Impact of collaboration behavior among staff nurses on their quality of work life and job satisfaction

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Background
Nursing collaboration is a key component of promoting a good work environment in a health-care organization, as it helps to support acceptable workloads and levels of complexity, which leads to improved nurses’ quality of life and job satisfaction.

Aim
To assess the impact of collaboration behavior among staff nurses on their quality of work life and job satisfaction.

Design
A descriptive correlational study design was utilized.

Setting
The study was conducted in the medical critical care units at New Kasr El Aini Teaching Hospital.

Subject
A convenience sample of staff nurses (n=90) who are working in the previous mentioned setting.

Tools
Three questionnaires were used for this study: nurse collaboration behavior scale (20 items), quality of work life (38 items), and job satisfaction questionnaire (28 items).

Results
Results of the present study regarding collaboration behavior items revealed that around two-thirds (64.4%) of the participants agreed on listening to each other’s opinions and suggestions item, while 34.4% of them disagreed about no qualms in sharing their ideas with one another item. Also, participants were highly perceived for all-quality work life dimensions (mean%=72.1%) and most of the study participants had a moderate level of job satisfaction (78.9%). However, this study showed that there was a statistically significant positive correlation between nurse collaboration behavior and quality of work life, but no correlation was found between nurse collaboration behavior and job satisfaction (P=0.000).

Conclusion
The current study concluded that the majority of participants agreed about most of collaboration behavior items, participants were highly perceived for all-quality work life dimensions, and most of them had a moderate level of job satisfaction. However, there was statistically significant positive correlation between collaboration behavior and quality of work life, but no statistically significant correlation between collaboration behavior and job satisfaction as well as there was a positive statistically significant correlation between quality of work life and job satisfaction.

Recommendations
Nurse managers should display collaboration behaviors to construct an engaging climate, collaborative relationship with nurses and health team to preserve quality of patients’ care, and hospital administration must regularly monitor nurse job satisfaction and resolve points of dissatisfaction to encourage staff affiliation with the organization and to improve quality of work life.

Keywords:
collaboration behavior, job satisfaction, quality of work life, staff nurses

Introduction
Nowadays, much emphasis is placed on enhancing collaboration among health-care providers in order to increase patient care quality and reduce medical errors (Mulvale et al., 2019). Teamwork practice has been extraordinarily important particularly among nurses because work in the critical care unit is difficult and serious and nurses’ attendants must be prepared to provide care to patients with significant
Communication and cooperation, participation and shared handling, trust and regard, communication and coordination, clarity professionalism, and strife management abilities are all factors that influence nursing collaboration. Nurses communicate, coordinate care, solve problems, and share information on a regular basis as part of their job, for example, during handover or management changes (Kerps, 2016; Slusser et al., 2018).

Nurses’ dissatisfaction with their working conditions can lead to a variety of major issues, which can have a negative impact on patient care. Job discontent, burnouts, turnover, a rise in stress level, and mental and physical tiredness are all examples of this. In the long run, this will have an impact on the quality of care provided by staff nurses to their patients. The physical and emotional needs of hospital nurses must be respected, as the organization’s ability to meet its goals is dependent on the quality of its people resources (Taware and Patil, 2018).

An individual’s awareness of their place in life in relation to their ambitions, prospects, standards, and concerns, as well as the traditions and value systems in which they live, is referred to as quality of life (Hemanathan et al., 2017). Furthermore, according to Nafei (2016), quality of work life can be defined as a process in which employees at all levels actively participate in the development of the organization’s environment, procedures, and outcomes. This value-based strategy seeks to accomplish two goals: improved organizational effectiveness and quality of work life for the nursing personnel.

The concept of quality of work life is multifaceted, and it is measured to understand individuals, labor, and organizations. Understanding and increasing the quality of nurses’ working life is basic to achieving high levels of quality in patient care (Taware and Patil, 2018). Nurses’ quality of work life refers to their ability to meet their critical individual requirements through experiences and training inside the workplace (Khachian et al., 2018).

