



Relationship between Effort Reward Imbalance and Safety Climate among staff Nurses

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ABSTRACT

Background: reward must be balanced with the produced effort to prevent effort reward imbalance (ERI) and to maintain safety climate for staff nurses. **Aim:** was to assess the relationship between effort reward imbalance and safety climate among staff nurses. **Methods:** A descriptive cross sectional research design was used in the current study. A convenience sample of 209 staff nurses were included in the study. **This study was conducted at** all in patient's medical surgical units at Kafrelsheikh University Hospital. **Results:** Revealed that there was statistical significant difference between effort reward imbalance and safety climate $r = 0.760^*$. **Conclusion:** The study results concluded that there was statistical significant difference between effort reward imbalance and safety climate. Therefore, in order to have a significant impact on the safety climate of staff nurses, it is crucial to implement certain significant heroic rewards that are more equitable and fair. **Recommendations:** Healthcare organizations should consider the recognition system that values staff nurses' work/effort through incentives package and rewards staff nurses to reinforce safety climate.

Keywords: Climate, Effort reward imbalance, Safety.

Introduction

Staff nurses naturally experience higher levels of stress than other professionals which forces them to put up more effort (Shechter et al., 2020). Effort reward imbalance (ERI) is defined as the framework of job-related effort and reward since the effort that is put out at work is linked to the anticipation of obtaining specific benefits like income or a boost in self-esteem. ERI composed of over commitment, reward, and effort as effort

external demands of the job "reward" which has three variant forms such as acknowledgment (socio-emotional reward), career advancement that indicates status-related reward, and financial reward in the form of salary or wages. Moreover, over commitment which describes an individual's method of handling difficult circumstances (Siegrist, 2017; Siegrist & Li, 2016) .

Staff nurses who receive inadequate financial compensation, little welfare benefits, or respect for

their work believe that there is an imbalance between the significant efforts and the received rewards that can easily result in effort reward imbalance (ERI) which reflects the current changes in the nature of employment in many parts of the world particularly in the nursing field (Owen et al., 2016). It is argued that stress arises when staff nurses' efforts are not adequately acknowledged (Leineweber et al., 2020).

This imbalance between reward and effort which includes high effort, low reward, and more over commitment (an excessive job involvement way) that may lead to negative health outcomes and poor organizational members' wellbeing which may affect staff nurses' quality of work life. Therefore, ERI is receiving more attention in the healthcare industry because of its ability to predict negative outcomes for mental and physical health which can result in undesirable psychosocial work characteristics that arise from an imbalance between "costs" and "gains" (Rugulies et al., 2017; Siegrist & Li, 2016). Thus, there is a greater focus on the prevalence of ERI among staff nurses (Xie et al., 2021).

Since the actions and results of staff nurses' contributions to the organization impact organizational performance, the rewarding system should be created with the understanding that it has an impact on the direction of organizational productivity. Staff nurses' perceptions of the organization is improved when they receive rewards for their effort that it is needed for growth and compassionating viewpoint when they believe that the organization appreciates their

contributions and reciprocates the rewards for their diligence which makes them happier and more dedicated to their work. Balancing effort related reward has an effect on job satisfaction and helps to retain staff nurses' loyalty to the healthcare organization and their jobs which is beneficial for the recognition of staff nurses which is a key motivator for work engagement because adjusting the reward system that is based on staff nurses' effort may increase staff nurses' retention rates, influence effectiveness, motivation, and commitment levels in the heal care institutions (Ajmal et al., 2015).

The regular occurrence of effort-reward imbalance which happens when staff nurses spend a lot of effort and receive little reward or appreciation in return can cause negative feelings and irritation which can then trigger psychobiological stress reactions (Ren et al., 2019). The imbalance between effort and the expected reward increases the experience of emotional distress, depression, and poor health outcomes and impacts organizational factors (engagement, job satisfaction). This highlights the need for a more comprehensive multilevel understanding of the need to prevent the devastating effects of ERI that may lead to work-related stress as job demands and job resources (e.g., rewards and supervisors' coworkers' support) are known to have an impact on the health, work-life balance, and safety climate of staff nurses (Devonish, 2018 ; Owen et al., 2016).

