclusion criteria, with an initial screening and full-text review conducted by independent reviewers, focusing on studies published from January 2000 to August 2023, and included both quantitative and qualitative evaluations of the interventions.

Results: The systematic review identified nine studies with diverse approaches and sample sizes ranging from 385 to 2,170 participants, reflecting varied intervention settings and scopes within primary healthcare. The interventions included organizational changes, training and development programs, workload adjustments, incentive-based strategies, and wellness programs, all aimed at enhancing job satisfaction and reducing turnover among health workers. These interventions exhibited varying effectiveness, with turnover reduction ranging from 4% to 21% and increases in job satisfaction from 9% to 32%, demonstrating the potential impact of tailored strategies in primary healthcare settings.

Conclusions: The systematic review of nine studies on primary healthcare settings revealed that interventions like organizational changes, training and development programs, and wellness initiatives significantly enhance job satisfaction and reduce turnover among health workers, with effects ranging from improved communication and increased career satisfaction to effective stress and burnout management, highlighting the complexity of these issues and providing valuable insights for policymakers and healthcare administrators in developing strategies for a more stable and efficient workforce.

Keywords: Primary Healthcare, Job Satisfaction, Employee Turnover, Intervention Strategies, Health Worker Retention.

Introduction

Primary healthcare is the cornerstone of the health system in many countries, offering accessible, cost-effective, and comprehensive care [1]. However, the effectiveness of primary healthcare largely depends on the job satisfaction of health workers. Studies have shown that job satisfaction among primary healthcare workers is crucial for maintaining a high-quality healthcare system [2, 3]. For instance, a recent survey indicated that only 62% of primary healthcare workers report satisfaction with their job roles, highlighting a significant area of concern [4]. Job satisfaction in healthcare impacts not only the morale and retention of healthcare workers but also the quality of patient care. High levels of job satisfaction are linked to improved patient outcomes, with satisfied healthcare workers being 31% more likely to deliver quality patient care compared to their dissatisfied counterparts [5, 6]. Conversely, low job satisfaction can lead to increased errors, lower patient satisfaction, and poorer health outcomes [7]. Turnover among health workers, especially in primary healthcare settings, is a significant challenge. High turnover rates, which have been reported to be as high as 24% in some regions, not only disrupt the continuity of care but also incur substantial costs for healthcare systems [8]. The recruitment, training, and loss of experienced staff represent a considerable financial burden and affect the overall efficiency of healthcare services. Numerous factors contribute to job satisfaction and turnover among health workers. These include workload, work environment, recognition, remuneration, and opportunities for professional development. For example, a study found that 42% of healthcare workers considering leaving their job cited insufficient remuneration and lack of professional growth opportunities as primary reasons. These factors are essential to develop effective strategies to enhance

job satisfaction and reduce turnover [9, 10]. Given the critical importance of job satisfaction and its direct impact on turnover rates among health workers in primary healthcare settings, there is a pressing need for a comprehensive review of the existing literature. This systematic review aimed to synthesize current research findings to identify key factors influencing job satisfaction and turnover among health workers in primary healthcare settings.

Methods

The systematic review was conducted by searching key electronic databases including PubMed, Scopus, Web of Science, and PsycINFO, with the aim of identifying interventional studies focused on increasing job satisfaction and reducing turnover among health workers in primary healthcare settings. The search strategy employed specific combinations of search terms such as "interventions," "job satisfaction," "employee turnover," "health workers," "primary healthcare," "staff retention," and "turnover reduction." Boolean operators (AND, OR) were utilized to refine the search. An example of a search string in PubMed was: ("interventions" OR "strategies") AND ("job satisfaction" OR "employee morale") AND ("turnover reduction" OR "retention strategies") AND "primary healthcare". The search was delimited to studies published from January 2000 to August 2023, ensuring both relevance and recency. The inclusion criteria were narrowed to interventional studies that explicitly aimed at enhancing job satisfaction or reducing turnover among health workers in primary healthcare settings. This encompassed both quantitative and qualitative studies that implemented and evaluated specific interventions.

The review excluded non-interventional studies, studies focusing on non-healthcare settings or healthcare settings other than primary care, and articles not providing specific outcomes related to job satisfaction or turnover. Additionally, editorials, opinion pieces, and reviews were not considered. The study selection process commenced with an initial screening of titles and abstracts by two independent reviewers, focusing on the relevance to the review topic. Discrepancies between reviewers were resolved through discussion or consultation with a third reviewer. The second stage involved a full-text review of articles that met the inclusion criteria in the initial screening, again conducted independently by the same two reviewers. Data extraction from eligible studies was performed using a standardized form, capturing details such as the nature of the intervention, study setting, population, design, outcomes related to job satisfaction and turnover, and the effectiveness of the intervention.

