

Retention Strategy to Minimize Nurse Turnover: A Systematic Review

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ABSTRACT

This study aimed to identify and discuss nurse retention strategies which related to nursing turnover intention. Systematic Review design was used in this review. Data were taken from six databases: Scopus, EBSCO Cinahl, ProQuest, Science Direct, JSTOR and SAGE Journals in period 2012-2017. Keywords used in this review are a nursing shortage, nurses, retention, and turnover intention. Papers identified using PICoS framework. Paper selection adapted from the PRISMA model through three steps. The first step was selected based on the title, then abstract and full paper. The total of selected articles were 22 studies and identified a few retention strategies related to nursing turnover. Retention strategies have five categories, (1) positive working environment; (2) leadership; (3) nursing staffing; (4) orientation, preceptorship and mentoring; (5) professional development. Leadership and positive working environment have the main idea from those 22 types of research. Ideal leadership that strengthens and support staff are vital strategies that used to retention the nurses and minimize nurse turnover. The organization should be able to create a positive work environment through the application of ideal leadership. The strengthening of nurse managers is necessary to be done through the improvement of management and leadership competence.

Keywords: nursing shortage, nurses, retention, turnover intention

1. INTRODUCTION

The nurse has a vital role in maintaining a quality of service, specifically to guarantee patient safety, which is the indicator of Healthcare. The Achievement of quality of service must be supported by the availability of reliable nurses and stable workforce in every Health Care Institution. However, the availability of health workers is a problem to be faced by some countries, especially doctors, nurses, and midwives (1). Nurses turnover is one of the factors that caused the shortage of nurses. The Phenomenon, which happens in some hospital, is the resignation of competent nurses accompanies the addition of new nurses. Therefore, the number of nurses always does not meet the needs. The number of nurses turnover in developed countries such as

America was 15% in 2015, Canada 19.9%, and Australia 15.1% (2,3). The number of nurse turnover in some countries exceeds the average standard between 5 and 10% (4).

Nurses turnover significantly disrupts the performance and profitability of the hospital and public health care. The nurse turnover causes a significant increase in the amount of budget and expenditure costs (3). Prices that had spent on selection and recruitment process, orientation, training, mentoring and preceptorship are extravagance and disrupt the aspect of quality control, cost control and patient safety. The impact of the high number of turnover is not only about the cost efficiency problem, but also influence the decrease of nursing quality of service in the hospital because of the number of competent nurses are diminishing.

WHO in May 2001 with its main program “Strengthening nurses and midwives” generate an agreement about the concentration of effort to resolve the shortage of nurses and midwives globally through the human resource developing program, recruitment, and an effort to retain the number of nurses and midwives (5), in line with that agreement, the hospital should concern about the right nursing retention strategies as an effort to resolve turnover, nurse retention is implemented as an effort to continue and maintain competent nurses’ performance so that they will not leave their organization (6), retention program should be developed because the nurse’s shortage has projected to become a significant increase in 2025 (3).

The effectiveness of retention strategies is related to nurses desire to leave their job has been discussed in some studies. The authors compile a systematic review to identify retention strategies, which can minimize the number of nurse turnover.

2. OBJECTIVE

The study aimed to review and describe nurse retention strategies, which related to nursing turnover intention.

3. METHODS

3.1 Search Strategy

This systematic review took the data from six databases: Scopus, EBSCO Cinahl, ProQuest, Science Direct, JSTOR, dan Sage Journals. The data received is data between 2012 and 2017. The Nursing shortage, nurses, retention, turnover, and intention to stay or leave were used as a keyword to search the journals, articles, and literature review (Table 1).