Safety climate is created from an equilibrium or an imbalance between rewards and efforts.

Safety climate is defined as the staff nurses' perception of safety and the nonhazardous workplace in the practicing environment which reflects the healthy organization and has a considerable positive impact on staff nurses' performance (Dos et al., 2017). The components like appreciation of personal risk, safe behaviors, management/staff nurses' involvement, staff nurses' competence, work pressure, work site risk, safety rules and procedures, supervisory environment, supportive work environment, management commitment to safety, and management communication of safety are required and should be taken into consideration for maintaining safety climate (Al Mazrouei et al., 2020).

Staff nurses' opinions of safe rules, procedures, and their sense of security in the workplace are referred to the safety climate which supports acceptable organizational and individual efforts, enhances higher organizational and individual incentives, promotes better health outcomes for staff nurses, and is a powerful predictor of work outcome. Furthermore, a workplace with an optimal safety climate is essential for staff nurses' psychological well-being because it creates an atmosphere that encourages a healthy balance between rewards and efforts which boosts profitability and improves work-related outcomes. This is crucial for reducing the rising rates and expenses of the worker's compensation claims for physical and psychological injuries (Owen et al., 2016).

Thus, creating a thorough safety climate promotes the general well-being and security of the staff nurses. Fostering a positive safety climate is crucial for organizational health and safety which can be improved to influence staff nurses' beliefs, values, attitudes, and competence in the health and safety management that helps with internal communication such as holding workshops to teach staff nurses how to handle machines safely and is important to wear protective gear because a safe environment not only helps keep people physically and mentally safe, but it also reduces the likelihood of the work accidents (Al Mazrouei et al., 2020).

Significance of the study

In order to more accurately depict the elements that influence staff nurses' health and wellbeing and lower the expenses associated with the work-related illness, injury, and lost productivity, it is crucial to balance rewards which are based on effort. Staff nurses' views of unfairness and reward imbalance at the work can lead to results like negative health consequences (Tripathi et al., 2024; Zhang et al., 2024). It the staff nurses' perception of the imbalance between effort and reward was noted /observed in Kaferelsheikh University Hospital which may affect safety climate. So, the researcher was interested in this title. This study was carried out to provide theoretical support and practical assistance for effectively preventing or lowering the occurrence of ERI among staff nurses and to comprehensively examine the incidence of ERI. Additionally, it is hoped that this study provides a

solid foundation for assisting healthcare organization in maintaining a safety climate by balancing effort and reward.

Aim of the study

The current study aimed to assess the relationship between effort reward imbalance and safety climate among staff nurses.

Research question:

What is the relationship between effort reward imbalance and safety climate among staff nurses?

Subjects and method:

Research Design:

A descriptive cross sectional research design was used in the current study.

Setting:

This study was conducted at all in patient's medical surgical units (general medical, special medical, general surgical, special surgical) at Kafrelsheikh University Hospital which is affiliated with the Ministry of Higher Education and Scientific Research and provides a wide spectrum of the healthcare services at Kafrelsheikh governorate.

Subjects: The study subjects included all convenient staff nurses (209) who work at all in patient's medical surgical units in the previously mentioned setting.

Sample size calculations:

By using the following formula

$$n = \frac{N \cdot Z^2 \cdot p \cdot (1-p)}{(N-1) \cdot E^2 + Z^2 \cdot p \cdot (1-p)}$$

Where:

- N = population size
- n = desired sample size
- p = population proportion
- Z = Z-score corresponding to the confidence level (for 95% confidence level, Z = 1.96)
- E = margin of error

Considering the following assumptions:

95% two-sided confidence interval, with a power of 80% and an alpha error of 0.05, the minimum required sample size was calculated to get the most accurate significant results. With the specified inputs, the final study sample size needed was determined to be 209 staff nurses.