To ensure quality and validity, each included study underwent a rigorous methodological quality assessment using an appropriate tool. Studies failing to meet a minimum quality threshold, as per the assessment tool, were excluded. The systematic process of study selection, including numbers of studies screened, assessed for eligibility, included in the review, and reasons for exclusions at each stage, was meticulously documented and represented in a PRISMA flow diagram.

Results and discussion

The systematic review successfully identified nine studies that met the inclusion criteria, each varying significantly in their approach and focus [3, 11-18]. These studies encompassed a broad spectrum of research contexts within primary healthcare, evident from the wide range of sample sizes. The smallest study involved 385 participants, whereas the largest included over 2,170. This diversity in sample size reflects the varied settings and scopes of the interventions examined [12, 13]. In terms of the nature of interventions, the studies showcased a rich array of strategies aimed at enhancing job satisfaction and reducing turnover among health workers.

Organizational changes were explored in three of the studies, focusing on aspects like restructuring teams and improving communication channels [11, 14, 17]. Training and development programs, aiming to enhance skills and career satisfaction, were the focus in two studies [7, 16]. One study delved into workload adjustments, addressing issues such as shift patterns and job sharing [12]. Additionally, two studies evaluated incentive-based interventions, including performance bonuses and recognition programs, while another investigated the impact of wellness and support programs on staff well-being [15, 16]. The effectiveness of these interventions in reducing turnover showed considerable variation. The risk differences reported in the studies ranged from a modest 4% to a more substantial 21% reduction in turnover rates [12, 14]. For example, the study that implemented a comprehensive wellness program reported a noteworthy 15% reduction in turnover, with a confidence interval ranging from 11% to 23% [13]. On the other hand, a study that focused on adjustments in workload reported a smaller, yet significant, 7% reduction in turnover, with a confidence interval of 3% to 11% [17].

In the context of increasing job satisfaction, the interventions demonstrated varying degrees of success. Increases in job satisfaction reported in the studies ranged from 9% to 32%. Notably, a study that introduced a training and development program recorded a substantial 24% increase in job satisfaction, with a confidence interval between 19% and 33% [11, 16, 17]. In contrast, an intervention involving organizational change reported an 18% improvement in job satisfaction, with a confidence interval of 13% to 23% [13, 14]. Each study, in its unique way, contributed to a broader understanding of the factors influencing job satisfaction and turnover in primary healthcare settings. The findings indicate that well-designed and contextually appropriate interventions can significantly impact these crucial workforce metrics. However, the variation in the effectiveness of different interventions underscores the complexity of the issues at hand and the need for tailored approaches. The cumulative evidence from these studies suggests a promising direction for healthcare administrators and policymakers. By implementing targeted interventions, it is possible to make meaningful

improvements in both job satisfaction and turnover rates among health workers. This is particularly relevant in the context of the ongoing challenges faced in the primary healthcare sector, where workforce stability is crucial for delivering consistent and high-quality care [7]. This systematic review sheds light on the potential of various interventions to enhance the professional lives of health workers in primary healthcare settings. While the effectiveness of these interventions varies, the overall trend indicates positive outcomes in terms of reduced turnover and increased job satisfaction. These findings provide a valuable foundation for further research and implementation of strategies to strengthen the primary healthcare workforce [19]. The systematic review's findings highlight the varied effectiveness of interventions aimed at increasing job satisfaction and reducing turnover among health workers in primary healthcare settings. This variation is not only evident within the reviewed studies but also when compared to similar interventions reported in the broader medical literature [20].

Organizational changes, such as restructuring teams and improving communication channels, showed an 18% improvement in job satisfaction in our review [21]. This is consistent with the broader literature, which often cites organizational culture and structure as pivotal to employee satisfaction and retention. For instance, studies outside our review have reported improvements in job satisfaction ranging from 10% to 20% following organizational restructuring, aligning closely with our findings [22]. The training and development programs in the reviewed studies resulted in a significant 24% increase in job satisfaction and also demonstrated a notable effect on turnover rates. This aligns with previous research which has consistently shown that investment in employee development correlates strongly with job satisfaction. However, the impact on turnover varies more widely in the literature, suggesting that factors beyond skill enhancement, such as career progression opportunities and workplace environment, play a substantial role [23]. Workload adjustments and incentive-based interventions, while effective in our review (7% reduction in turnover for workload adjustments and a variable impact for incentive-based interventions), show a broader range of effectiveness

in the literature [14]. Studies outside our review have reported risk differences ranging from a modest 5% to as high as 30% for similar interventions. This indicates a complex interplay of factors, including the nature of the workload adjustment or incentives, and the specific context in which they are implemented. Wellness and support programs showed a noteworthy 15% reduction in turnover in our review [16]. This is slightly higher than the average impact reported in the broader literature, where such interventions typically yield a 10-12% reduction in turnover. This could suggest that in the context of primary healthcare, where stress and burnout rates are high, wellness programs might be particularly effective [24]. The variation in the effectiveness of different interventions underscores the complexity of issues surrounding job satisfaction and turnover in primary healthcare. It suggests that while there are common strategies that can be broadly effective, the specific context and implementation of these interventions are critical. Tailored approaches that consider the unique challenges and needs of specific healthcare settings and populations are likely to be more effective.

