Literature Review

The Role of Job Satisfaction to Reduce Nurse Turnover Intention: A Systematic Review

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ABSTRACT

Introduction: Job satisfaction is a condition in which a person feels positive about the job and its characteristics. The conditions are synonymous with satisfying, happy, and grateful. A person with high job satisfaction tends to stay longer in the organization and supports the organization. The purpose of systematic review aims to search published articles on job satisfaction among nurses.

Methods: This study applied a systematic review. Literature was searched in three databases namely PubMed, Science Direct, and Semantic Scholar with keywords "job satisfaction", "turnover intention", "intent to stay", and "nurse". Search strategies focused on the published article from January 2018 to December 2022.

Results: Fifteen (15) articles were analyzed. The finding revealed job satisfaction significantly reduced turnover intention in nurses. The role of job satisfaction in reducing turnover intention at nurses can be done directly or as a mediating factor. Job satisfaction has a fully mediating role in reducing turnover intention in nurses. Job security, self-seeking, unappreciativeness, negative state of mind, relational coordination, workload, burnout, and work environment are variables that mediated job satisfaction. Meanwhile, job burnout, job organizational, affective and normative commitment have a role as a mediator between job satisfaction and turnover intention in nurses.

Conclusions: The current findings underline the urgency of establishing and maintaining supportive and conducive working environment. Nursing management in the clinical setting has a responsibility to create a sustain work setting that in line with the organization goals and professional development.

1. INTRODUCTION

Turnover of healthcare workers is still a real problem facing hospitals around the world (Chiao et al., 2021). There are still many health organizations in the world that are facing the impact of a shortage of nursing staff due to increased turnover among nurses (Y.-W. Lee et al., 2017). The lack of nursing staff due to the high rate of nurse turnover is a critical challenge in hospital organizations, because it can have a negative impact

on various aspects, ranging from decreasing the quality of nursing services to disrupting the productivity of hospital organizations (Drennan & Ross, 2019). Nurses leaving the hospital can negatively impact patient care, reduce patient satisfaction, increase patient mortality and infection rates as the workload of remaining nurses increases (Aiken et al., 2014; Simone et al., 2018). The increased workload of nurses will also have an impact on the level of emotional exhaustion of nurses and cause

work accidents for nurses to also increase (Yim et al., 2017). Thus, it is necessary to make efforts so that nurses do not think about leaving a nd remain in the organization.

Previous research revealed that job satisfaction is one of the main determinants of turnover in nurses (De Gieter et al., 2011; Viola & Filon, 2015). Previous research also stated that when nurse job satisfaction decreases, the tendency for nurses to leave their jobs will increase (Paula et al., 2022; Salahat & Al-Hamdan, 2022; Simone et al., 2018). This is because someone who is satisfied with his job will show positive attitudes and feelings and will be more willing to stay longer in his organization and has no intention of leaving his organization (Paula et al., 2022).

Based on this background explanation, the purpose of writing this article is to systematically review the role of job satisfaction in reducing the turnover intention of nurses in hospitals. his systematic review is important to carry out to find alternative ways to reduce turnover among nurses through job satisfaction.

2. METHODS

2.1 Design

The design from this article is a systematic review.

2.2 Search Methods

The database used for this systematic search are PubMed, ScienceDirect, and Semanticscholar. The selected articles are articles published in 2018-2022 with keywords "job satisfaction", "turnover intention", and "nurse". Search using combination terms using Boolean terms AND quotation marks. The selected research must use cross-sectional method or other that can answer research questions. Only articles written in English are used as a reference for this review.

2.3 Study Selection

The inclusion criteria of this review are as follows: 1) is original research 2) contains the results of research that discusses how the effect of job satisfaction on turnover intention in nurses; 3) measure job satisfaction; 4) measure turnover intention; and 5) research subjects are nurses. The exclusion criteria from this review are as follows: 1) the research results do not explain celarly the role of job satisfaction on nurse turnover intention and 2) thesis, review, abstract, or part of the conference process.

