Evaluation of Staff Nurses’ performance at Primary Health Care Centers in Baghdad City

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Abstract
Objectives: This study aimed to evaluate the performance of staff nurses at primary health care centers in Baghdad city and to compare them with their demographic characteristics of age, gender and education.

Methodology: A descriptive design was carried out at Baghdad City’s primary health care centers from January 2nd 2019 to May 1st 2020. An instrument was developed for the purpose of the study. A non-probability, multi-stage purposive sample of (52) staff nurses was recruited from nurses working at primary health care centers in Baghdad City. The instrument is used to evaluate staff nurses’ performance which includes (62) items. These items are divided to (13) main domains related to evaluation of work quantity, work quality, punctuality of work, initiative, creativity and judgment, commitment to program goals, work with others ability, express self verbally and in writing ability, planning and organization, crisis response, solve problems ability, professional Skills in present activity, supervisory skills and response to supervision as dimensions of staff nurses’ performance. Questionnaire content validity is determined by a panel of (10) experts. Reliability was determined through Inter-observer technique. Data are collected by using the study instrument and the observation technique as data collection method. Data are analyzed using a systematic approach to statistical analysis

المستخلص
الأهداف: تهدف الدراسة إلى تقييم أداء الممرضات التمريضية في مراكز الرعاية الصحية الأولية في مدينة بغداد والمقارنة مع خصائصهم الديموغرافية للعمر والجنس والتعليم
منهجية البحث: دراسة وصفية تم إجراؤها في مراكز الرعاية الصحية الأولية في مدينة بغداد من 2019م إلى 1はありません. تم تطوير أداة الدراسة لغرض الدراسة عن طريق اختلاف متعدد المراحل من 52 من الملاحظات التمريضية العامة في مراكز الرعاية الصحية الأولية في مدينة بغداد التي تم استخدامها لتقييم أداء الممرضات التمريضية كقانون من 62 فقرة. وترتبط هذه الفقرات إلى (13) فقرة رئيسية والتي شملت تقييم كمية العمل، نوعية العمل، وفترة العمل، المهارات، والالتزام، والإبادة، والصحة، والقدرة على العمل مع الآخرين، والقدرة على التعبير عن الذات، وفهم العمل، والكتابة والخطية، والتنظيم والاستجابة للأزمات والقدرة على حل المشكلات، والممارسات المهنية في نهائية منتوح الانتهازي، والممارسات الإشرافية، واستخدام الإشراف كأي بعدين: أداء الممرضات التمريضية. تم تحديد صلاحية悸ًد الانتهازي من قبل لجنة من (10) خبراء وتم الحصول على موثوقية الانتهازي من خلال تقييم الانتهازي الداخلي. جمع البيانات من خلال استخدام أداة الاستبيان وتقنية المراقبة كوسيلة لمجمع البيانات وتحليل البيانات الإحصائية الوصفية التكرارات والنسب المنوية والمجمل الكلي للقيم والمديين وتحليل البيانات الإحصائية الإسلالية لاختبار t وتحليل التباين.

النتائج: أغلب الملاحظات التمريضية كان مستوى تقييمهم ضعيف في التقييم الكلي لافترق أداء الممرضات التمريضية التوصيات: يجب الحفاظ على التقييم الدوري ومتظم ومتوفاة أداء الممرضات التمريضية للممارسات المهنية على البنية للعاملين في مراكز الرعاية الصحية الأولية.

الكلمات المفتاحية: تقييم، أداء الممرضات التمريضية، مراكز الرعاية الصحية الأولية
of frequencies, percentages, total scores and ranges and inferential statistical data analysis of t-test and analysis of variance.

**Results:** The majority of the staff nurses have poor level of overall evaluation of the dimensions of staff nurses’ performance.

**Recommendations:** Periodic and regular evaluation and follow-up to staff nurses’ performance of the evidence-based practices have to be maintained at the primary health care centers.

**Keyword:** Evaluation, Staff Nurses’ Performance, Primary Health Care Centers

**Introduction:**

Nurse performance assessment plays an important role in ensuring high quality clinical care to achieve desired outcomes for the patient. The search for a valid and reliable method of accessing nurses' clinical performance has a long history and is still a matter of concern. One of the major challenges in designing a suitable method is to pick products that offer the most reliable and descriptive definition of successful performance in nursing.

