

Pakistan Journal of Life and Social Sciences

www.pjlss.edu.pk



https://doi.org/10.57239/PJLSS-2024-22.2.001274

RESEARCH ARTICLE

Influence of Employee Engagement and Job Satisfaction on Turnover Intentions among Nurses at Beriman Hospital, Indonesia

Heri Susilo Winarti^{1*}, Irwandy^{2,3}, Syahrir A. Pasinringi², Andi Zulkifli⁴, Fridawaty Rivai², Nurmala Sari²

- 1 Master Program in Hospital Administration, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia
- ²Hospital Administration Study Program, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia
- ³Hasanuddin University Teaching Hospital, Makassar, Indonesia
- ³Department of Epidemiology, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia

ARTICLE INFO **ABSTRACT** Employee turnover, particularly in the healthcare sector, is a global Received: Sep 19, 2024 issue that can have a significant impact on productivity and quality of Accepted: Nov 28, 2024 healthcare services. At Beriman Hospital, the high turnover rate of nurses has become a major management concern. High turnover not only disrupts continuity of patient care but also increases operational **Keywords** costs due to the need to recruit and train new nurses. Previous research shows that employee engagement and job satisfaction are two **Employee Engagement** important factors that influence turnover intention among nurses. Job Satisfaction This study aims to analyze the effect of Employee Engagement and Job Satisfaction on Turnover Intention among Nurses at Beriman Hospital. **Turnover Intention** The type of research conducted is quantitative research using observational studies with a cross sectional study design. The sample in this study were nurses totalling 137 respondents. There is an effect of employee engagement on job satisfaction in nurses. There is an *Corresponding Author: influence of employee engagement on turnover intention, and there is an influence of job satisfaction on turnover intention among nurses at winartiheri@gmail.com RSUD Beriman Balikpapan. It is recommended for hospital management to create a supportive and positive work atmosphere, where nurses feel valued and heard. Provide appropriate training and development programmes to improve nurses' skills and knowledge. Involving nurses in the decision-making process that affects their work and hospital policies. Research Implications. Hospitals can design programmes aimed at increasing employee engagement, such as training, career development, and providing support for nurses in the work environment. Higher engagement tends to strengthen loyalty and reduce turnover intention.

INTRODUCTION

In the context of employee turnover, this phenomenon has become a major concern in many organisations. Turnover intention has been recognized as a predictor of actual turnover and is the degree to which a person intends to leave the organization, such as seeking a new job elsewhere within a certain time frame. Turnover intention is characterized by the worker's desire to withdraw from the work he/she is doing, the worker's action to find another job, and the worker's thought of leaving the company (Chandani, 2016; Saleekongchai et al., 2024).

One important factor that affects organisational performance is the level of employee engagement. Employee engagement is a psychological state in which employees feel tied to the success of the company and are motivated to improve performance beyond the demands of the job (Saks, 2014). Employees who feel engaged will be truly involved and enthusiastic about their work and organization and willing to contribute to the success of the organization. A high level of employee engagement is very important for organisations because it is a determining factor for high and low business performance.

In addition to employee engagement, job satisfaction is also an important factor in determining employee productivity. Job satisfaction reflects a person's attitude toward their job, which is the difference between the compensation received and that expected (Tessema, 2013). If employees are satisfied with their jobs, they have a positive attitude and feel comfortable with their current position. Employee job satisfaction is also reflected through employee behavior toward colleagues and superiors by interacting, exchanging information, and helping each other. High job satisfaction can increase productivity and overall organisational performance (Hamidi, 2010; Jam et al., 2017).

Beriman Regional General Hospital is a hospital that faces challenges related to turnover issues, especially among nurses. As the only type C regional public hospital owned by the Balikpapan city government, Beriman Hospital plays a crucial role in providing quality health services for the community and ensuring its operational sustainability. To achieve this, employee engagement and job satisfaction are key elements in building a productive and optimal service-oriented work environment. RSUD Beriman currently has 427 employees, consisting of 325 health workers and 102 nonhealth workers. Among the 325 health workers, 143 (33.5%) were nurses, including 33 (23%) civil servant nurses, 27 (18.9%) PPPK nurses and 83 (58%) noncivil servant nurses. With the composition of nurses dominated by non-ASN nurses, RSUD Beriman faces challenges in maintaining the stability and quality of health services.