Tools for data collection:

Tool I: Effort Reward Imbalance Questionnaire:

This tool was developed by Msaouel et al., (2022) in the English language, modified, and translated by the researcher into Arabic language. It aimed to assess ERI from the staff nurses' viewpoints. It is consisted from two parts:

Part (1): which included personal characteristics of the study subjects namely; age, gender, educational qualifications as well as years of experience.

Part (2): It is consisted of 23 items that are organized into three categories namely extrinsic effort (6 items), extrinsic reward (11 items), and over commitment (6 items).

Responses were measured on a 5-point Likert scale (1, strongly disagree; 2, disagree; 3, uncertain; 4, agree; and 5, strongly agree). Scoring system of effort reward imbalance questionnaire

included Low (<33.3%) (23 – 53), Moderate (33.3% – 66.6%) (54 – 84), and High (> 66.6%) (85 – 115). The highest the score, the more effort reward imbalance in the organization

Tool II: Safety Climate Questionnaire:

This tool was developed by Pecquet (2013) in the English language, modified, and translated by the researcher into Arabic language. It aimed to assess safety climate from the staff nurses' viewpoints. It is consisted of 77 items that are organized into eleven categories namely ;management commitment to safety, management communication of safety, safety rules and procedures, supportive work environment, supervisory environment, employees'(staff nurses') involvement, appreciation of personal risk ,work site risks, work pressure, staff nurses' competence, and safe behavior, for each category included seven statements look.

Responses were measured on a 5-point likert scale (1, strongly disagree; 2, disagree; 3, uncertain; 4, agree; and 5, strongly agree) .Scoring system of safety climate questionnaire included Low (<33.3%) (77 – 179), Moderate (33.3% – 66.6%) (180 – 282), and High (> 66.6%) (283 – 385). The highest the score, the more safety climate in the organization.

Method:

- The study tools was translated into Arabic and back-to-back translation (Arabic to English) was done.
- **Tool validity and reliability :**

- Three scholarly nursing specialists in the field of nursing administration were given the tools to test both face and content validity. Tools contents were validated for its appropriateness, completeness, and clarity. Modifications were implemented in accordance with the experts' recommendations.
- Cronbach's alpha was used to test the tools' reliability and the consistency of the tool items as the following :

| Questionnaire | Cronbach's Alpha | No. of Items |
|----------------------------------|------------------|--------------|
| Tool I : Effort reward imbalance | 0.871 | 23 |
| Tool II : Safety Climate | 0.958 | 77 |

Cronbach's Alpha is better and accepted to be > 0.7

- Pilot study (n=21) staff nurses who were not included in the study subjects in order to check and ensure the clarity, applicability/feasibility of the tools, identify obstacles/ problems that may be encountered during data collection, and determine the needed time to complete the questionnaire. The necessary modifications were done.

• Ethical considerations:

The researcher acquired ethical approval from Kafrelsheikh University's Committee of Research Ethics on 25/11/2024 to perform the study. In addition to, a written approval was obtained from the hospital administrator after a thorough explanation of the study aim, benefits, and purpose to get an agreement to conduct the study.

An oral acceptance was obtained from the staff nurses who accept to participate in the study before the collection of data after providing them with detailed information about the study and after explanation of the study aim in a simple and a clear manner.

Study subjects were participated in the study on a voluntary base and they understood that they have the right to withdraw at any time from the study without responsibility or giving any reasons.

Confidentiality of data was maintained through keeping all data confidential as the study participants were reassured that the collected data was used for the scientific research, it was used only for the purpose of the study, and it did not be used outside the purpose of the study. Also, and anonymity of the study participants was kept.

Data Collection:

Data collection for this study was conducted by the researcher through self-administered questionnaire sheets (I and II). It was hand-delivered to the study participants, they were asked to return it back to the researcher in the study setting.