In the literature, competence and competency were used to describe various clinical skills as related to the performance of nurses, including quality of care and productivity. The connection between these words is not only unclear in nursing but also in other health fields (1). Other nursing studies, new objects were developed for various aims. Concluded from a comprehensive analysis of research investigating the measurement of the clinical performance of nurses that following a 40-year history of research and creation of a nursing performance measuring instrument, For this reason there is none widely acknowledged. Continue research to seek reliable and valid measures (2).

Measuring the performance of nurses has been one of the most important studies for nurse researchers in recent years. The literature has emphasized that variety strategies were explored using a questionnaire for performance reviews of nurses assessed by specific raters. In previous attempts to develop performance appraisal tools a number of approaches have been implemented to produce and validate the content domain (1).
Methodology:

A descriptive design, using evaluation approach, is carried throughout the present study to evaluate the nurses’ performance in primary health care centers for the period of January 2\textsuperscript{nd} 2019 to May 1\textsuperscript{st} 2020.

The present study is conducted on (20) primary health care centers which are distributed as (5) main and (5) family medicine at Al-Russafa Health Directorate in Baghdad City and (5) main and (5) family medicine at Al-Karkh Health Directorate in Baghdad City.

A non-probability, multi-stage purposive sample of (52) nurses who are working at primary health care centers was recruited for the present study. Nurses were selected based on the following criteria:

A. Nurses, of all nursing educational backgrounds, who worked at the primary health care centers at the time of the study.
B. Nurses of both genders.

A questionnaire was developed for the purpose of the study. It is presented as follows:\(^{(4)}\):

**Evaluation of Nurses’ performance Questionnaire**

a. Work Quantity
b. Work Quality
c. Punctuality of Work
d. Initiative, Creativity and Judgment
e. Goals of Commitment to Program
f. Work with Others Ability
g. Express Self Verbally and in Writing Ability
h. Planning and Organization
i. Crisis Response
j. Solve Problems Ability
k. Professional Skills in Present Activity
l. Supervisory Skills
m. Responsiveness to Supervision

A pilot study was conducted for the determination of the questionnaires’ inter-observer reliability and content validity. Content validity of the questionnaire was determined by a panel of (10) experts. Inter-observer reliability is employed for evaluation of staff nurses’ performance Observation Tool. Cronbach’s alpha correlation coefficient is computed on responses of (10) staff.
nurses and indicated that \( r = 0.87 \) which is adequate.

Data are collected through the use of the study questionnaire and the observation technique as means of data collection. Each observation takes approximately (11-16) hours to be completed.

Data were analyzed using descriptive statistical data analysis method for frequencies, percentages, total scores and ranges and the inferential statistical analysis of t-test and variance analysis.

**Ethical Considerations**

The Institutional Review Board (IRB) at the University of Baghdad, College of Nursing approved the study to be conducted. The study protocol meets both the global & the Committee on Publication Ethics (COPE) standards of respecting humans subjects’ rights.

**Results:**

**Table (1): Overall Evaluation of Staff Nurses’ Performance**

<table>
<thead>
<tr>
<th>List</th>
<th>Overall Evaluation</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor (62-144)</td>
<td></td>
<td>49</td>
<td>94.23</td>
</tr>
<tr>
<td>Fair (145-227)</td>
<td></td>
<td>3</td>
<td>5.769</td>
</tr>
<tr>
<td>Good (228-310)</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>52</td>
<td>100</td>
</tr>
</tbody>
</table>

\( F = \text{frequency} \quad \% = \text{prevent} \)

Results out of this table reveal that the majority of the nurses have poor level of overall evaluation of the dimensions of nurses’ performance (94.23%).
Table (2): Comparative Difference between Staff Nurses’ Performance Relative to their Gender

<table>
<thead>
<tr>
<th>Source of variances</th>
<th>Levine’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Performance</td>
<td>Equal variances assumed</td>
<td>0.651</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td>0.029</td>
</tr>
</tbody>
</table>

F = F-Statistics, t = T-test, df = Degree of Freedom, Sig. = Level of Significance at p ≤ 0.05

Results out of this table depict that there is highly significant difference between nurses’ performance relative to gender.