2.4 Data Extraction

The extracted article data elements are author, country, year of publication, study design, sample, instrument for measuring job satisfaction and turnover intention, scoring, reliability, validity, analysis data, and the research result. Extraction is used to evaluate the effectiveness of job satisfaction

in reducing turnover intention. Narration is the method used in synthesizing this research, this method groups existing data extracted. At this stage, important data is grouped then studied in depth with data, facts and information obtained from the research article and then can be taken conclusions that can answer the objectives. If there is disagreement the agreement is resolved through discussion with all authors.

2.5 Research Outcomes

The systematic review was prepared based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyzes (PRISMA). Based on these guidelines, there are five steps in this review: 1) determine eligibility criteria; 2) define information sources; 3) study selection; 4) data collection process; and 5) selection of data items (Handayani et al., 2018). A preliminary research data search found 526 articles consisting of: 114 articles from PubMed, 149 articles from Science Direct, and 263 articles from Semantic scholar. Each article is reviewed in three parts, namely the title of the article, abstract, and the contents of the article. Forty-nine articles were selected to review the content of the study, and 34 out of 49 articles were excluded because they did not specifically explain the role of job satisfaction on nurse turnover intention. Fifteen studies that met with inclusion criteria were retained after inspection of the quality assessment of the content of the article. All the studies reviewed were quantitative studies. The process of taking and screening manuscripts is illustrated in Figure 1.

3. RESULTS

3.1 Study Characteristics

Research articles are limited to articles published in 2018 to 2022. Two articles published in 2022, two articles published in 2021, five articles published in 2020, five articles published in 2019, and one article published in 2018. All research articles are quantitative research with 10 articles explaining the research design used was a cross sectional design, while the other two articles were not explained.

All articles use a questionnaire to collect data. There are nine types of questionnaires to measure job satisfaction, the most used questionnaire is the Mueller and McClosky Satisfaction Scale [MMSS] by Mueller & McCloskey (1990) (Falatah & Conway, 2019; Salahat & Al-Hamdan, 2022) and also which is translated into the language of the country of research become Mueller and McClosky Satisfaction Scale [MMSS] by Wu (2015) (Li et al., 2019, 2020). Meanwhile, to measure nurse turnover intention, there are 14 types of questionnaires. Article from Li, Bsn, Job, & Ph (2020) and Li, Zhang, Xiao, Chen, & Lu (2019) use the same questionnaire to measure turnover, namely the Chinese Version of Turnover Intention Tool from Lee & Lee (2000). Three articles did not report reliability results and 8 articles did not
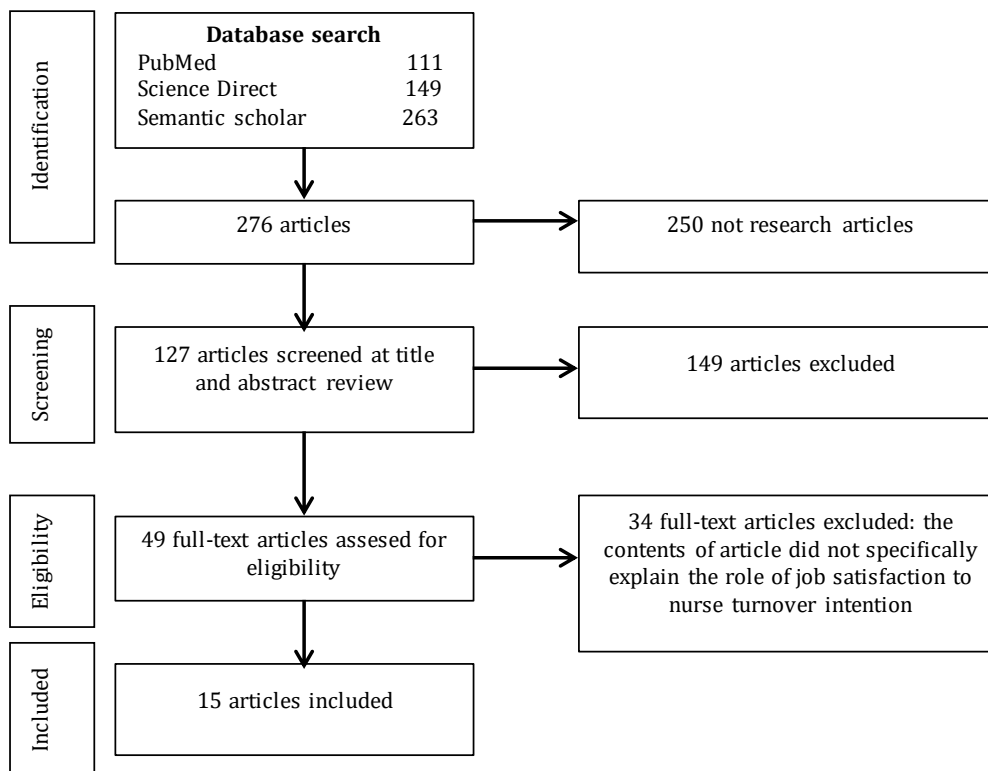
Figure 1. Search strategy