3.2 Study Selection

Paper of study result was identified based on criteria which set using the framework the PICOs: P = participants, I = interest, Co = Context, and S = types of studies (7–9) (table 2). Studies selection adapted PRISMA flow model (10,11). The selection process went through 3 steps. First, the search in six databases obtained 8910 studies. Next, the first step is to identify the title, which appropriates with the keyword and discussion, then eliminating 8801 reviews, which left 109 studies with appropriate headings. The second step was based on the abstract (n=35), and the third selection is the content of studies as a whole based on inclusion criteria (n=22) (Fig 1). Furthermore, analyzing retention strategies, which have a significant influence on

nurses turnover intention. Inclusion criteria of the studies are studies that are set in the hospital area.

Table 1. Search Strategy

Database	Keyword	n
Ebsco Cinahl	(retention) AND (nurse) AND (turnover) AND (staff) AND (nurse shortage) AND (hospital)	973
Scopus	ALL (<i>nursing</i> AND <i>shortage</i>) AND ALL (<i>nurses</i>) AND ALL (<i>nurse</i> AND <i>retention</i>) AND ALL (<i>turnover</i>) OR ALL (<i>intention</i> AND <i>to</i> AND <i>stay</i>) OR ALL (<i>intention</i> AND <i>to</i> AND <i>leave</i>)	808
SAGE Journals	[All nursing shortage] AND [All nurses] AND [All nurse retention] AND [All turnover]	259
JSTOR	(((((nursing shortage) AND (nurse retention)) AND (turnover)) OR (intention to stay))	33
ScienceDirect	(nurse retention) and turnover	1310
Proquest	(nurse retention) AND (nursing shortage) AND turnover OR (intention to stay) OR (intention to leave)	5518
Total		8910

Table 2
Inclusion and Exclusion Criteria

Frame	Inclusion Criteria	Exclusion Criteria
P	Nurses who worked in Hospital	Nurses who didn't work in Hospital and Nursing Students
I	Nursing Shortage Problem, Factors which influenced nurses turnover and nursing Retention Strategies	Retention and General Staf Retention
Co	Nursing	Except Nursing
S	Literature Review, Quantitative and Qualitative Studies.	Opinion and Notion

4. RESULTS

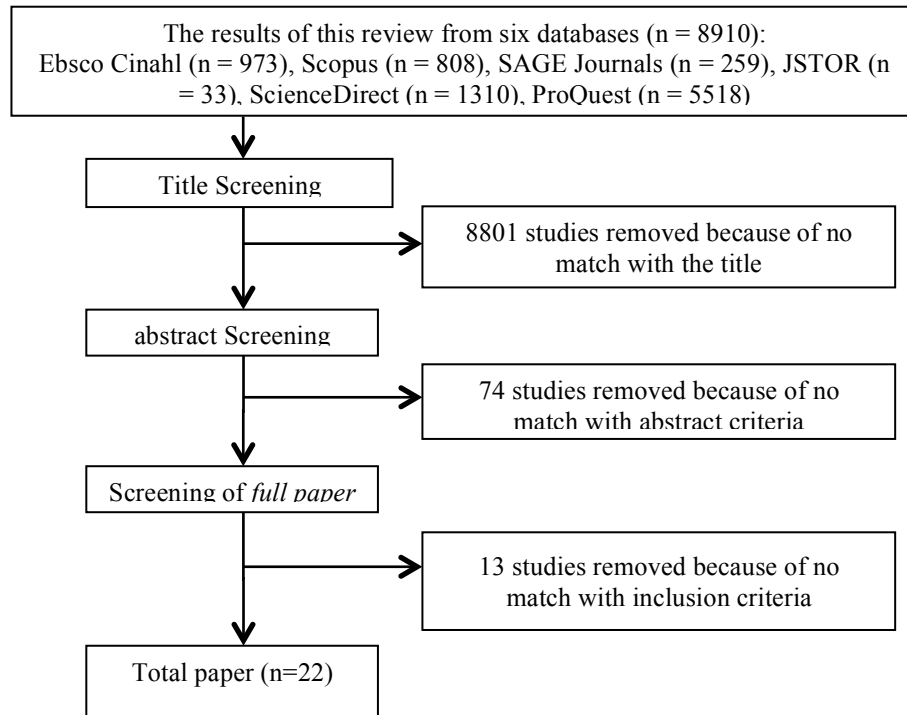
4.1 Studies Description

A total of 8910 studies was founded from six databases (table 1). From, the number of these direct search, systematic review identifies conformity based on the title, so that it obtained 109 studies with a title that suitable for the selected discussion.