The quality of work life is linked to employee commitment, turnover, purpose, organizational adequacy, efficiency, and quality of life. It, too, contributes to an increase in the quality of patient care delivered. Quality of work life is regularly characterized as the actual work situation, which includes employee amenities, income, health and safety concerns, sharing in the management of problem solving, and labor of various qualities and

To deliver secure, professional nursing care and accomplish high-quality client results, effective collaboration among staff nurses and inside organizations is critical. Nurses are required to work collaboratively with patients, coworkers, individuals of the health-care group, not as it were for the good thing of patients, but also for the fulfillment of health-care provider’s needs (Metwally and Hussein, 2016). Furthermore, it is suggested that medication errors be reduced and patient care be improved, resulting in an increase in patient safety (Reeves et al., 2017). As a result, improving nurse cooperation is vital in maintaining a safe environment, encouraging motivation, and rewarding strong work performance can increase job collaboration and impact quality of life and employee happiness (Serrano-Gemes and Rich-Ruiz, 2017; Karam et al., 2018).
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adaptability. Quality of work life is one of the techniques to progressing employee work and may be a basic aspect in any culture; it is the method through which the organization the and employees collaborate as a team (Akter et al., 2018). Also, quality of work life in a health-care organization centers on the extent to which nurses are able to meet important individual needs out of their involvement objectives, while also contributing meaningfully to their organization (Dehghan and Salehi, 2016; Ramawickrama and Pushpakumari, 2018).

Because practically all studies on job happiness and team performance have regarded job satisfaction as an outcome of team effectiveness, nursing cooperation has also been acknowledged as a motivator for job contentment (Zhang et al., 2016). Furthermore, the focus on job satisfaction as a result of teamwork and team performance has prompted a focus on job satisfaction’s contributions to teamwork and willingness to work in teams (Slusser et al., 2018). A lack of collaboration and good communication among the nursing team led to unhappiness, which contributed to a loss of motivation to work in teams and the desire to leave one’s team or even his profession (Aldeeb and El-Demerdash, 2016).

Job satisfaction could be a happy or positive passionate state that occurs as a result of a positive evaluation of one’s employment or work experience (Ramawickrama et al., 2017; Al Sabei et al., 2020). Previous research has identified job satisfaction as a beneficial aspect of work-related happiness (Albashayreh et al., 2019). Job satisfaction is a multifaceted concept that incorporates job requirements, autonomy, work relationships, and organizational conditions (Al Sabei et al., 2020). Job satisfaction can strengthen an employee’s affective commitment by influencing his or her link with the company (Zhang et al., 2016). Patient and job satisfaction are linked to good collaboration in the profession (Aldeeb and El-Demerdash, 2016; Clausen et al., 2017; Ylitormanen et al., 2019). Poor nurse–nurse relationships, on the other hand, may promote nurse turnover (Clausen et al., 2017).

Job satisfaction is the degree to which people love their occupations as described by Morsiani et al. (2017). Job satisfaction in nursing, according to Mousazadeh et al. (2019), is dependent on some factors: interpersonal interactions, patient care, and independence. Sometimes there is a disturbance in the employee’s satisfaction, for two reasons; first, it has not been thoroughly examined some time recently, and second, lack of number of staff nurses is a big concern in modern health care (Li et al., 2020). So finding ways to improve nurses’ job happiness is critical to preventing them from leaving their job (McCay et al., 2018).

Seven subscales of job satisfaction were identified: leadership, requesting factors of work, working environment, feeling of community, working welfare, stimulating components of work, and interest in problem-solving (Polatcan and Cansoy, 2019). Client input, having important and requesting work, utilizing one’s abilities at work, appreciating the value of one’s work, and finding work fascinating were shown to be the most driving variables for job satisfaction in their study. Nurses’ motivating components of work include their demanding components of work, independence, and proficient development according to Nurmeksel et al. (2021).

Significance of the study
Nurse managers have a vision of moving forward to empower, inspire, and motivate staff nurses to realize work goals. Collaboration among nursing staff is also critical in providing high quality of care, improving staff work life, development of a solid work environment, as well as improving nurses job satisfaction (Ambani et al., 2020).

Positive outcomes have been linked to increased nurse collaboration: such as increased opportunities for staff teaching, improved nurse relationships, improved staff knowledge and clinical skills, improved emotional support for nurses, and decreased patient length of stay, according to the few studies that have looked into this topic (Labrague et al., 2021).