Statistical analysis of the data

The statistical analysis of the data was performed using IBM SPSS software version 20.0 (Armonk, NY: IBM Corp, released 2011). Categorical data were summarized as numbers and percentages. For continuous data, normality was assessed using the Kolmogorov Smirnov test. Quantitative data were described using range (minimum and maximum), mean, and standard deviation, median and interquartile range (IQR).

Significance of the obtained results was judged at the 5% level. Pearson coefficient used to correlate between two normally distributed quantitative variables.

Results:

Table (1) presented distribution of the studied staff nurses according to demographic data (n = 209). It revealed that the total study subjects was 209 staff nurses. Concerning gender, slightly more than three quarter of staff nurses (76.6 %) were females. With regard to age, the most common age (near to the half which is presented by (40.7%) was < 30 years of the studied staff nurses. Concerning staff nurses' educational qualifications, (47.8 %) of the studied staff nurses had diploma in the technical secondary school of nursing. Regarding years of experience, the highest percentages of staff nurses were 10-20 years (44.0%).

Table (2) presented opinions about different effort reward imbalance parameter (n = 209). It showed that the highest mean and standard deviation was related to extrinsic reward (39.05 ± 6.31). On the other hand, the lowest mean and standard deviation was related to extrinsic effort (24.06 ± 4.24)

Table (3) presented staff nurses' opinions about different safety climate parameter (n = 209). It showed that the highest mean and standard deviation was related to appreciation of personal risk (29.13 ± 4.61). On the other hand, the lowest mean and standard deviation was related to

employees' (staff nurses') involvement (26.47 ± 4.48)

and safety climate ($n = 209$). It revealed that there was statistical significant difference between effort related reward and safety climate $r = 0.760^*$

Table (4) Presented correlation between staff nurses' opinions related to effort reward imbalance

Table (1): Distribution of the studied staff nurses according to demographic data ($n = 209$)

| Demographic data | No. | % |
|--|--------------------|------|
| Sex | | |
| Male | 49 | 23.4 |
| Female | 160 | 76.6 |
| Age | | |
| <30 | 85 | 40.7 |
| 30-40 | 69 | 33.0 |
| >40 | 55 | 26.3 |
| Min. – Max. | 24.0 – 55.0 | |
| Mean \pm SD. | 34.30 \pm 8.37 | |
| Median (IQR) | 32.0 (28.0 – 41.0) | |
| Qualification | | |
| Diploma in the technical secondary school of nursing | 100 | 47.8 |
| Diploma in health technical institute nursing division | 41 | 19.6 |
| Bachelor's degree in nursing science | 68 | 32.5 |
| Years of experience | | |
| <10 | 77 | 36.8 |
| 10-20 | 92 | 44.0 |
| >20 | 40 | 19.1 |
| Min. – Max. | 4.0 – 37.0 | |
| Mean \pm SD. | 13.85 \pm 8.65 | |
| Median (IQR) | 12.0 (7.0 – 20.0) | |

IQR: Inter quartile range

SD: Standard deviation

Table (2): Staff Nurses' opinions about different effort reward imbalance parameter (n = 209)

| Effort Reward Imbalance | Total score | | |
|-------------------------|--------------|---------------|--------|
| | Min. – Max. | Mean ± SD. | Median |
| Extrinsic Effort | 14.0 – 30.0 | 24.06 ± 4.24 | 24.0 |
| Extrinsic Reward | 22.0 – 50.0 | 39.05 ± 6.31 | 39.0 |
| Over commitment | 14.0 – 35.0 | 26.47 ± 4.67 | 27.0 |
| Overall | 61.0 – 115.0 | 89.57 ± 11.93 | 87.0 |

