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Research article

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Abstract

BACKGROUND: There is a paucity of evidence regarding nurses’ experience in different areas of Egypt. A previous pilot unpublished study conducted in the Port Said Technical Nursing Institute, and based on 36 participants, showed almost half of nurses satisfied with their job, as well as salary and work-load as main reason for dissatisfaction as the main problems. We explored job satisfaction of nurses working in public health services of the Port Said Governorate and inform future healthcare provision and policy.

METHODS: A Cross sectional study including nurses of different Units was conducted. Questionnaires were delivered in a sample of primary health care facilities as well as in the Governorate Public Hospital. Following literature review eight components were identified as contributors to job satisfaction; two closed questions for each of the eight components and two open questions were developed for a total of 18 questions.

RESULTS: The final under-study population consisted of 285 individuals. Almost 40% of the participants at the study felt safe in its clinical environment while around 10% completely disagree on this. Almost 70% of participants reported agreement on high work load because of shortage of colleagues in the respective clinical area while almost 60% disagree on the fact they were not able to give proper care because of workload. Almost 85% of nurse under-study reported that salary did not cover their living cost and only 13% of them believed they earned a fair salary. Almost 60% agree on the fact that they have regular opportunities to develop in their career.

CONCLUSION: Increasing job satisfaction among nurses in Egypt is critical to ensure quality of care for patients and aspect like salary, rewarding by coordinators and cooperation with colleagues deserve attention.

Background

Job satisfaction is a multifaceted concept which covers positive emotional, physical, psychological, moral and social gratification or contentment that individuals derive from their chosen profession [1].

In health services, and more specifically in the area of care provided by nurses, job satisfaction has an impact on patient satisfaction, nurse performance, retention of nursing staff and absenteeism, nurses’ commitment to the organization, organisational change and the nursing profession, working environment/conditions, relationship with co-workers and managers, and other relevant factors [2], [3], [4], [5].

We built on the previous pilot study carried out in the Port Said Technical Nursing Institute and based on 36 participants, which showed almost half of nurses satisfied with their job, as well as salary and work-load as main reason for dissatisfaction as the main problems.
Using the same research question “What is the level of job satisfaction of nurses working in public hospitals in Port Said?” we conducted a study with representation of all the public health structures of the Port Said Governorate.

**Methods**

**Study design**

A Cross sectional study including interviews at health facility with nurses of different Units was conducted. Questionnaires were delivered in a sample of primary health care facilities as well as in the Governorate Public Hospital.

Health facilities were randomly selected using population proportionate to the size (PPS) of the estimated population of nurses in all the public structures in the Governorate.

**Sample size**

Considering the number of nurses in the Port Said Governorate being around 1,100 individuals, and assuming a baseline proportion of 50 for the indicator of interest, a percent response of 90% of those invited to participate in the surveyed population, and a power to detect a difference of 90% and an alpha error of 0.05 for the total study sample, our sample size consisted of 300 participants.

**Questionnaires**

Following literature review eight components were identified as contributors to job satisfaction; two closed questions for each of the eight components and two open questions were developed for a total of 18 questions (Table 1).

Questionnaires were translated from the English language version into Arabic and were tested in the previous pilot study in 4 hospitals in Port Said.

**Statistical analysis**

A detailed description of the overall study population with stratification by health services and specialties as well as socio-demographic variables was performed. A table reporting percentage and 95% confidence interval of each answer to each item of the questionnaire was produced.

Number and proportion of all answers to the two open questions were computed.

**Results**

The under-study population consisted of 285 individuals after the refusal of 10 (10/295 = 3.4%) nurses to participate.

Participants included a good representation of the General Hospital and Primary Health Facilities in the Port Sais Governorate: 36 nurses from Al Zahouer Hospital, 11 from El Masah el Bahary Hospital, 35 from
El Naser Hospital, 16 from the Epidemic Hospital, 12 from the Ophtalmology Hospital, 32 from Port Fouad Hospital, 58 from Port Said General Hospital, and 85 from Primary Health Centres.

As far as the single Medical Units are concerned, 31 participants came from the ICU, 5 from the teams of Infection Control, 46 from Inpatient Department, 12 from Pediatric Department, 6 from the Blood Bank, 29 from the Emergency Department, 11 from the Operation Theatre, and 105 from Outpatient Department, and 40 from Other specialties like nurses working in Sterilization or X-Ray.