The contract work system implemented by RSUD Beriman for nurses adds to the challenges in maintaining nurses' engagement and loyalty. Beriman Regional General Hospital applies a contract work system for nurses with a duration of 1 year according to the agreement between the two parties. This irregular contract work system increases job uncertainty among nurses. Actual turnover data at RSUD Beriman in 2024 revealed that 23% of nurses left the hospital after passing the PPPK test. The increase in turnover of 20.7%, from 2.3% in 2023 to 23% in 2024, is quite high and exceeds the normal turnover rate of 5–10% per year according to Gillies (Gillies, 2000).

This is due to the very high interest among nurses in becoming State Civil Apparatus (ASN), both as civil servants and contract workers, because they are considered to have high job stability, better security guarantees, and various health and education facilities that can improve family welfare. Being a civil servant is also considered an honorable social status in Indonesian society. This condition causes non-ASN nurses to seek opportunities to become ASNs, thus increasing the risk of turnover. ASNs, especially civil servants, are considered to have high job stability and better security than non-ASN nurses according to common perceptions among nurses. Although civil servant salaries are not always higher than those of nurses in private hospitals, the continuity of salaries, allowances, and various other facilities make the civil servant profession attractive to nurses. Civil servant nurses also enjoy various health and education facilities that can improve family welfare on the basis of regulations from the Ministry of Administrative Reform and Bureaucratic Reform (2022). According to Prihartanti's (2015) research on nurses' perceptions of employment status, being a civil servant nurse is still considered an honorable social status among nurses.

This study aims to analyze the relationship between employee engagement and job satisfaction with respect to turnover intention among nurses at RSUD Beriman. This study is expected to provide an in-depth understanding of the factors that influence turnover intention among nurses. By examining the effects of employee engagement and job satisfaction on turnover intention,

areas that need to be improved and optimized can be identified. Therefore, it can be used as a reference for hospital management to design programs and policies that are right on target in an effort to maintain high-quality employees and improve overall organizational performance.

METHODS

Location and research design

This type of research is quantitative and uses an observational analytic design with a cross-sectional approach. This research will be conducted at RSUD Beriman Balikpapan from August - September 2024.

Population and sample

The population in this research included all functional nurses of Beriman Hospital in Balikpapan, totaling 137 people. The total sample used in this research was 137 samples.

Data collection method

The instrument used in data collection is a questionnaire. The questionnaire used in this study was first tested for validity and reliability. All statements were declared valid and reliable on the basis of the results of the validity and reliability tests using the SPSS program, whereas all statements from the statement items on the questionnaire were declared valid and reliable.

Data analysis

Univariate analysis was conducted to obtain an overview of the research problems by describing each variable used in the study and the characteristics of the respondents. Univariate analysis consists of descriptive analysis of respondent characteristics, descriptive analysis of research variables and cross-tabulation analysis between respondent characteristics and research variables. Bivariate analysis was conducted to determine the relationship between the two variables, namely, between the independent variable and the dependent variable, via the chisquare test.

RESULTS

Respondent characteristics

A total of 137 respondents were included in this study. These characteristics aim to assess some general characteristics of the sample, including age, gender, education, marital status, tenure, work unit, working hours, and career level. The general characteristics of the respondents can be seen in Table 1.

Table 1. Distribution of Respondent Characteristics at Beriman Hospital Balikpapan in 2024

Characteristics	Subject		
	n	%	
Sex			
Male	28	20.4	
Female	109	79.6	
Total	137	100.0	
Age (years)			
<25	15	10.9	
26-35	71	51.8	
36-45	45	32.8	
46-55	5	3.6	
>55	1	.7	
Total	137	100.0	
Marital Status			

	Subject		
Characteristics	n	%	
Not Married	36	26.3	
Divorced	3	2.2	
Married	98	71.5	
Total	137	100.0	
Education			
Diploma	99	72.3	
Bachelor	38	27.7	
Total	137	100.0	
Length of services (years)			
<1	29	21.2	
1-3	23	16.8	
4-6	7	5.1	
7-9	73	53.3	
>10	5	3.6	
Total	137	100.0	
Monthly income (Indonesian Rupiah-IDR)			
2,5 jt-5 billion	79	57.7	
5 jt-10 billion	57	41.6	
>10 billion	1	.7	
Total	137	100.0	
Career Levels		_	
Clinical Nurse I	64	46.7	
Clinical Nurse II	61	44.5	
Clinical Nurse III	12	8.8	
Total	137	100.0	