SD: Standard deviation

Table (3): Staff nurses' opinions about different safety climate parameter (n = 209)

| Safety Climate | Total score | | |
|---|---------------|----------------|--------|
| | Min. – Max. | Mean ± SD. | Median |
| Management Commitment To Safety | 9.0 – 35.0 | 26.50 ± 5.91 | 27.0 |
| Management Communication of Safety | 13.0 – 35.0 | 26.89 ± 5.56 | 28.0 |
| Safety Rules and Procedures | 10.0 – 35.0 | 28.63 ± 5.47 | 29.0 |
| Supportive Work Environment | 16.0 – 35.0 | 28.25 ± 4.65 | 28.0 |
| Supervisory Environment | 14.0 – 35.0 | 27.10 ± 5.28 | 27.0 |
| Employees'(staff nurses ') Involvement | 13.0 – 35.0 | 26.47 ± 4.48 | 27.0 |
| Appreciation of Personal Risk | 19.0 – 35.0 | 29.13 ± 4.61 | 29.0 |
| Work Site Risks | 14.0 – 35.0 | 27.69 ± 4.74 | 28.0 |
| Work Pressure | 22.0 – 35.0 | 29.03 ± 3.37 | 29.0 |
| Staff nurses' Competence | 22.0 – 35.0 | 28.57 ± 3.01 | 29.0 |
| Safe Behavior | 17.0 – 35.0 | 28.71 ± 4.66 | 29.0 |
| Overall | 223.0 – 377.0 | 306.98 ± 38.77 | 312.0 |

SD: Standard deviation

Table (4): Correlation between staff nurses' opinions related to Effort Reward imbalance and Safety Climate (n = 209)

| Safety Climate vs. | R | P |
|-----------------------|--------|---------|
| Effort Related Reward | 0.760* | <0.001* |

r: Pearson coefficient

*: Statistically significant at $p \leq 0.05$

Discussion

The relationship between working circumstances, efforts, and rewards can be used to understand/assess effort reward imbalance at both the organizational and individual levels (Owen et al., 2016). The prevalence of ERI between staff nurses has steadily increased over time because staff nurses who feel that their efforts are not sufficiently recognized may suffer from psychological disorders that might result in gastrointestinal, cardiovascular, and other problems. ERI may need to be immediately reduced for nurses because it is closely linked to mental health, quality of work life, attendance, burnout, and intention to leave (Gräske et al., 2023; Trybou et al., 2014; Wu et al., 2023).

Safety climate forecasts the efforts and rewards to interact inside the ERI since safety climate has an indirect effect on health issues through its link to efforts and rewards (Owen et al., 2016). The perception of safety measures, practices, procedures, and policies is reflected in the safety climate which is closely linked to the awareness of risk and the avoidance of the workplace accidents and injuries (Abeje & Luo, 2023 ; Al Mazrouei et al., 2020).

The present study aimed to investigate the relationship between effort reward imbalance and safety climate. Concerning **effort reward imbalance**, the highest mean and standard deviation was related to **extrinsic reward** (39.05 ± 6.31). This may be related to that extrinsic reward is needed in the workplace to motivate staff to do

their best and the rewarding system of the ERI addresses job security and career promotion which are important and relevant in the stability of the work. This study findings confirmed previous study which done by Seitovirta et al. (2018) who reported that the relationship and correlation between staff nurses' perceptions, rewards, and happiness at the work environment has a significant impact on all organizational activities and functions since extrinsic rewards play a key role in keeping the staff nurses are more engaged and motivated either in the public or private sectors. Also, extrinsic rewards are preferred by staff nurses because it is the foundation of staff nurses' perceptions of organizational support.

Present study findings were consistent with the finding of (Cherry, 2019; Khan et al., 2017) who concluded that the tangible extrinsic reward is given to staff nurses who contribute to the success of the healthcare institution .Extrinsic reward inevitably represents the behavior that is driven by the need for the outside reward. Accordingly, extrinsic rewards are crucial in the healthcare performance.