The total paper result of the selected study is 22 papers. Those studies were conducted in the USA as many as 14 reviews (12–25). Two studies were conducted in Canada (26,27). One study was conducted in Belgium (28). One study was conducted in China (29). One study was conducted in Australia (30). One study was conducted in Egypt (31). One study was conducted in Taiwan (32), and one study was conducted in

Jordan (33). These papers are numbered to make it easier for authors to review (Table 3).

Population and sample in those 22 studies consist of nurses who worked in a hospital, nurses turnover data, an article of a literature review. Eight studies took new nurses who worked less than a year as respondents; twelve studies took either new nurses or senior nurses, one study took turnover data from a Human Resource Department as a data to analyze, one study examining the literature from studies result. In those studies found several important retention strategies, which influenced and related to nurses turnover intention.



4.2 Nurse Retention Strategies

In the analysis process, found retention strategies which influenced and related to nurses turnover decrease number — authors classified in 5 categories (Table 4). Twenty-Two studies examine retention strategies.

Table 4 Category of Retention Strategy

Category	LiR	CRS	Los	Ex	Qual	Paper
Positive Work Environment	1	7	1		1	1, 2, 3, 5, 8, 13, 14, 16, 18
Leadership		9		1	1	3, 4, 7, 10, 11, 12, 13, 14, 15, 22
Nursing Staffing		1				6
Orientation, preceptorship, and mentoring		2		1	2	9, 17, 18, 19, 20
Professional Development			1	1	1	19, 20, 21

Note:

LiR = Literatur review

CrS = Cross sectional study

LoS = Longitudinal study

Ex = Experiment/ Pre and Post intervention

Qual = Qualitative study

Paper = Serial number of paper

4.2.1. Positive work environment

Ten studies (1, 2, 3, 5, 8, 13, 14, 16, 18) said that a positive work environment is one of the retention strategies. A positive work environment for nurses in performing their work could be achieved by providing nurses autonomy in decision making within their authority and involving nurses in essential activities in their unit (28). Empowerment is a strategy to create a positive work environment; it has been proven by the research of related between empowerment with nurse retention ($p < 0,05$) (12). Giving an opportunity to present their opinion and consider the views of nurses, encourage their creativity, and foster motivation does empowerment of nurses.

Harmonious communication and collaboration between medical staff is an essential element in the work environment. An ethical work climate should support collaboration and through caring for others, code of conduct, and commitment to the applied regulation (18,31). The conducive work environment can reduce work stress and foster work satisfaction. The study proves that work environment quality for nurses related with an intention to leave ($p = 0,001$) (28).

4.2.2. Leadership

Nursing management and leadership are the main factors which considered by nurses to stay or leave their institution (6,13,34–37). Nursing Manager should have knowledge and skill about leadership, which is capable of providing a comfortable, and satisfying work environment.

In the study, it was found that transformational and transactional leadership were related to nurses empowerment and nurse retention (12,17). A manager who applies transformational leadership, giving effect to ideal behavior, motivating and inspiring, individual attention, and giving intellectual stimulation while transactional leadership is applying reward and punishment strategy to motivate their staff.

Besides those types of leadership, authentic leadership has significant impacts either, in preventing violence at work, nurses emotion and turnover, furthermore to create a healthy work environment (26,27). The manager who applies authentic leadership will make an effort to increase staff's motivation and encourage open communication, give guidance and positive feedback (Gardner, Avolio, Luthans, May, & Walumbwa (2005) stated The characteristics and strategies of leadership are a reflection of leader's caring attitude. This caring attitude of leadership is proved has a significant relation with the increase of nurses' performance satisfaction ($r = 0.728$, $p < 0.001$), and *turnover intentions* ($r = 0.372$, $p < 0.000$) (20).