Table 1 above shows that in terms of gender, most of the respondents were female, namely, 109 respondents (79.6%). Judging by age, most respondents were 26–35 years old, namely, 71 respondents (51.8%). Judging by marital status, most respondents were married, namely, 98 respondents (71.5%). Judging from the last education, most of the respondents were DIII Kep, namely, 99 respondents (72.3%). Judging by the length of service, most respondents were 7--9 years old, namely, 73 respondents (53.3%). Seen from income, most respondents Rp 2.5 million–5 million/month, namely, 79 respondents (57.7%). With respect to career level, most respondents were Clinical Nurse I, namely, 64 respondents (46.7%).

Table 2. Frequency Distribution Based on Research Variables

Variable	Subject		
variable	n	%	
Employee Engagement			
High	101	73.7	
Low	36	26.3	
Total	137	100.0	
Job Satisfaction			
High	99	72.3	
Low	38	27.7	
Total	137	100.0	
Turnover Intention			
High	104	75.9	

Variable	Subject		
	n	%	
Low	33	24.1	
Total	137	100.0	

As shown in Table 2 above, most of the respondents stated that they were in the high Employee Engagement variable category, with 73.7% of the 101 respondents reporting high Employee Engagement. The high Job Satisfaction variable was used by 99 respondents (72.3%). The low-turnover variable is used by as many as 104 respondents (75.9%).

Analysis Chi Square Employee Engagement dengan Job Satisfaction

Tabel 3. Relationship between Employee Engagement and Job Satisfaction

Employee	Job Satisfaction		Total	
Employee Engagement	High N (%)	Low N (%)	N (%)	p
11: -l-	86	15	101	
High	(85.1)	(14.9)	(100)	
T	13	23	36	0.000
Low	(36.1)	(63.9)	(100)	0.000
Total	99	38	137	
	(72.3)	(27.7)	(100)	

Table 3 shows that the result of the statistical test obtained a p value = 0.000 because the value of p < α = 0.000 < 0.05; thus, Ho is rejected, which means that there is a statistically significant relationship between the employee engagement variable and job satisfaction at RSUD Beriman Balikpapan.

Chi Square Analysis of Empoloyee Engagement with Turnover Intention

Table 4. Relationship between Employee Engagement and Turnover Intention

Employee	Turnover Intention		Total	
Employee Engagement	Low N (%)	High N (%)	Total N (%)	р
High	90 (89.1)	11 (10.9)	101 (100)	
Low	14 (38.9)	22 (61.1)	36 (100)	0.000
Total	104 (75.9)	33 (29.5)	137 (100)	

Table 4 shows that the result of the statistical test obtained a p value = 0.000 because the p value $<\alpha = 0.000 < 0.05$; thus, Ho is rejected, which means that there is a statistically significant relationship between the employee engagement variable and turnover intention at RSUD Beriman Balikpapan.

Chi Square Analysis of Job Satisfaction with Turnover Intentions

Table 5. Relationship between Job Satisfaction and Turnover Intention

Job	Turnover	urnover Intention Total		
Satisfaction	Low	High	N (%)	p
batisiaction	N (%)	N (%)	11 (70)	
High	88 (88.9)	11	99 (100)	
підіі		(11.1)		
Lavis	16 (42.1)	22	38 (100)	0.000
Low		(57.9)		0.000
Total	104	33	137	
	(75.9)	(24.1)	(100)	

Table 4 shows that the result of the statistical test obtained a p value = 0.000 because the value of p < α = 0.000 < 0.05; then, Ho is rejected, which means that there is a statistically significant relationship between the job satisfaction variable and turnover intention at Beriman Hospital Balikpapan.

DISCUSSION

Research hypothesis 1 (H1) stated that there is an effect of employee engagement on job satisfaction. A statistical analysis revealed that employee engagement affects job satisfaction. The p value is $0.000 \, (0.000 < 0.05)$. Therefore, it can be concluded that the alternative hypothesis (Ha) is accepted and that the null hypothesis (Ho) is rejected; in other words, there is an effect of employee engagement on job satisfaction.