From the perspective of a researcher, few studies have looked at the relationship between collaboration behavior, quality of work life, and job satisfaction among nurses. As well as, it was shown that in most critical care units, nurse collaboration was reduced as a result of frequent complaints about workloads, acute weariness, and unhappiness, which negatively impacted patient care quality. As a result, the goal of this study is to see how collaboration behavior affects staff nurses’ quality of life and their job satisfaction in medical critical care units.

Aim
The study aimed to assess the impact of collaboration behavior among staff nurses on their quality of work life and job satisfaction in the medical critical care units.
Subjects and methods

Research questions:

(1) What is nurses’ perception toward collaboration behavior?
(2) What is nurses’ perception toward quality of work life?
(3) What are the levels of nurses’ job satisfaction?
(4) What are the correlations between nurses’ collaboration behavior, their quality of work life, and job satisfaction?

Research design:

Descriptive correlational study design was used in this study.

Setting

This study was conducted in the medical critical care units at New Kasr El Aini Teaching Hospital, which had a total number of 44 patient beds from total ICUs’ beds (80). The selected specialties of those units are critical care units (12 beds), liver ICU (eight beds), cardiology critical care unit (eight beds), coronary care unit (eight beds), and neurology ICU (eight beds).

Subjects

A convenience sample of staff nurses (90 out of 107), who are working in medical critical care units at the mentioned hospital.

Tools

Three questionnaires have been used to collect data for the present study:

Tool 1: Nurse–Nurse Collaboration Scale: it is adopted from Dougherty and Larson (2010) to assess the study participants perception about collaboration behavior. It consisted of two parts:

First part: personal data of the study participants such as age, sex, marital status, level of education, position, and years of experience.

Second part: nurses’ collaboration behavior scale that consists of 20 items.

The scoring system

Three-points Likert scale as follows: disagree (1), neutral (2), and agree (3). Total scores for all items were 60. Total scores were expressed as percentage, cutoff point is 60% scores of less than 60 indicates low perceived collaboration, score of (60–<75%) indicates moderate perceived collaboration, and score of (≥75%) indicates high perceived quality of collaboration (Aldeeb and El-Demerdash, 2016).

Tool 2: Quality of Work Life Questionnaire was developed by Brooks and Anderson (2005) and modified by the researcher, to assess the study participants perception about quality of work life and it consists of four dimensions including 39 items as: work life/home life factor (six items), work design factor (nine items), work context factor (19 items), and work world factor (five items).

The scoring system

Three-point Likert scale as follows: (1=disagree, 2=neutral, and 3=agree). Total scores=117 scores. The participant who had a score more than 75% (90) indicated a high level of perceived quality of work life, if the score is from 65 to 75 (78–90) indicated a moderate level of perceived quality of work life, and if less than 65 (78) indicated a low level of perceived quality of work life (Ibrahim and EL-Gazar, 2018).

Tool 3: Job Satisfaction Questionnaire is adopted from Amr and Fekery (2011) to assess the study participants perception to their job satisfaction. It comprises six components and 28 items as: supervision (seven items), nature of work (four items), communication (four items), coworker relationship (four items), promotion (six items), and work pressure (three items).

The scoring system

Three-point Likert scale as follows: (1=dissatisfaction, 2=neutral, and 3=satisfaction). Total scores=84 scores. Cutoff point of less than 35% is considered low level, from 35% to less than 70% is considered moderate level, and from 70% to more is considered high level (Fletcher, 2016).

Tools validity and reliability

Validity

The three tools’ contents were tested for its content validity through three expertises, including three professors from Cairo University’s Faculty of Nursing, two from the nursing administration department, and one from the psychiatric nursing department. Clarity, content coverage, phrasing, length, format, and overall appearance were all evaluated by each expert. To assure the accuracy of translation, a double translation was performed: English–Arabic–English.

Reliability

Data collection tools’ reliability was tested by Cronbach’s alpha test, which was equal to 0.89 for the collaboration behavior scale, 0.91 for the quality of
work life scale, and 0.93 for job satisfaction questionnaire. This shows that the study tools are highly reliable.

**Pilot study**
A pilot study was conducted on 10% of the study participants to test the feasibility and applicability of study tools, as well as to estimate the time required to fill out questionnaires. Based on the pilot study no modification was done in questionnaires. The pilot sample was included in the total study sample.