report validity results for job satisfaction instruments. Whereas for the turnover intention instrument, 3 articles did not report the results of reliability and 9 articles did not report the results of validity.

All studies were conducted in hospitals with nurse participants. The total population in this review was 12,709 nurses. The research sites were conducted in various countries, namely Jordan, China, United States, Saudi Arabia, United Kingdom, Turkey, Uganda, Indonesia, Oman, Australia, and Pakistan.

3.2 Role of Job Satisfaction to Nurse Turnover Intention

From a systematic review, the results show the role of job satisfaction directly or indirectly in reducing the desire to switch nurses. Fourteen studies prove that job satisfaction plays a direct role in nurse turnover intention, while one other study only explains that job satisfaction plays a role as a mediator in reducing nurse turnover intention. There are six articles that explain the other role of job satisfaction, namely as a full mediator and a partial mediator between the independent variables and nurse turnover intention. Variables that are fully mediated by job satisfaction in reducing turnover intention include job security, self-seeking, unappreciativeness, negative state of mind, relational coordination, workload, burnout, and work environment. Meanwhile, the variables partially mediated by job satisfaction in reducing nurse turnover intention include job security and workplace violence. In addition, there are two articles which state that job satisfaction plays a role in influencing turnover intention if it is moderated by

other variables, namely moderated by variables job burnout, job organizational, and normative commitment. The results of this study can be seen in Table 1.

4. DISCUSSION

In carrying out this systematic review, 15 research articles were evaluated to find out the role of hospital management in reducing nurse turnover intention. Through this systematic review we try to show that in 14 research articles there is a positive role of job satisfaction in reducing the level of turnover intention in nurses. The results of the study show that the role of job satisfaction can directly make nurses feel satisfied with their jobs and consider their work valuable so they don't have time to think about leaving their jobs.

Job satisfaction is the assessment and positive attitude of employees towards their work including in the work environment, type of work, relationships between co-workers, and social relations in the work environment., so it can be concluded that job satisfaction is everything that makes a person enjoy his work. work is done because they feel happy doing (Robbins & Judge, 2013). Someone who is satisfied with their work will find their work enjoyable and love their work. This attitude is reflected in a person's work morale, discipline and work performance (Hasibuan, 2016). Someone who is satisfied with their job will enjoy their work and have a low level of absenteeism (Simanjuntan & Sitio, 2021). Some research literature also reveals that the most influential factor at nurse turnover intention is the level of job satisfaction (Chen et al., 2019; Ferede et

al., 2018; Liu et al., 2019; Y. H. Yang & Kim, 2016). Therefore, health organizations or nurse managers must consider how their behavior affects nurse satisfaction and increase nurse motivation through various efforts to increase job satisfaction. It is expected that someone who is satisfied with his job will show positive attitudes and feelings, love his job more and will be more willing to stay longer in his organization and will not leave his organization.