Table (3): Comparative Difference between Staff Nurses’ Performance Relative to their Age

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2840.923</td>
<td>20</td>
<td>142.046</td>
<td>1.300</td>
<td>0.250</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3388.000</td>
<td>31</td>
<td>109.290</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6228.923</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df = Degree of Freedom, F = F-Statistics, Sig. = Level of Significance at p ≤ 0.05
Results out of this table indicate that there is no significant difference between nurses’ performance relative to age.

**Table (4): Comparative Difference between Staff Nurses’ Performance Relative to Their Education**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2793.16</td>
<td>3</td>
<td>931.05</td>
<td>13.00</td>
<td>0.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3435.75</td>
<td>48</td>
<td>71.578</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6228.92</td>
<td>51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df = Degree of Freedom, F = F-Statistics, Sig. = Level of Significance at p ≤ 0.05

Results out of this table reveal that there is highly significant difference between nurses’ performance relative to graduation.

**Discussion:**

1. **Overall Evaluation of Staff Nurses’ Performance.**

Analysis of such evaluation depicts that most of staff nurses have poor level of performance (Table 1). This can interpreted in a fashion that these staff nurses have experienced lack of training and orientation toward evidence-based practices.

A qualitative study conducted with a sample of (50) nurses is chosen from those working in the hospital departments, including medical, surgical, pediatric, intensive care, surgery, emergency and oncology. The study finding shows that specific challenges are faced by the nurses, performance evaluation method. Some of these concerns relate to the organizational context, while the others concern the structure, method and outcomes of the performance assessment system. (5).

A research developing performance appraisal system carried
out in Egypt. A purposive sample of (141) staff nurses and (55) nurse administrators who are working in five main Egyptian hospitals. The finding of the study depicts that the performance appraisal system used currently at selected hospitals is ineffective and needed to develop new performance appraisal system for staff nurses at hospitals (6).

2. Comparative Difference between Staff Nurses’ Performance Relative to Their Gender.

Analysis of such comparative differences between staff nurses’ evidence-based practices and performance relative to their gender indicates that there is no significant difference noted (Table 2). This can be interpreted in a way that the gender has no effect imposed on their evidence-based practices and performance.

A cross-sectional study aims to measure the beliefs and implementation of evidence-based practices among Saudi nursing students enrolled in the bridge program, and also attempted to identify factors that influence the beliefs and implementation of evidence-based practices. A convenient sample of (188) Nursing Bridge students is selected from universities in Saudi Arabia. The findings of the study show that the evidence-based practices’ beliefs of the respondents is primarily influenced by gender ($\beta=0.20, p<0.001$) (7).

3. Comparative Difference between Staff Nurses’ Performance Relative to Their Age.

Data Analysis depicts no significant relationship between evidence-based practices and nurses’ performance relative to their age (Table 3). This can be interpreted in a way that the age has no impact upon staff nurses’ evidence-based practices and performance.

A cross-sectional research aimed at assessing the beliefs and implementation of evidence-based practices among Saudi nursing students participating in the bridge program, as well as identifying factors affecting the beliefs and implementation of evidence-based practices. A convenience sample of (188) nursing bridge program students at universities in Saudi Arabia is
selected. The findings of the study show that the evidence-based practices’ beliefs of the respondent is primarily influenced by age ($\beta=0.17, p<0.05$) (7).

4. **Comparative Difference between Staff Nurses’ Performance Relative to Their Education**

Analysis of such comparative differences indicates that there is highly significant relationship between evidence-based practices and performance relative to their education (Table 4). This can be interpreted in a way that nurses’ education can meaningfully influence nurses’ evidence-based practices and performance.

A descriptive study carried out to determine the efficiency of the nurses employed in a hospital for training purposes. A sample of (136) health-care nurses who work. The study finding indicate that college graduates perform better than other nurses (61.8%) (8).

**Recommendations:**

1. Periodic and regular evaluation and follow-up to staff nurses’ performance of the evidence-based practices at the primary health care centers.

2. Further research can be conducted on large sample size with wide-range variables.

**References**