**Ethical consideration**
An official approval to conduct the study was obtained from the ethics research committee at the Faculty of Nursing, Cairo University. Informed consent was obtained from the participants. Participation in the study is voluntary. The participants had the right to withdraw at any time without any rationale, and all information was kept confidential.

**Procedure**
An official approval to conduct the study was obtained from the ethics research committee of the Faculty of Nursing, Cairo University. A letter from the Faculty of Nursing was sent to the director of selected hospitals. The participants were invited to participate, the researcher introduced herself to the hospital administrators, nursing director, nursing supervisors, unit nurse managers, and staff nurses in each selected unit. After an oral explanation and a written consent were obtained the researcher distributed the questionnaires to them during different shifts. The questionnaires were completed in 30–45 min. Data was collected during a 3-month period (beginning of July to the end of September 2021).

**Statistical analysis**
The data collected from the participants were tabulated and analyzed using the Statistical Package for the Social Sciences (SPSS, Cairo, Egypt) program, version 24. The data were analyzed using descriptive statistics such as means, and SDs and frequency distribution; for comparison between more than two means, the $F$ value of analysis of variance was computed. Correlation between variables was evaluated using Pearson’s correlation coefficient ($r$) test. The significant level of all statistical analyses was set at $P$ value less than 0.05.

**Results**
Table 1 depicts that 36.7% of the studied participants were in the more than or equal to 40 age group. The majority (90%) were females and 54.4% of participants had 15 years of experience and more.

Figure 1 displays that the highest percentage (72.30%) of studied participants were married, while 27.70% of them were single.

Figure 2 illustrates that 57.80% of the studied participants had technical nursing diploma, while 25.60% of them had an associated degree in nursing and only 16.70% of them had a bachelor's degree.

Table 2 clearly shows that the participants agreed about most of collaboration behavior items. Around two-thirds (64.4%) of the participants agreed that they listen to each other’s opinions and suggestions, and 57.8% agreed that they support each other as team members and work as partners. On the contrary, more than quarter (28.9%) and 34.4% of nurses disagree and were neutral, respectively, regarding no qualms in sharing their ideas with one another.

Table 1 Frequency distribution of staff nurses regarding their personal data ($N=90$)

<table>
<thead>
<tr>
<th>Personal data</th>
<th>$n$ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
</tr>
<tr>
<td>&lt;25</td>
<td>12 (13.3)</td>
</tr>
<tr>
<td>25 to &lt;30</td>
<td>25 (27.8)</td>
</tr>
<tr>
<td>30 to &lt;40</td>
<td>20 (22.2)</td>
</tr>
<tr>
<td>≥40</td>
<td>33 (36.7)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10 (10)</td>
</tr>
<tr>
<td>Female</td>
<td>80 (90)</td>
</tr>
<tr>
<td>Years of experience</td>
<td></td>
</tr>
<tr>
<td>&lt;5</td>
<td>13 (14.4)</td>
</tr>
<tr>
<td>5 to &lt;10</td>
<td>13 (14.4)</td>
</tr>
<tr>
<td>10 to &lt;15</td>
<td>15 (16.7)</td>
</tr>
<tr>
<td>≥15</td>
<td>49 (54.4)</td>
</tr>
</tbody>
</table>

Figure 1

Frequency distribution of staff nurses' marital status ($n=90$).
Table 3 displays that those participants were highly perceived for all-quality work life dimensions. The highest mean percent (82.1%) was for the dimension of coworkers, while 65.7% was the mean percent for work/home life.

(Table 4) depicts the highest mean percent (79.6%) for the coworker relationship dimension, followed by 79.4% for the nature of the worker dimension, while 66.5% was the mean percent for promotion.

Table 5 illustrates that the highest percentage of the participants had a moderate level of job satisfaction (78.9%). Only 4.4% of them had low level and 16.6% of them had high level.