Apart from playing a direct role in reducing nurse turnover intention, job satisfaction can act as a mediator between other independent variables and turnover intention. The moderator variable is an independent variable that affects the strength of the relationship between the other independent variables and the dependent variable (King, 2013). Job Satisfaction can act as a full or partial mediator. The role as a full mediator can occur if there is no direct relationship between the independent variables and turnover intention, and these independent variables can be related to turnover intention if mediated by job satisfaction. Meanwhile, the role as a mediator can partially occur if the independent variable can occur if the independent variable can directly influence turnover intention or through mediation of job satisfaction. The results of this review are in accordance with the statement of (Al Sabei et al., 2020) which states that job satisfaction plays a moderating role in keeping nurses to stay in their organizations. For example, job satisfaction fully moderates the relationship between work environment and turnover intention. If job satisfaction is not considered, the results of the research suggest that working in a good environment is associated with higher turnover intention. Conversely, when the moderating role of job satisfaction is added, the result is that working in a good environment will lead to high job satisfaction and can lead to lower turnover intention (AbuAlRub et al., 2016). So it can be said that increasing nurse job satisfaction will automatically reduce switching intentions by creating a good work environment.

The third role of job satisfaction found in this review to reduce nurse turnover intention is by partially moderating some of the other variables. Partial mediation indicates that a significant relationship occurs not only between the mediator and the dependent variable, but the relationship also occurs directly between the independent variable and the dependent variable. Variables that can partially moderate the relationship between job satisfaction and turnover intention in this review are job burnout, job organization, affective and normative commitment.

5. CONCLUSION

The results of the systematic review show that job satisfaction has an important role to help reduce the level of turnover intention among nurses. Job satisfaction can reduce turnover intention directly without going through other variables and also act as

a mediator between other variables to reduce the level of turnover intention in nurses. Job satisfaction can also reduce nurse turnover intention with the help of mediating other variables. The role of job satisfaction in mediating can act as a full mediator and a partial mediator. Nurses who have high job satisfaction will always enjoy their work, do their work with pleasure, and always have a positive attitude towards their work, so it will not be thought of leaving a healthcare organization. The results of the systematic review show that job satisfaction has an important role in helping reduce the level of turnover intentions among nurses. Job satisfaction can reduce turnover desire directly without using other variables and also acts as a mediator between other variables to reduce the level of turnover desire among nurses. Job satisfaction can also reduce nurse turnover intentions with the help of mediating other variables. The role of job satisfaction in mediation can act as a full mediator and partial mediator. Nurses who have high job satisfaction will always enjoy their work, do their work happily, and always have a positive attitude towards their work, so they will not think about leaving the health service organization. Thus, job satisfaction can be used as a strategy in health service organizations to play a role in helping nurses love their jobs more so that they do not think about resigning from the organization, because nurses are valuable human resource assets in health service organizations.

6. REFERENCES

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Table 1. Characteristic of included study

No	Author (yr)/ country	Study Design	Sample	Instrument, Scoring, Reliability	Validity	Analysis	Result
1	Salahat & Al-Hamdan (2022) / Jordan	A descriptive cross-sectional correlational design	200 registered nurse	Mueller and McClosky Satisfaction Scale [MMSS](Mueller & McCloskey, 1990) 31 item, α=0,93	Prior research (Mueller & McCloskey, 1990)	Spearman's correlation test	Job satisfaction negatively correlated with turnover intention
				A single question for intent to leave (Not reported) 1 item, α= not reported	Not reported		
2	Li, Bsn, Job, & Ph, (2020) / China	A descriptive cross-sectional study	415 emergency nurse	Chinese version of Mueller and McClosky Satisfaction Scale [MMSS](Wu, 2015) 31 items, α=0,95	Prior research (Wu, 2015)	Descriptive statistics Pearson's correlation analysis Path analysis	Job satisfaction negatively correlated with turnover intention
				Chinese version of Turnover Intention Tool (G. Y. Lee & Lee, 2000) 6 items, α==0,893	Prior research (G. Y. Lee & Lee, 2000)		
3	Modaresnezhad, Andrews, Mesmer-Magnus, Viswesvaran, & Deshpande, (2021)/ USA	A cross-sectional research design	1080 nurses	Job satisfaction instrument (Not reported) 5 items, α=0,70 Turnover intention instrument (Not reported) 4 items, α=0,81	Convergent validity and discriminant validity	Partial Least Squares – Structural Equation Modelling	Job satisfaction negatively correlated with turnover intention
4	Falatah, Almuqati, Almuqati, & Altunbakti, (2021)/ Saudi Arabia	A cross sectional descriptive design	314 nurses	Single-item global job satisfaction scale (Not reported) 1 item, α= not reported	Prior study (Dolbier et al., 2005)	Univariate, bivariate and multivariate analyses	Job satisfaction negatively correlated with nurse's organizational and professional turnover intention.