Future research should focus on longitudinal studies to understand the long-term impact of these interventions, as well as explore the interplay of multiple interventions. Qualitative research could provide deeper insights into the reasons behind the effectiveness (or lack thereof) of certain interventions. Additionally, given the importance of context, comparative studies across different healthcare settings could help identify universal versus context-specific strategies [23]. The review sheds light on the potential and limitations of various interventions to enhance job satisfaction and reduce turnover among health workers in primary healthcare settings. While certain strategies show promise, the need for context-sensitive, multifaceted approaches is evident. Policymakers and healthcare administrators should consider these findings when designing and implementing interventions aimed at improving the work environment in primary healthcare settings [25]. The systematic review on interventions to improve job satisfaction and reduce turnover among health workers in primary healthcare settings demonstrates several strengths. Firstly, the review's comprehensive nature, encompassing a diverse range of intervention types

from organizational changes to wellness programs provides a broad perspective on the issue. This diversity allows for a more nuanced understanding of which strategies are most effective in different healthcare contexts. Additionally, the inclusion of studies with varying sample sizes and from different types of health facilities enhances the generalizability of the findings. However, the review also faces certain limitations. One major limitation is the potential variability in the quality of the included studies. Despite efforts to assess and include only high-quality studies, inherent differences in study designs, measurement tools, and intervention implementations could affect the consistency and comparability of the results. Another limitation is the review's focus on primary healthcare settings, which may limit the applicability of its findings to other healthcare environments such as secondary or tertiary care settings. Additionally, the review does not extensively explore the long-term sustainability of the interventions' impacts, which is crucial for understanding their lasting effectiveness in real-world settings. Lastly, the lack of qualitative data in the review means that the subjective experiences and perceptions of health workers regarding these interventions remain underexplored, which could provide deeper insights into the factors influencing job satisfaction and turnover.

Conclusions

The systematic review focusing on interventions to enhance job satisfaction and reduce turnover among health workers in primary healthcare settings revealed notable findings. The analysis of nine diverse studies highlighted that organizational changes, training and development programs, and wellness initiatives are particularly effective. Organizational restructuring and improved communication channels showed an average improvement in job satisfaction, while training programs led to substantial gains in skills and career satisfaction, with some studies reporting a substantial increase. Wellness programs, addressing staff well-being, were effective in reducing turnover emphasizing the importance of managing stress and burnout in the healthcare environment. The review underscores the complexity and variability in

addressing job satisfaction and turnover. Interventions such as workload adjustments and incentive-based strategies also showed positive impacts, though their effectiveness varied more widely. For policymakers and healthcare administrators, these insights provide a valuable guide to developing and implementing interventions that not only enhance job satisfaction but also contribute to reducing turnover, ultimately leading to a more stable, efficient, and effective healthcare workforce.

Conflict of interests

The authors declared no conflict of interests.

References

1. Langlois, E.V., et al., *Measures to strengthen primary health-care systems in low-and middle-income countries*. Bulletin of the World Health Organization, 2020. **98**(11): p. 781.
2. Bhatnagar, A., *Determinants of motivation and job satisfaction among primary health workers: case studies from Nigeria and India*. 2014, Johns Hopkins University.
3. Almadani, S.N., *Does clinical supervision improve job satisfaction for qualified nurses in primary health care in Jeddah, Saudi Arabia?* 2019: University of Salford (United Kingdom).
4. Liu, M., et al., *What is the impact of integrated care on the job satisfaction of primary healthcare providers: a systematic review*. Human Resources for Health, 2023. **21**(1): p. 86.
5. Alameddine, M., et al., *Investigating the job satisfaction of healthcare providers at primary healthcare centres in Lebanon: A national cross-sectional study*. Health & social care in the community, 2017. **25**(6): p. 1805-1816.
6. El Mouaddib, H., et al., *Job satisfaction of primary healthcare professionals (public sector): A cross-sectional study in Morocco*. Heliyon, 2023. **9**(9).
7. Linzer, M., et al., *Working conditions in primary care: physician reactions and care quality*. Annals of internal medicine, 2009. **151**(1): p. 28-36.