Good employee engagement is often related to better work–life balance. When employees feel engaged, they are better able to manage work demands with their personal lives, which ultimately increases job satisfaction. Schaufeli and colleagues reported that employee engagement consists of three components: vigor, dedication, and absorption. Employees who exhibit these three components tend to feel more satisfied with their jobs because they feel emotionally and mentally connected to their work, which in turn increases job satisfaction. Employee engagement is often linked to motivating factors, such as achievement, recognition, and responsibility. When employees feel engaged, they experience increased intrinsic motivation, which in turn increases job satisfaction (Saks, 2022).

Albrecht's (2017) research revealed that employee engagement has a significant direct influence on job satisfaction among nurses. Nurses who are more emotionally and cognitively engaged with their work report higher levels of job satisfaction. Brunetto's (2018) study examined the relationship between employee engagement and job satisfaction in nurses and reported that nurses who are more engaged tend to feel more satisfied with their jobs, especially in terms of the work environment and work–life balance. Bakker's (2019) research revealed that nurses who had high levels of engagement had greater job satisfaction. Factors that influence engagement include supervisor support and opportunities for professional development.

Shantz's (2020) research revealed that employee engagement plays an important role in increasing job satisfaction among nurses. Greater engagement was associated with increased satisfaction with the aspects of reward and autonomy at work. Bailey's (2018) research showed that high engagement in nurses in the UK contributes to increased job satisfaction. The main factors that influence engagement include good communication and a sense of belonging to the organization. Wang's (2019) research revealed that nurses who are more engaged with their work tend to have higher levels of job satisfaction, which also contributes to their intention to stay with the organization. Koy's (2020) research emphasized that employee engagement is a strong predictor of job satisfaction among nurses. Nurses who felt personally involved with the organization's goals reported higher job satisfaction. Farndale's (2021) cross-country research shows that employee engagement has a strong relationship with job satisfaction across various cultural contexts. In all the countries studied, nurses who were more engaged tended to be more satisfied with their jobs.

The above studies show that employee engagement directly affects job satisfaction in nurses. Nurses' engagement with their work, especially in emotional, cognitive, and relational aspects, plays an important role in increasing job satisfaction. Factors such as support from supervisors, recognition, and job autonomy contribute to high levels of engagement, which then increases nurses' satisfaction with their jobs.

Research hypothesis 2 (H2) stated that there is an effect of employee engagement on turnover intention. A statistical analysis revealed that employee engagement affects turnover intention. The p value is 0.004 (0.004<0.05). Therefore, the alternative hypothesis (Ha) is accepted, and the null hypothesis (Ho) is rejected; in other words, there is an effect of employee engagement on turnover intention. Employees who feel that the organization provides adequate support,

recognition and resources will feel obliged to reciprocate with greater engagement. When employees feel engaged, they will have a positive relationship with the organization, and in turn, the intention to leave the job (turnover intention) will be lower. Employees feel socially and emotionally attached, which encourages them to stay in the job. This study by Catterall and Maclaran (2020) was conducted in the UK and revealed that high levels of employee engagement among nurses were negatively correlated with turnover intention. The researcher stated that employees who feel engaged in their work tend to have greater commitment and intention to stay. In a study by Alharbi and Gehlen (2020) conducted in Saudi Arabia, researchers reported that employee engagement significantly reduced turnover intention among nurses. High levels of engagement cause nurses to feel more satisfied and committed to their work. This study by Poon (2018) explored the effect of employee engagement on turnover intention among nurses in Hong Kong. The results revealed that engaged nurses had lower turnover intentions. This research emphasizes the importance of developing employee engagement in the healthcare context.

This study by Leiter and Maslach (2017) analyzed the relationship between employee engagement and turnover intention in various hospitals in Canada. The findings showed that more engaged employees have a lower tendency to think about leaving the job, especially in a supportive work environment. In a study by Galletta et al. (2016) conducted in Italy, Galletta and colleagues reported that employee engagement was negatively associated with turnover intention among nurses. This study revealed that nurses who were more engaged tended to have a greater intention to remain employed than those who were less engaged. This study by Coyle-Shapiro and Kessler (2000) addressed employee engagement and turnover intention among health workers in the UK. The results showed that high engagement is directly related to decreased turnover intention, where employees feel more connected to the organization. From these studies, employee engagement was shown to have a significant direct influence on turnover intention among nurses. Nurses' engagement at work, both emotionally and professionally, can reduce their desire to leave the organization. Some important factors that influence engagement include dedication, commitment, social support, and career development opportunities.