No	Author (yr)/ country	Study Design	Sample	Instrument, Scoring, Reliability	Validity	Analysis	Result
				Single item turnover intention scale (Not reported) 1 item, α=not reported	Prior study (Mosadeg hrad, 2013)		Job satisfaction partially mediated the association between job security and organisational turnover. Job satisfaction fully mediated the association between job security and professional turnover intention
5	Yang & Chen, (2020)/ China	A cross-sectional research design	6673 pediatric nurses	A single item job satisfaction scale (You et al., 2013) 1 item, α==not reported	Not reported	Structural Equation Modelling	Job satisfaction negatively correlated with turnover intention. Job burnout and organizational mediation between job satisfaction and turnover intention.
				The Chinese version 3-item questionnaire (Zhao, 2008) 3 items, α= 0,82	Prior study (Zhao, 2008)		
6	Li, Zhang, Xiao, Chen, & Lu, (2019)/ China	A cross-sectional research design	385 emergen cy nurses	Chinese version of Mueller and McClosky Satisfaction Scale [MMSS](Wu, 2015) 31 items, α=0,919	Prior research (Wu, 2015)	Descriptive statistics Spearman's Pearson's correlation analysis Structural Equation Modelling	Job satisfaction negatively correlated with turnover intention.
				Chinese version of Turnover Intention Tool (G. Y. Lee & Lee, 2000) 6 items, α=0,778	Prior research (G. Y. Lee & Lee, 2000)		
7	Fasbender, Van der Heijden, & Grimshaw, (2019)/ UK	Not reported	361 nurses	Psychiatric Nurse Job Stressor Scale (PNJSS) (Yada et al., 2011) 1 items, α= above 0,70	Prior research (Fisher et al., 2016)	Hierarchical multiple regression Simple slope analysis	Job satisfaction negatively correlated with turnover intention.
				Three Items Turnover	Not reported		

No	Author (yr)/ country	Study Design	Sample	Instrument, Scoring, Reliability	Validity	Analysis	Result
				Intention Scale (Cammann et al., 1979) 3 items, α=above 0,70			
8	(Shihong et al., 2018)/ China	A cross-sectional research design	1024 nurses	Single item job satisfaction scale (Wanous et al., 1997) 1 item, α=not reported	Not reported	Descriptive statistics Multiple linear hierarchical regression analysis Multiple linear regression analysis of moderation	Job satisfaction negatively correlated with turnover intention. Job satisfaction partially mediated the association between workplace violence and turnover intention.
				Turnover intention scale (Cole & Bruch, 2006) 3 items, α=0,893	Not reported		
9	Bakkal, Serener, & Myrvang, (2019)/ Turkey	A cross sectional descriptive design	369 nurses	Minnesota Job Satisfaction Questionnaire (Weiss et al., 1967) 20 items, α=0,969	Not reported	Confirmatory factor analysis (CFA) Structural equation modelling (SEM) Sobel test	Job satisfaction negatively correlated with turnover intention. Job is significantly mediated between self-seeking and turnover intention. Job satisfaction significantly mediated the association between unappreciativeness and turnover intention. Job satisfaction significantly mediated the association between negative state of mind and turnover intention.
				A turnover intention scale (Rosin & Korabik, 1995) No reported for items, α=0,753	Not reported		
10	Paula, Kwatampora, & Eyamu, (2022)/ Uganda	A cross-sectional research design	125 nurses	Job satisfaction scale (Bennett et al., 2000) 4 items, α=0,75	Not reported	Pearson product-moment correlation Hierarchical regression analysis	Job satisfaction negatively correlated with turnover intention. Affective and normative commitment partially mediated between job satisfaction and turnover intention.
				Turnover intention scale (Sager et al., 1998) 5 items=0,75	Not reported		
11	Falatah & Conway, (2019)/ Saudi Arabia	A cross-sectional research design	180 nurses	Mueller and McClosky Satisfaction Scale [MMSS](Muelle	Not reported	Hayes' (2013) process macro for mediation	Job satisfaction significant mediated the association between relational