Conversely, the study findings were disagreed with DK (2023) who reported that staff nurses cannot be motivated if the organization solely uses extrinsic rewards as extrinsic rewards have the drawback of potentially losing their influence after their value is depleted . Therefore, a mix of extrinsic and intrinsic rewards is required which makes it is necessary to balance them with other types of rewards. Nonetheless, numerous studies demonstrate the importance of the rewards

system for staff nurses' performance consequences, but they do not specify whether intrinsic or extrinsic rewards are necessary to boost organizational profitability because both intrinsic and extrinsic rewards are necessary to support the other. The significance of each kind of reward varies depending on the individual (Ajmal et al., 2015).

On the other hand, the lowest mean and standard deviation was related to **extrinsic effort** (24.06 ± 4.24). This may be due to that the staff nurses who are their extrinsic effort is well appreciated are more engaged with the work and perceive more effort reward balance in the organization and the organizations whose staff nurses are treated like a machine will leave the organization or become less committed to the organization. This effort type is driven by factors like recognition, monetary compensation, or other tangible benefits. Those findings were supported by Siegrist (2016) who summarized that staff nurses' perception of effort reward balance and commitment to their work is increased when they put up extrinsic effort at the work and expect to be rewarded with prospects for advancement and job stability.

Additionally, Gelard and Sheida (2024), Widokarti et al. (2019), Baluyos et al. (2019), and Shen et al. (2018), Ismail et al. (2023) confirmed that the external factors that drive staff nurses to perform at the highest level within the organization are the value of extrinsic effort and the strong positive correlation between compensation and extrinsic effort. This is because staff nurses may

feel that their efforts are valued and be more motivated to meet work requirements to prevent self-referential incompetence. Additionally, health managers should use incentive systems to maintain healthcare professionals' active dedication to their work and assist them in realizing the importance and worth of their extrinsic work effort. In contrast to the results of this study, Ge et al. (2021) found that an imbalance between excessive extrinsic effort and active distress can result in a state of active distress that is accompanied by very unpleasant feelings and can impact the safety climate.

Regarding safety climate, the present study results showed that the highest mean and standard deviation was related to **appreciation of personal risk** (29.13 ± 4.61). This may be related to that personal risk is less severe than general risk and the perception of the importance of own safety and the necessity of preventing personal risk in order to maintain personal safety and to improve the safety climate is necessary. Also, it is crucial to ascertain whether the risk is to oneself (personal risk) or to others (general risk). Present study findings were consistent with the finding of Owen et al. (2016) who reported that the degree of psychosocial and personal dangers such as bullying, aggression, harassment, and work-related stress affects staff nurses' emotional tiredness and muscular skeletal diseases which in turn raise the workers' compensation claims.

In contrast to this study findings, the appreciation of personal risk has the lowest score and the lower risk perception as a variety of factors

could be responsible for the various healthcare providers' reduced risk perceptions and ratings since doctors may define risk according to the likelihood that a health concern will materialize. However, staff nurses and paramedics may be influenced by the severity of the sickness in their perceptions of risk which raises the possibility of developing a health condition in the upcoming years. For instance, doctors may downplay the seriousness of personal and health risks and overemphasize the advantages of medical treatments if they are expected to sympathize with patients' circumstances which lead to a different base of personal risk perception between medical, non-medical workers, and among medical workers themselves (Ferrer & Klein, 2015).

On the other hand, the lowest mean and standard deviation was related to **employee's (staff nurses') involvement** (26.47 ± 4.48). This may be due to that staff nurses are less involved in organizational decisions which is needed to promote a more stable safety environment and cooperative relationships with coworkers. According to Karlsson et al. (2023) some staff nurses believed that problem-solving involvement and participation increased the responsibility for identifying problems and solution which they perceived as demanding which may make them overloaded. They believed that obstacles to problem-solving could arise from conflicts amongst various colleagues which impairs their involvement in participatory decision making .

Those findings were disagreed with (Ateeq, 2023), Riyanto et al. (2021), Rohman et al. (2021),

Kim et al. (2018) who reported that staff nurses with a high degree of involvement may make a difference for their coworkers' benefits in the form of personal satisfaction and fulfillment which indicates that staff nurses view their involvement as one of the most important aspects in the workplace which is reflected in the positive performance.