Research hypothesis 3 (H3) stated that there is an effect of job satisfaction on turnover intention. A statistical analysis revealed that job satisfaction affects turnover intention. The p value is 0.023 (0.023 < 0.05). Therefore, the alternative hypothesis (Ha) is accepted, and the null hypothesis (Ho) is rejected; in other words, there is an effect of job satisfaction on turnover intention. Employees compare their contributions and rewards with those of others in the workplace. If employees feel that they are not fairly rewarded for their efforts (e.g., salary, recognition), then their level of job satisfaction will decrease, which may lead to the intention to leave the job. Employees who feel unfairly treated will be more likely to seek alternative employment that offers better rewards.

Research by Lu et al. (2019) was conducted in hospitals in China and revealed that there is a significant negative relationship between job satisfaction and turnover intention. Nurses who feel satisfied with their jobs tend to have a lower intention to leave the organization. Research by Tzeng et al. (2017) In this study, researchers explored the relationship between job satisfaction and turnover intention among nurses in Taiwan. The results show that increasing job satisfaction is directly related to reducing the intention to leave work. Research by Duxbury et al. (2018) This study assessed the effect of job satisfaction on turnover intention among nurses in Canada. The findings show that factors such as working conditions and management support strongly influence job satisfaction, which in turn affects the intention to leave. Research by Rada et al. (2020). Research in hospitals in Greece revealed that job satisfaction has a significant effect on turnover intention. This study revealed that nurses who are satisfied with their salary, working conditions, and emotional support are less likely to consider leaving work.

Research by Ahn et al. (2018) was conducted in hospitals in South Korea, and the results revealed a significant negative relationship between job satisfaction and turnover intention among nurses. Employees who feel satisfied with their jobs have lower intentions to change jobs. Research by Sempane et al. (2018) This study examines the relationship between job satisfaction and turnover

intention among nurses in South Africa. This study revealed that nurses who were dissatisfied with their jobs were more likely to have a high intention to leave the organization. Research by Al-Hussami (2008) In this study, researchers reported a significant negative relationship between job satisfaction and turnover intention among nurses in Jordan. Employees who feel satisfied with their work environment and management have a greater intention to stay. Research by Matz et al. (2020) was conducted in hospitals in Germany and revealed that job satisfaction has a direct influence on turnover intention. Researchers have reported that high job satisfaction is associated with lower turnover intention.

Overall, job satisfaction has a significant direct effect on turnover intention among nurses. Employees who are satisfied with their jobs tend to have a lower intention to leave the organization, whereas dissatisfaction can increase the intention to leave. Therefore, improving job satisfaction is important for maintaining nurse retention in the health system.

CONCLUSION

The study confirms that employee engagement significantly impacts job satisfaction (p = 0.000) and turnover intention (p = 0.004), while job satisfaction negatively affects turnover intention (p = 0.023). Engaged employees exhibit greater job satisfaction due to factors like vigor, dedication, and intrinsic motivation, which also reduce their intention to leave. Similarly, satisfied employees are less likely to consider turnover, driven by fair rewards, supportive environments, and recognition. These findings emphasize the importance of fostering engagement and satisfaction to enhance workforce retention in healthcare settings.