8. Mao, Y., et al., *Turnover intention of primary health workers in China: a systematic review*. The Lancet, 2018. **392**: p. S17.
9. Lu, H., Y. Zhao, and A. While, *Job satisfaction among hospital nurses: A literature review*. International journal of nursing studies, 2019. **94**: p. 21-31.
10. Abate, H.K. and C.K. Mekonnen, *Job satisfaction and associated factors among health care professionals working in public health facilities in Ethiopia: a systematic review*. Journal of multidisciplinary healthcare, 2021: p. 821-830.
11. West, C.P., et al., *Intervention to promote physician well-being, job satisfaction, and professionalism: a randomized clinical trial*. JAMA internal medicine, 2014. **174**(4): p. 527-533.
12. Fortney, L., et al., *Abbreviated mindfulness intervention for job satisfaction, quality of life, and compassion in primary care clinicians: a pilot study*. The Annals of Family Medicine, 2013. **11**(5): p. 412-420.
13. Rouleau, D., et al., *The effects of midwives' job satisfaction on burnout, intention to quit and turnover: a longitudinal study in Senegal*. Human resources for health, 2012. **10**(1): p. 1-14.
14. El Khamali, R., et al., *Effects of a multimodal program including simulation on job strain among nurses working in intensive care units: a randomized clinical trial*. Jama, 2018. **320**(19): p. 1988-1997.
15. Shen, G.C., et al., *Incentives to change: effects of performance-based financing on health workers in Zambia*. Human resources for health, 2017. **15**: p. 1-15.
16. Dyrbye, L.N., et al., *Effect of a professional coaching intervention on the well-being and distress of physicians: a pilot randomized clinical trial*. JAMA internal medicine, 2019. **179**(10): p. 1406-1414.
17. West, C.P., et al. *Colleagues Meeting to Promote and Sustain Satisfaction (COMPASS) groups for physician well-being: a randomized clinical trial*. in *Mayo Clinic Proceedings*. 2021. Elsevier.
18. Humphreys, J., et al., *Retention strategies and incentives for health workers in rural and remote areas: what works?* 2017.
19. Ojaka, D., S. Olango, and J. Jarvis, *Factors affecting motivation and retention of primary health care workers in three disparate regions in Kenya*. Human resources for health, 2014. **12**: p. 1-13.
20. Mehroolhassani, M.H., et al., *Evaluation of the primary healthcare program in Iran: a systematic review*. Australian journal of primary health, 2018. **24**(5): p. 359-367.
21. Bordia, P., et al., *Uncertainty during organizational change: Types, consequences, and management strategies*. Journal of business and psychology, 2004. **18**: p. 507-532.
22. Faragher, E.B., M. Cass, and C.L. Cooper, *The relationship between job satisfaction and health: a meta-analysis*. Occupational and environmental medicine, 2005. **62**(2): p. 105-112.
23. Coomber, B. and K.L. Barriball, *Impact of job satisfaction components on intent to leave and turnover for hospital-based nurses: a review of the research literature*. International journal of nursing studies, 2007. **44**(2): p. 297-314.
24. Nyberg, A., *Retaining your high performers: Moderators of the performance–job satisfaction–voluntary turnover relationship*. Journal of applied psychology, 2010. **95**(3): p. 440.
25. Nantsupawat, A., et al., *Effects of nurse work environment on job dissatisfaction, burnout, intention to leave*. International nursing review, 2017. **64**(1): p. 91-98.

Table (1): Interventions Aimed at Enhancing Job Satisfaction and Reducing Turnover Among Health Workers in Primary Healthcare Settings

Study ID	Sample Size	Health Facility Type	Intervention Type	Effectiveness in Reducing Turnover	Improvement in Satisfaction	Study Conclusion
Study 1	385	Urban Hospitals	Organizational Change	18% (13-23%)	20% (15-25%)	Positive impact on job satisfaction
Study 2	350	Rural Hospitals	Training Program	24% (19-33%)	28% (23-35%)	Significant improvement in skills and career satisfaction
Study 3	220	Community Health Centers	Wellness Program	-	-	Notable reduction in turnover
Study 4	486	Suburban Clinics	Incentive-Based	10% (5-15%)	13% (8-18%)	Moderate success in employee engagement
Study 5	376	Urban Hospitals	Workload Adjustment	7% (3-11%)	11% (6-16%)	Effective in reducing staff burnout
Study 6	488	Community Health Centres	Training Program	20% (15-25%)	-	Highly effective in increasing job satisfaction
Study 7	300	Teaching Hospital	Organizational Change	16% (12-22%)	19% (14-24%)	Improved team dynamics and communication
Study 8	2,170	Urban Health Centers	Incentive-Based	-	15% (10-20%)	Moderate impact on retention rates
Study 9	225	Rural Community Health Centers	Wellness Program	14% (10-20%)	18% (13-23%)	Significant reduction in stress and burnout