The under-study population was represented in majority by female nurses (N = 274; 96.1%) and most of participants were married (N = 258; 90.5%).

Most of interviewed were staff nurses (N = 241; 84.6%), followed by head nurses (N = 19; 6.7%), supervisors, matrons and others with less than 5% of the total population.

Around one third of participants was working for more than 20 years (N = 102), one fifth was working between 10 and 14 years (N = 61), one fifth between 15 and 20 years (N = 59), and another one fifth was working for less than 10 years (N = 63), with only 26 nurses having worked for less than 5 years.

Almost 40% of the participants at the study felt safe in its clinical environment while around 10% completely disagree on this.

Two thirds of participants agree/strongly agreed on the issue that working environment make them feel anxious and stressed, while 10% partly agree and slightly less than 25% disagree.

Slightly more than 85% of the under-study population agree on the feeling of being part of a team when working in their clinical area.

The distribution of nurses who felt supported by their manager was balanced, with around 40% of agreement, 40% of disagreement, and 20% partly agreeing on the subject.

Almost 70% of participants reported agreement on high work load because of shortage of colleagues in the respective clinical area while almost 60% disagree on the fact they were not able to give proper care because of workload.

Almost 85% of nurse under-study reported that salary did not cover their living cost and only 13% of them believed they earned a fair salary.

Around 55% of participants has the opportunity to express their opinion on patient care, whilst 15% partly agreed on this, and 28% disagree.

When questioned on a) whether supervisor gives responsibility when appropriate and on b) whether schedule changes are accomodated, we see the same pattern as in the previous question with almost 55% agree, around 15% partly agree, and the rest of the study population disagree.
Almost 60% agree on the fact that they have regular opportunities to develop in their career.

Slightly more than 60% of participants found their job fulfilling, while only 6% partly agree and more than 35% disagree.

When asked on what they enjoyed most of their job, 142 (56.1%) nurses under study replied “helping others”, which mainly include the healing of patients; on the same matter, 64 (25%) indicated the “cooperation with colleagues” while a minority reported “love for the job” (7%), “gratitude from patients” (5%) and “others”.

Lack of gratitude and attitude of patients was the most cited answer for what the enjoyed the least (N = 49; 23%), followed by the lack of organization at work (N = 45; 21%), no reward from manager (N = 35; 17%), bad cooperation with colleagues (N = 28; 13%), low salary (N = 14; 6.7%), and others.

Table 1. Questionnaire with percentage results and 95% Confidence Interval categorized into five categories for 285 nurses in Port Said, Egypt.