Moreover, participation practices give staff nurses an access to the important organizational information and encompass them in problem-solving and decision-making processes which offer them more influence over the work atmosphere and facilitate the improvement of work-related skills and the satisfaction of self-actualization needs which make staff nurses experience greater organizational support and involvement in participatory decision-making that may make staff nurses want to stay there (Qi & Wang, 2016). Also, the study done by Ateeq (2023) showed that staff nurses become more happier and satisfied in the firms that prioritize their involvement and maintain fair treatment.

The present study results showed that there was statistical significant difference between effort reward imbalance and safety climate $r = 0.760^*$. This may be due to that the safety climate aids in fostering a balance between staff nurses' efforts and rewards since top level management should establish fair expectations and encourage the acknowledgment of the exceptional work with suitable compensation. The study results were in agreement with Owen et al. (2016) who concluded that both organizational safety climate and

organizational ERI are related because safety climate addresses general safety issues while ERI cultivates a particular safety climate that is directly tied to general expectations and attitudes regarding establishing demands and allocating resources. Additionally, the safety climate offers more explanatory power for worker outcomes like ERI.

The study findings confirmed the previous study which is done by Tripathi et al. (2024) who summarized that emotional tiredness and safety climate were shown to be significantly impacted by ERI. A more balanced focus on the particular climate that ERI represents within the firm will result from a broad focus on the staff nurses' psychosocial health and safety climate concerns. Additionally, the safety climate and ERI can be used to assess work-related stress issues in order to prevent and reduce the associated health effects on the workforce and injury compensation costs

Additionally, the study findings were consistent with (Own et al, 2016) who reported that high levels of psychological anguish, bad workplace results, and staff nurses' physical and mental health, are caused by an imbalance between high efforts, inadequate rewards, and a poor safety climate. Also, optimal staff nurses' health and workplace outcomes are linked to the combination of individual efforts, rewards, and safety climate. For instance, by striking a balance between work, effort, and incentives, safety climate has a substantial impact which may contribute to job satisfaction. Furthermore, safety climate can predict both working conditions and organizational outcomes as it is a predictor of ERI. Moreover, the

institutions with a high safety climate will encourage a suitable ratio of organizational effort-related compensation and offer staff nurses monetary and non-monetary incentives that are commensurate with the amount of the work that they put in.

In contrast, staff nurses may put in more effort at work which may raise the sense of ERI which may limit the ability to make timely safety improvements and reduce participation in the safe work practices. Also, higher perceived ERI may cause staff nurses to make more mistakes and decrease safety-related behavior which increases the likelihood that their quality of life may be impacted (Liang et al., 2023).

Lastly, some staff nurses frequently experience an imbalance between effort and reward. Hospital management must maintain a balance between effort, incentives and effort to improve staff nurses' performance. This can only be accomplished with an effective system for rewarding staff nurses which will enhance a safer environment. Therefore, lowering the degree of effort-reward imbalance should be taken into consideration.

Conclusion

According to the present study findings, it was concluded that:

The study results concluded that there was statistical significant difference between effort reward imbalance and safety climate. Therefore, in order to have a significant impact on the safety climate of staff nurses, it is crucial to implement

certain significant heroic rewards that are more equitable and fair.

Recommendations

On the basis of the findings of the present study, the following recommendations are suggested. The healthcare organizations should:

- Maintain a plan for fostering proper extrinsic and intrinsic rewards to the staff nurses.
- Consider the recognition system that values nurses' work/effort through incentives package and rewards which enables staff nurses to reinforce safety climate.
- Periodically assess staff nurses' opinions regarding effort related reward
- Inform staff nurses and other healthcare providers by posters and other methods about measures to maintain safety climate.
- Assess safety measures training needs that foster safety climate.
- Develop creative and different safety climate strategies by encouraging staff nurses and nurse managers to suggest innovative ideas about how to maintain safety climate at the nursing units.

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