In the study, it is found that leadership role has an impact to nurse retention; the role is in conflict management. Al-Hamdan, et al. (2016) in his study found the

significant relation between nurses intention to stay and conflict management style: integrative ($r = 0.274, P < 0.05$), *obliging* ($r = 0.168, P < 0.05$), and avoiding ($r = 0.146, P < 0.05$).

4.2.3. Nursing staffing

Nurses who work in a hospital or a public health center, on average, have a high workload. Nurses: patient ratio is not ideal, it is caused by the nursing shortage become a problem in around the world. High workload has an impact to motivate and work performance satisfaction decrease. The study suggests that there is a strong negative correlation between workload and work performance, satisfaction, and intention to leave their job ($p(59) = -0.43, p = 0.01, \text{two-tailed}$) (14). *Nursing staffing* should be attention for nurse managers to make a plan about staff addition as needed. A fair and equitable schedule is an effort to increase staff satisfaction, which impacts to increase nurse retention.

4.2.4. Orientation, preceptorship, and mentoring

Orientation program and preceptorship are efforts of retention nurse, especially for their new nurse. Intervention study on orientation program and preceptorship suggest that the incidence of new nurse turnover is 0% after intervention in the form of orientation and preceptorship and there is significant influence between mentoring and turnover intention ($p \text{ values all} = <0.0005$) (16,23,25).

4.2.5. Professional development

The continuous professional development program is a continuation of new nurses orientation. Clear and well-implemented nurse development program increases loyalty and nurse retention. Nurse professional development is one of the aspects of *continuance professional commitment*. Chang et al. (2015), in their study, suggests that continuance professional commitment has a definite relation to nursing retention (path coefficient = 0.34, $p < 0.01$)

Table 3 Serial number of the paper

Number	Title	Authors
1	Effective strategies for nurse retention in acute hospitals: A mixed method study	(Van den Heede et al., 2013)
2	Newly graduated nurses' intention to leave in their first year of practice in Shanghai: A longitudinal study	(Zhang et al., 2017)
3	Nurse manager leadership in unionized acute care hospitals in Massachusetts, staff nurse empowerment, and retention	(Fergus, 2012)
4	Nurse Retention in the Hospital Setting	(Silvers, 2013)
5	Nurse retention: A review of strategies to create and enhance positive practice environments in clinical settings	(Twigg & McCullough, 2014)
6	Nurse staffing and the relationship to job satisfaction and retention	(Hairr et al., 2014)
7	Reducing Annual Hospital and Registered Nurse Staff Turnover—A 10-Element Onboarding Program Intervention	(Kurnat-thoma et al., 2017)
8	The relationship between ethical work climate and nurses' perception of organizational support, commitment, job satisfaction, and turnover intent	(Abou Hashish, 2015)
9	The Effectiveness of a New Graduate Nurse Precepted Orientation Program on Retention	(Morton, 2014)

10	The effects of authentic leadership, organizational identification, and occupational coping self-efficacy on new graduate nurses' job turnover intentions in Canada	(Fallatah et al., 2016)
11	The influence of authentic leadership on newly graduated nurses' experiences of workplace bullying, burnout and retention outcomes: A cross-sectional study	(Spence Laschinger et al., 2012)
12	The influence of nurse manager leadership style factors on the perception of staff nurse structural empowerment, work engagement and intent to stay	(Manning, 2014)
13	The influence of magnet designation on the recruitment and retention of RN in a hospital	(West, 2014)
14	The Influence of Organizational Support and Commitment on Intent to Stay Among Registered Nurses	(Riegal, 2012)
15	The Relationship Between Caring Leadership, Nursing Job Satisfaction, and Turnover Intentions	(Bolima, 2015)
16	Work-related stress and intention to quit in newly graduated nurses	(Wu et al., 2012)
17	A nurse residency program and the retention of graduate nurses into clinical practice: A descriptive quantitative research study	(Furlong, 2016)
18	Outcomes of Mentoring Interventions for New Graduate Nurses	(Reid Tinio, 2012)
19	Promoting Successful Nursing Retention Using Orientation Programs	(Huggins, 2012)
20	Specialized New Graduate RN Pediatric Orientation: A Strategy For Nursing Retention And its Financial Impact	(Friedman et al., 2013)
21	Which Aspects of Professional Commitment Can Effectively Retain Nurses in the Nursing Profession?	(Chang et al., 2015)
22	The conflict management style of Jordanian nurse managers and its relationship to staff nurses' intent to stay	(Al-Hamdan et al., 2016)