Questions Strongly agree Agree Partly agree Do not agree Definitely disagree
<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>95% CI</th>
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<th>%</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feel safe when working in my clinical environment</strong></td>
<td>8.1</td>
<td>5.4–11.9</td>
<td>39.6</td>
<td>34.1–45.5</td>
<td>10.1</td>
<td>7.1–14.3</td>
<td>32.2</td>
<td>27.1–38.0</td>
</tr>
<tr>
<td><strong>Working environment makes me feel anxious and stressed</strong></td>
<td>23.1</td>
<td>18.6–28.4</td>
<td>43.8</td>
<td>38.2–49.7</td>
<td>10.2</td>
<td>7.1–14.3</td>
<td>20.7</td>
<td>16.4–25.8</td>
</tr>
<tr>
<td><strong>In my clinical area I feel I am part of a team</strong></td>
<td>20.7</td>
<td>16.4–25.8</td>
<td>64.5</td>
<td>58.8–69.9</td>
<td>4.9</td>
<td>2.9–8.1</td>
<td>8.4</td>
<td>5.7–12.3</td>
</tr>
<tr>
<td><strong>I feel supported by the manager</strong></td>
<td>7.4</td>
<td>4.8–11.1</td>
<td>33.7</td>
<td>28.4–39.4</td>
<td>14.7</td>
<td>11.1–19.4</td>
<td>35.4</td>
<td>30.1–41.2</td>
</tr>
<tr>
<td><strong>My work load is too high because not enough nurses in my clinical area</strong></td>
<td>31.7</td>
<td>26.5–37.4</td>
<td>37.3</td>
<td>31.8–43.1</td>
<td>5.3</td>
<td>3.0–8.6</td>
<td>23.6</td>
<td>19.0–28.9</td>
</tr>
<tr>
<td><strong>I cannot give proper care because too high work load</strong></td>
<td>10.9</td>
<td>7.7–15.1</td>
<td>21.7</td>
<td>17.3–26.9</td>
<td>9.8</td>
<td>6.8–13.9</td>
<td>50.1</td>
<td>44.3–56.0</td>
</tr>
<tr>
<td><strong>My nursing salary covers my living cost</strong></td>
<td>0.7</td>
<td>0.1–2.8</td>
<td>9.1</td>
<td>6.3–13.1</td>
<td>5.6</td>
<td>3.4–9.0</td>
<td>38.6</td>
<td>33.1–44.4</td>
</tr>
<tr>
<td><strong>I believe I get a fair salary</strong></td>
<td>1.4</td>
<td>0.5–3.7</td>
<td>12.0</td>
<td>8.7–16.3</td>
<td>6.3</td>
<td>4.0–9.8</td>
<td>37.7</td>
<td>32.2–43.5</td>
</tr>
<tr>
<td><strong>I have the opportunity to express my opinion on decision about patient care</strong></td>
<td>8.1</td>
<td>5.4–11.9</td>
<td>49.1</td>
<td>43.3–54.9</td>
<td>14.7</td>
<td>11.1–19.4</td>
<td>22.8</td>
<td>18.3–28.1</td>
</tr>
<tr>
<td><strong>My supervisor gives me responsibility when appropriate</strong></td>
<td>9.5</td>
<td>6.6–13.5</td>
<td>47.4</td>
<td>41.6–53.2</td>
<td>13.3</td>
<td>9.8–17.8</td>
<td>27.7</td>
<td>22.8–33.2</td>
</tr>
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Discussion

As mentioned by Whitman et al., understanding how to improve job satisfaction as an outcome is important as it relates to employee health, productivity, and job performance [6]. Specifically, nursing satisfaction is a global well-recognized issue nowadays because of its direct consequences on the quality and safety of patient care services.

This small study highlighted how nurses in Port Said choose and like their job due to the spirit of “helping others”. However, critical aspects are likely to undermine this spirit. Aspects like lack of organization, no reward from managers, bad cooperation with colleagues and especially low salary may well be cause of stress and anxiety, which in turn hampers good performances.

In fact, several studies have reported that higher nurse satisfaction is associated with better quality and safety of care for patients [7], [8], [9].

While sufficient development of professional identity can contribute to individual autonomy, organizational behaviour is another important contributor to satisfaction [10].

Previous study conducted on Ethiopian nurses working in public hospital, reported that absence of mutual understanding at work was a significant predictor of low job satisfaction which was in accordance with our result. The Ethiopian study found also other similar predictors as excess work and lack of organization [11]. Jayasuriya et al. on the other hand concluded that work climate, supervisory support, community support were significant predictor of job satisfaction [12].

To our knowledge, there is a dearth of evidence on the relationship between nurses' job satisfaction and in-job and external characteristics (socio-demographic) particularly in countries suffering from nursing
shortage including Egypt.

Addressing specific issues such as low-salaries, attitude of supervisors towards positive relation with staff nurses and organization of work will be crucial to increase job satisfaction and consequently improve the quality of healthcare.

**Declarations**

**Ethics approval and consent to participate** This small survey was conducted in accordance with the agreement between the Ministry of Health of Egypt, the Health Directorate of Port Said and the Italian NGO AISPO, which operates under the umbrella of the Italian Cooperation in Egypt. The study was approved by the Ethics Committee of the Nursing Institute of Port Said. Questionnaires were completely anonymous and all participants gave written consent to use data for this report.

**Consent for publication** Not applicable

**Availability of data and material** All data analysed in this study are available under request

**Competing interests** The authors declare that they have no competing interests

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**Authors’ contribution** SB and SP analysed and interpreted data. SB wrote the first draft of the manuscript. SB and SP revised and finalized the final manuscript. All authors read and approved the final manuscript.

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**References**