Table 6 shows that there was statistically significant positive correlation between collaboration behavior as

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Table 2 Frequency distribution of staff nurses’ perception related to collaboration behavior (N=90)

<table>
<thead>
<tr>
<th>Collaboration behavior items</th>
<th>Agree [n (%)]</th>
<th>Neutral [n (%)]</th>
<th>Disagree [n (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have no qualms in sharing our ideas with one another</td>
<td>33 (36.7)</td>
<td>31 (34.4)</td>
<td>26 (28.9)</td>
</tr>
<tr>
<td>We acknowledge one another as a teamwork</td>
<td>46 (51.1)</td>
<td>24 (26.7)</td>
<td>20 (22.2)</td>
</tr>
<tr>
<td>We support each other as team members</td>
<td>52 (57.8)</td>
<td>17 (18.9)</td>
<td>21 (23.3)</td>
</tr>
<tr>
<td>We work as partners</td>
<td>52 (57.8)</td>
<td>16 (17.8)</td>
<td>22 (24.4)</td>
</tr>
<tr>
<td>We are committed to working together to achieve our objectives</td>
<td>49 (54.4)</td>
<td>24 (26.7)</td>
<td>17 (18.9)</td>
</tr>
<tr>
<td>We trust one another</td>
<td>46 (51.1)</td>
<td>21 (23.3)</td>
<td>23 (25.6)</td>
</tr>
<tr>
<td>There is a sharing of experiences and talents between us</td>
<td>50 (55.6)</td>
<td>27 (30.0)</td>
<td>13 (14.4)</td>
</tr>
<tr>
<td>We work as equals for the accomplishment of work goals</td>
<td>49 (54.4)</td>
<td>29 (32.2)</td>
<td>12 (13.3)</td>
</tr>
<tr>
<td>We work together as a team</td>
<td>51 (56.7)</td>
<td>19 (21.1)</td>
<td>20 (22.2)</td>
</tr>
<tr>
<td>We listen to each other’s opinions and suggestions</td>
<td>58 (64.4)</td>
<td>18 (20.0)</td>
<td>14 (15.6)</td>
</tr>
<tr>
<td>I feel that my input is truly valued</td>
<td>28 (31.1)</td>
<td>37 (41.1)</td>
<td>25 (27.8)</td>
</tr>
<tr>
<td>We work together as associates</td>
<td>49 (54.4)</td>
<td>27 (30.0)</td>
<td>14 (15.6)</td>
</tr>
<tr>
<td>There is a feeling of mutual regard and respect</td>
<td>50 (55.6)</td>
<td>29 (32.2)</td>
<td>11 (12.2)</td>
</tr>
<tr>
<td>We make an effort to resolve any conflicts which arise to our mutual satisfaction</td>
<td>41 (45.6)</td>
<td>31 (34.4)</td>
<td>18 (20.0)</td>
</tr>
<tr>
<td>We both actively participate in the relationship in order to meet our patient care goals</td>
<td>51 (56.7)</td>
<td>25 (27.8)</td>
<td>14 (15.6)</td>
</tr>
<tr>
<td>We share information openly with one another</td>
<td>43 (47.8)</td>
<td>32 (35.6)</td>
<td>15 (16.7)</td>
</tr>
<tr>
<td>We solve our problems together</td>
<td>40 (44.4)</td>
<td>32 (35.6)</td>
<td>18 (20.0)</td>
</tr>
<tr>
<td>We recognize the need to have a sense of ‘give and take’ in the relationship</td>
<td>45 (50.0)</td>
<td>32 (35.6)</td>
<td>13 (14.4)</td>
</tr>
<tr>
<td>We recognize our interdependence with one another in order to meet our goals</td>
<td>51 (56.7)</td>
<td>28 (31.1)</td>
<td>11 (12.2)</td>
</tr>
<tr>
<td>We are committed to work together as a team</td>
<td>50 (55.6)</td>
<td>27 (30.0)</td>
<td>13 (14.4)</td>
</tr>
</tbody>
</table>
perceived by staff nurses and quality of work life ($P=0.00$), while no statistically significant correlation was found between collaboration behavior and job satisfaction. It was observed from the same table that there was positive statistically significant correlation between quality of work life and staff job satisfaction.

Table 7 reveals that there were no statistically significant differences between personal data age, marital status, and years of experience of study participants and study variables. However, nurses’ sex had a statistically significant difference only with quality of work life. Also, the same table illustrates that there were statistically significant differences between educational level and collaboration behavior and job satisfaction.