5. DISCUSSION

The result of the identification and analysis of the selected study obtained some retention strategies as an effort to minimize nurse turnover. Leadership and positive work environment were most discussed among in 22 reviews. The leadership role has a relation between the implemented of orientation program and preceptorship, mentoring, staffing, and professional development as other retention strategies which were discussed in the study.

The role of the leader in a nurse organization is needed because the nurse who works in the hospital needs a support system from the Head Nurse to maintain their work performance in the hospital. Their relationship with the leader influences the safety and comfort of nursing staff on performing their work. This required interpersonal leader skill to interact with nursing staff. In line with Katz's opinion (1955) in the (38) that human relation skill or interpersonal relation is an essential skill area for other management skill. A study suggests that staff interaction with their leader has an impact on their satisfaction and increase staff retention (39).

Nurse managers are required to be able to use style or type of leadership by their situation at hand. The authentic leadership discussed in selected studies is analyzed as an ideal leadership type. The authoritative leadership role has a significant influence on new nurses' intention to stay in The organization (26,27). The Leaders implement the strategies to encourage an open attitude with their staff by observing moral principle, supporting staff to express their feelings and evaluating their weakness

and strength, involving the team in decision-making, and make an effort to develop staff through training, skills and knowledge guidance.

Ideal leadership will create a positive work environment through staff empowerment, contribution, and harmonious collaboration, a caring relationship among staffs, ethical and supportive. It is supported by research which suggests staffs' intention to leave is related to staff empowerment and leaders' role (40).

Important retention strategies that involve leadership role are orientation program and preceptorship. Orientation program and preceptorship are efforts to develop a new professional nurses' aspect (41). This program helps new nurses to adapt from education institution environment to work environment, where nurses were expected to provide best and high-quality service to patients. Adaptation period of work environment is felt to be burdened for new nurses. Intention to leave the job will appear if there is no reinforcement from the work environment and the leaders. The study proves there was a decrease in new nurse turnover after orientation program and preceptorship program were implemented.

6. CONCLUSIONS

There are many studies found discussed the nurse shortage problem because of turnover. Some strategies that have significant relation and influenced to nurse retention can be used in the hospital. Identified retention strategies in those selected studies are summarized in 5 strategies: positive work environment, leadership, nursing staffing, orientation, preceptorship, mentoring, and professional development. Ideal leadership is strengthening and supporting their staff become its main strategies for retention the nurse and to minimize nurse turnover. The Organization and leader need to provide attention to their team and create a positive work environment through ideal leadership implementation. It is necessary to strengthen the organization to the increase of leadership competency for nurse manager. which is strengthened and supporting their staff become its main strategies to retention the nurse and to minimize nurse turnover. The Organization and leader need to provide attention to their team and create a positive work environment through ideal leadership implementation. It is necessary to strengthen the organization to the increase of leadership competency for the nurse manager.

7. Strength & Limitations

In this review, we examined many studies involving nurse retention strategies with Cross-Sectional Studies designs. Also, all of the studies were set in the hospital. However, some limitations were encountered. Various methods, strategies, populations, and outcomes made it difficult to compare the effect size of each study. Even though we created this systematic review by hand-tracking, there may have been some studies related to retention strategies that remain unidentified and excluded because they did not describe nurse retention strategies.

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