No	Author (yr)/ country	Study Design	Sample	Instrument, Scoring, Reliability	Validity	Analysis	Result
				r & McCloskey, 1990) 31 items, α=0,94			coordination and turnover intention
				Turnover intention Scale (TI-6) (Roodt, 2004) 6 items, α=0,70	Not reported		
12	Dwinijanti, Adhikara, & Kusumapradja (2020) / Indonesian	A cross-sectional research design	190 nurses	A questionnaire assessed job satisfaction (not reported) Not reported for item, α=0,854	0,664 (Kaiser-Meyer-Olkin Test)	Correlational statistical procedures with mediation variables	Job satisfaction significant relationship with turnover intention. Job satisfaction significant fully mediated between workload and turnover intention
				A questionnaire assessed turnover intention (not reported) Not reported for item, α=0,853	0,773 (Kaiser-Meyer-Olkin Test)		Job satisfaction significant fully mediated the association between burnout and turnover intention
13	Al Sabei et al., (2020) / Oman	A cross-sectional research design	207 nurses	Job Satisfaction Scale (Not reported) 6 items, α=0,81	Not reported	t test, χ^2 test, and one-way ANOVA Logistic regression models A hierarchical moderated logistic regression analysis	Job satisfaction negatively correlated with turnover intention. Job satisfaction significant fully mediated the association between work environment and turnover intention
				A single item to respond yes or no to whether they would leave their current hospital within the next year (not reported) 1 item, α=not reported	Not reported		
14	Halcomb & Bird, (2020) / Australian	A cross-sectional research design	786 nurses	A modified from Job Satisfaction Scale (Delobelle et al., 2010) 29 items, α=0,953	Not reported	Exploratory factor analyses Cronbach's alpha Spearman's Correlation Chi-squared test	Job satisfaction negatively correlated with turnover intention.

No	Author (yr)/ country	Study Design	Sample	Instrument, Scoring, Reliability	Validity	Analysis	Result
				A modified version of Nurses Retention Index (Cowin, 2002) 8 items, α=0,95	Not reported		
15	Alam & Asim, (2019)/ Pakistan	Not reported	400 nurses	Turnover Intention Scale (M. M. Alam & Muhammad, 2010) 3 items, α=above 0,7	Not reported	Pearson correlation Multiple Regression Analysis	Job satisfaction negatively correlated with turnover intention.
				Satisfaction With Organizational Policies and Strategies (M. M. Alam & Muhammad, 2010) 4 items, α=above 0,7	Not reported		
				Satisfaction with Career Development (Karavardar, 2014) 4 items, α=0,78	Not reported		
				Satisfaction Supervisor (M. M. Alam & Muhammad, 2010) 3 items, α= above 0,7	Not reported		
				Satisfaction with Compensation levels (M. M. Alam & Muhammad, 2010) 4 items, α=above 0,7	Not reported		
				Satisfaction with Task Clarity (Nandal	Not reported		

No	Author (yr)/ country	Study Design	Sample	Instrument, Scoring, Reliability	Validity	Analysis	Result
				& Krishnan, 2000) 4 items, α=0,73			