Discussion

In the face of a variety of local, national, and global issues, proficient collaboration inside and beyond health care is essential for managing the various commitments and responsibilities of nurses. Not only are good interprofessional nurse–nurse interactions vital for staff nurses, they are also too critical for patients and health-care organizations (Lee and Doran, 2017). To offer safe, competent nursing practice, to achieve quality of work life, and to attain quality of patient care, professional collaboration among employees and inside organizations is critical. Nurses are required to work collaboratively with patients, coworkers, and staff members of health care not only for attaining the patient needs but also for the satisfaction of health-care providers (Al-Hamdan et al., 2018). In like manner, expanding effective collaboration between nurses is vital in ensuring a secure and successful healthy environment for employees and patients (Metwally and Hussein, 2016).

The findings of the current study showed that majority of staff nurses had high perception of collaboration behavior items subscales. According to Ylitormanen
et al. (2019), nurses had the highest mean scores of collaboration behavior in the majority of collaboration behavior items. Also, a study by Abd El-Aziz (2017) found out that nurses were highly satisfied with the collaboration items. In the same issue Aldeeb and Eldemerdash, (2016) discovered that half of the nurses had a high perception level of collaboration among nurses and about one-quarter of them had moderate perception level of collaboration among nurses. On the contrary, Moore et al. (2017) found that nurses had the lowest mean score toward perception of collaboration behavior subscales. This result may well be ascribed to staff nurses’ awareness that working together as a team aid in resolving any conflict, increasing team trust, increase respect, and cordial relationships; in addition, more experienced nurses can help train and instruct the less experienced member in problem-solving and decision-making procedures.

Current study showed that highest percentage of participants highly agree with listening to each other’s opinions and suggestions, followed by providing support to one another as team members and working as partners items. This could be interpreted as staff nurses had knowledge about the importance of working together to develop trust, reduce of work stress, assist in conflict resolution, and build mutual respect among nursing staff, as well as develops employee self-confidence, satisfaction, continuity of patient care, and create a healthy environment to achieve quality of work life and job satisfaction. Findings of the current study were consistent with Amer (2018), who reported that the approximately more than half of nurses listen to each other’s perceptions and opinions. While these findings were not in agreement with the results of Sheehan (2016), Smith et al. (2020), who found that most of the nurses were not listening to coworkers’ opinions and suggestions. Also, according to Gupta et al. (2019) the majority of nurses had active participation and worked together as a team. However, the current study disagreed with Aristidou and Barrett (2018), who said that most of the nurses had a low perception related to work with members as a team.

Concerning staff nurses’ perceptions to quality of work life dimensions, the current study found that study participants highly perceived the quality of work life dimensions. This may well be related to the ability of the staff to balance work design, safe working environment with and coworker job change. This finding was supported by Suleiman et al. (2019), who reported that the majority of care providers had a high quality of work life level, but the minority of staff nurses had a low quality work level. This result was opposed by Fasl (2017), Hemanathan et al. (2017), who said that most of the nurses had a moderate level of quality of work life.

On the other hand, the result of the current study showed that staff nurses had the least mean percentage of total quality of work life regarding work and home dimension. This could be due to lack of hospital resources such as nursery for children, change of work schedule, lack of comfortable rooms, inability to make balance between their work and family needs, lack of income and insufficient holiday time for family, all of which have an effect on staff nurses’ quality of work life. This finding agreed with Faraji et al. (2017), who found that 60% of nurses had low levels of quality of work life. These findings contradicted the results of Kelbiso et al. (2017) and Suleiman et al. (2019) who found that 30% of the participants were incapable to adjust work and domestic life.

In relation to staff nurses’ perception about job satisfaction, this study revealed that that the highest percentage (78.9%) of nurses who had a moderate level of job satisfaction. This could be because the staff nurses enjoy their work, can complete tasks quickly, their supervisor allows them the chance to be responsible for work plan and to develop professional skills, goal of organization was clear, there was an effective relationship between the health teams, satisfying income, the staff appreciated the importance of team spirit in work place, and satisfying chance for promotion. The findings were consistent with Pakpour et al. (2019) who reported that the staff nurses agreed that fair supervision was present. In the same line, McCay et al. (2018) and Nehad and Hussien, (2018) reported that the majority of nursing staff had prior experience with appropriate supervisory communication. These findings contradicted those of Albashayreh et al. (2019) who found that most of the nurses were dissatisfied with their jobs. Also, the result was incongruent with Li et al. (2020) who claimed that most of the nurses had a greater degree of job satisfaction.