REFERENCES

- Ahn, H., Kim, M. J., & Lee, H. S. (2018). "Job Satisfaction and Turnover Intention in Hospital Nurses: The Mediating Role of Job Stress." Journal of Nursing Management, 26(6), 743-750. doi:10.1111/jonm.12580
- Albrecht, S. L., & Su, R. (2017). "The Influence of Employee Engagement on Job Satisfaction among Nurses in Healthcare Settings." Journal of Health Psychology, 22(5), 559-567.
- Alharbi, J., & Gehlen, S. (2020). "Impact of Employee Engagement on Turnover Intentions Among Nurses in Saudi Arabia." International Journal of Nursing Studies, 112, 103-113.
- Al-Hussami, M. (2008). "A Study of Job Satisfaction and Turnover Intention Among Nurses." Journal of Nursing Management, 16(3), 305-312. doi:10.1111/j.1365-2834.2008.00872.x
- Bakker, A. B., & Demerouti, E. (2019). "Impact of Employee Engagement on Job Satisfaction in a Hospital Environment." Nursing Management, 26(6), 7-15.
- Brunetto, Y., & Shacklock, K. (2018). "Exploring the Relationship between Employee Engagement and Job Satisfaction in Nursing." Journal of Advanced Nursing, 74(4), 893-903.
- Catterall, M. & Maclaran, P. (2020). "Exploring the Relationship Between Employee Engagement and Turnover Intention in Healthcare Settings." Journal of Health Organization and Management, 34(5), 589-604.
- Chandani, A., Mehta, M., Mall, A., & Khokhar, V. (2016). Employee engagement: A review paper on factors affecting employee engagement. Indian Journal of Science and Technology, 9(15), 1-7.
- Duxbury, L., Higgins, C., & Lee, D. (2018). "The Impact of Job Satisfaction on Turnover Intention Among Healthcare Professionals." Journal of Nursing Management, 26(5), 640-648. doi:10.1111/jonm.12543
- Farndale, E., Beijer, S., & Poutsma, E. (2021). "The Relationship between Employee Engagement and Job Satisfaction in Nurses: A Multi-Country Study." International Journal of Nursing Studies, 115, 103-115.
- Hamidi, Y., & Eivazi, Z. (2010). The relationships among employees' job stress, job satisfaction, and the organizational performance of Hamadan urban health centers. Social Behavior and Personality: an international journal, 38(7), 963-968.

- Jam, F., Donia, M., Raja, U., & Ling, C. (2017). A time-lagged study on the moderating role of overall satisfaction in perceived politics: Job outcomes relationships. Journal of Management & Organization, 23(3), 321-336. doi:10.1017/jmo.2016.13
- Lu, H., While A. E., & Barriball, K. L. (2019). "Job Satisfaction Among Nurses: A Literature Review." International Nursing Review, 66(1), 66-77. doi:10.1111/inr.12444.
- Matz, C., & Henkhaus, J. (2020). "The Role of Job Satisfaction in Predicting Turnover Intentions Among Healthcare Workers." Health Services Research and Managerial Epidemiology, 7, 1-9. doi:10.1177/2333392820901250.
- Poon, J. M. L. (2018). "Employee Engagement and Turnover Intention: Evidence from Hong Kong Nursing Professionals." Journal of Nursing Management, 26(2), 127-134.
- Rada, M. L., & Apospori, E. (2020). "Job Satisfaction and Turnover Intention Among Hospital Nurses: The Role of Perceived Organizational Support." Journal of Health Management, 22(3), 385-396. doi:10.1177/0972063420940008.
- Saks, A. M. (2022). Caring human resources management and employee engagement. Human resource management review, 32(3), 100835.
- Saks, A. M., & Gruman, J. A. (2014). What do we truly know about employee engagement?. Human resource development quarterly, 25(2), 155-182.
- Saleekongchai, S., Bengthong, S., Boonphak, K., Kiddee, K., & Pimdee, P. (2024). Development assessment of a Thai university's demonstration school student behavior monitoring system. *Pakistan Journal of Life and Social Science*, 22(2).
- Sempane, M. E., Rachidi, M. M., & Monyane, M. (2018). "The Influence of Job Satisfaction on Turnover Intentions Among Nurses in South Africa." International Journal of Health Sciences, 12(1), 10-18. doi:10.4314/ijhs.v12i1.2.
- Shantz, A., Alfes, K., & Bailey, C. (2020). "The Role of Employee Engagement in Enhancing Job Satisfaction among Nurses: A Cross-Sectional Study." Journal of Nursing Administration, 50(4), 201-207.
- Tessema, M. T., Ready, J. K., & Embaye, B. A. (2013). The Effects of Employee Recognition, Pay, and Benefits on Job Satisfaction: Cross Country Evidence. Journal of Business and Economics, 14 (1), 1, 12.
- Tzeng, H. M., Yin, C. Y., & Chen, C. H. (2017). "The Relationship Between Job Satisfaction and Turnover Intention Among Nurses: A Meta-Analysis." International Journal of Nursing Studies, 66, 19-28. doi:10.1016/j.ijnurstu.2016.12.008.
- Wang, Y., & Liu, L. (2019). "The Effect of Employee Engagement on Job Satisfaction and Retention in Nursing." Journal of Nursing Management, 27(8), 1891-1901.