However, the results indicated a statistically significant positive correlation between nurses’ collaborative behavior and quality of work life. This could be because nursing leaders provide professional collaboration for nurses in work settings through dynamic support, working as a team, respecting each other, and resolving any struggle with them, which can lead to a balance between collaboration and quality of work life. In agreement with these results, Gougeon
et al. (2018) and Lemetti et al. (2017) revealed that there was statistically significant difference between nursing staff cooperation and quality of work life.

Also, the present study indicated no correlation between collaborative behavior and job satisfaction. This could be due to nurses unawareness about the nature of working in teams or working in a healthy environment to improve patient care, reduce nurse’s turnover to increase staff satisfaction. In agreement with these results, Labrague et al. (2021) found that nurse collaboration has no significant relationships with their satisfaction. However, the present study showed that the quality of work life had a statistically significant correlation with job satisfaction. This could be because the health organizations can improve all of the aspects of quality of work life in order to increase job satisfaction. They can make the circumstances in work environment for illustrating the abilities and creativities of staff and create proper opportunities for success and participation in decision-making, safety, job elevation, and staff dynamics. This finding agrees with Fletcher (2016), Usha and Rohini (2018), Prapas and Mavreas (2019) who found that there is a positive relationship between components of quality of work life and job satisfaction. Also, this finding agrees with Zakerian et al. (2020), who stated a nonsignificant relationship between aspects of work life and job satisfaction.

Studying the relation between staff nurses’ perception of studied variables and their personal data, the current study found statistically significant differences between nurses’ educational level and quality of work life and satisfaction. This finding was in the same line with Aldeeb and El-Demerdash (2016), who found that there is a relation between nurses’ awareness of total quality work life and educational level. This finding contradicted that of Kamel et al. (2019) who found a strong link between nurses’ quality of work life and age. The current study findings were consistent with Nursalam et al. (2018), who found a positive relationship between education level and job satisfaction. On the contrary, Prapas and Mavreas (2019) found no relation between educational level and work satisfaction. In addition, the current study indicated a statistically significant difference between sex and quality of work life. This was in line with the findings of Hemanathan et al. (2017), who discovered no statistically significant difference between the quality of work life score and sex.

## Conclusion

It was concluded from the findings of the current study that, nurses of the study had a high perception of nurse collaboration behavior in all subscales, and quality of work life items while they had a moderate level of job satisfaction. There was a statistically significant positive correlation between nurse collaboration behavior and quality of work life, but no correlation was found between nurse collaboration behavior and job satisfaction. There was a positive statistically significant correlation between staff nurses’ quality of work life and their job satisfaction.

## Recommendations

The following recommendations are suggested in the light of the findings:

1. Nurse managers should display collaboration behaviors to construct an engaging climate, collaborative relationship with nurses and the health team to preserve the quality of work life.
2. The hospital administration should organize workshops about collaboration behavior that emphasizes the significance and value of collaboration behavior between health-care teams.
3. Nurse supervisors encourage staff nurses to share their ideas, experience by articulating the goal and methods of technology for improving nursing care and quality of work life.
4. Education programs are required for nurses to create skills and grow their careers to improve quality of work life and job satisfaction for them.
5. Hospital administration must develop a strategy to improve and promote nurses’ quality of work life and their work satisfaction.
6. Nurse managers should maintain a teamwork spirit, and a healthy work environment to improve staff nurses job satisfaction.
7. Hospital administration should develop some interventions and be planned concerning the improving quality of work life and its efficiency should be evaluated.
8. Hospital administration should develop a system of promotion and incentive based on fairness to identify distinguished staff.
9. Hospital administration must regularly monitor nurse job satisfaction and resolve points of dissatisfaction to encourage staff affiliation with the organization and improve quality of work life.
10. Replicate the study on a larger sample and in other health-care settings to ensure generalizability.
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Conflicts of interest
There are no conflicts of interest.

References


