Evaluation of Quality of Primary Health Care Services at Primary Health Care Centers in Baghdad City: A Comparative Study

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المستخلص
الأهداف: تقويم جودة خدمات الرعاية الصحية الأولية في مراكز الرعاية الصحية الأولية في مدينة بغداد والمقارنة بين مراكز الرعاية الصحية الأولية.

المنهجية: تم تصميم التقييم، باستخدام منهج التقييم، في دراسة تقييم جودة خدمات الرعاية الصحية الأولية في مراكز الرعاية الصحية الأولية في مدينة بغداد. تم اختيار عينة إحتمالية متعددة من المراكز المكونة من (36) مركزاً إدارياً ، (12) مركزاً إدارياً باناً ، و (12) مركزاً إدارياً ريفياً. نتمي إلى مراكز الرعاية الصحية الأولية في مدينة بغداد. يتم استبدال (5) أجزاء من (23) قرار (5) قرار، الموثوقية (5) قرار، الإستجابة (4) فئات، التأكيد والثقة (4) قرار، والتعايش (4) قرار. توصلت الدراسة إلى نتائج والبيانات من خلال الدراسة الاستقصائية. تم جمع البيانات من خلال استخدام الاستبانة وتقييم المقابلة وكود لجمع البيانات وتحليل البيانات من خلال تطبيق إسلوب تحليل البيانات الإحصائية والبيانات والبيانات والبيانات والبيانات والبيانات.

النتائج: انتشرت نتائج الدراسة إلى أن خدمات الرعاية الصحية الأولية في غالبية مراكز الرعاية الصحية الأولية في مدينة بغداد تتمتع بجودة عالية وتميز بجودة عالية وتميز بجودة عالية وتميز بجودة عالية وتميز بجودة عالية وتميز بجودة عالية وتميز بجودة عالية.

النتيجة: يمكن لمديري مراكز الرعاية الصحية الأولية أن يكونوا متخصصين بدرجة عالية للحصول على جودة أفضل لخدمات الرعاية الصحية الأولية مع تقديم المزيد من الفرص للممارسين في ميدان الرعاية الصحية الأولية. وعالية على ذلك يمكن إجراء دراسات بحثية على مستوى البلد لتحديد جودة خدمات الرعاية الصحية الأولية.

Abstract

Objective(s): To evaluate primary health care services at primary health care centers in Baghdad City and to compare between these primary health care centers relative to such quality.

Methodology: A descriptive design, using the evaluation approach, is study to Evaluation of quality of primary care services at primary health care centers in Baghdad City. A multistage probability sample of (36) health care centers was selected. The sample consists of (12) model centers, (12) urban centers, and (12) rural centers. A constructed questionnaire is composed of (23) items. It consisted of (5) parts that include intangible (5) items, reliability (5) items, response (4) items, emphasis and confidence (4) items and sympathy (5) items. Validity and reliability of the questionnaire are determined through pilot study. Data are collected through the use of the questionnaire and the interview technique as a means of data collection. Data are analyzed through the application of descriptive statistical data analysis approach of frequency, percentage, mean, range and total scores and inferential statistical data analysis approach of analysis of variance (ANOVA).

Results: Findings of the study indicate that the primary health care services at most of the primary health care centers have high quality and there is no difference between the primary health care centers based on such quality.
**Recommendations:** Managers of primary health care centers can be specialized with high degrees for better quality of primary health care services. Females can be presented with more opportunities to be managers. Periodic evaluation of primary health care services can be employed. Further and nation-wide research studies can be conducted for the determination of the quality of primary health care services.

**Key words:** Evaluation, Quality of primary care services, Primary Health Care Centers, Comparative Study

**Introduction:**

Primary health care (PHC) is essential health care that is a socially appropriate, universally accessible, scientifically sound first level care provided by a suitably trained workforce supported by integrated referral systems and in a way that gives priority to those most in need, maximizes community and individual self-reliance and participation and involves collaboration with other sectors. It includes the following: health promotion, illness prevention, care of the sick, advocacy, community development (1).

Primary care is the foundation of our healthcare system. As the first line of care in the community, our primary care professionals are often the first point of contact with patients. They provide holistic and personalized care for patients of different age groups. They treat acute conditions, and keep the population healthy through preventive measures such as targeted health screening. They also help to coordinate patients' care with other providers and help patients who require more specialized medical attention to navigate the healthcare system (2).

Primary health care Services refer to essential health care" that is based on "scientifically sound and socially acceptable methods and technology, which make universal health care accessible to all individuals and families in a community. It is through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. In other words, PHC is an approach to health beyond the traditional health care system that focuses on health equity-producing social policy. PHC includes all areas that play a role in health, such as access to health services, environment and lifestyle. Thus, primary healthcare and public health measures, taken together,
may be considered as the cornerstones of universal health systems (3).

Quality of primary health care service is one of the most important areas in the health services sector. There are a number of who can be of high value public health and private health, and the most prominent of these indicators (4).

1. Service has been closely associated with quality (quality) so far it is necessary. The adoption of a number of measures to indicate the level of satisfaction due to patients separated from the service Introduction and quality. In other words, this multidimensional measure is based on knowing the gap between what it realizes the consumer of the service and what he expects quality.

2. Quality has become a major dimension to be adopted as a basis for measurement and impact to indicate quality. It is dependence, responsiveness, emphasis (trust), empathy, palpability.

3. Quality in the health service. The service provided by the health center also indicates the level of response to what was expected.

Based on the early stated evidence, the present study ought to evaluate the quality of such services at the primary health care centers in Baghdad City.

**Methodology**

A descriptive design, using the evaluation approach, is employed to evaluate the quality of primary care services at primary health care centers in Baghdad city through November 3rd 2017 to May 12th 2018. Permission has been obtained from Al-Rusafa Health Sector and Al-Karkh Health Sector and primary health care centers in Baghdad City in order to conduct the present study.

The study was conducted in the model primary health care centers, the rural health centers and the urban health centers in the health sector of Al-Rusafa and Al-Akhrakh in Baghdad City.

A probability multistage sample of (36) health care centers is selected. The sample consists of (12) model centers, (12) urban centers, and (12) rural centers.

A questionnaire is designed and constructed to measure the variable underlying the study. The questionnaire is comprised of (5) domains that include intangibility (5) items, reliability (5) items, response (4) items, emphasis and confidence (4) items and sympathy (5) items that evaluate the quality of primary
health care services at primary health care centers.

Reliability and validity of the questionnaire are determined through pilot study from February 3rd 2018 to March 12th 2018. Internal consistency reliability is obtained through the use of split-half technique and computation of Cronbach alpha correlation coefficient. The result indicates that the correlation coefficient (r=0.87), which is adequate for the questionnaire to be a reliable measure. The content validity of the questionnaire is determined through panel of (14) experts. Their responses indicate that the questionnaire is adequately valid measure for the phenomenon underlying the study.

Data are collected through the use of the questionnaire and the interview technique as a means of data collection.

Data are analyzed through the application of descriptive statistical data analysis approach of frequency, percentage, mean, range and total scores and inferential statistical data analysis approach of analysis of variance (ANOVA).

**Results**

Table (1): Evaluation of the Quality of Primary Health Care Services

<table>
<thead>
<tr>
<th>Evaluation of Quality of Primary Health Care Services</th>
<th>Adequate (111-154)</th>
<th>Fair (66-110)</th>
<th>Inadequate (22-65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Primary Health Care Centers</td>
<td>11</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>Inadequate (22-65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Primary Health Care Centers</td>
<td>11</td>
<td>1</td>
<td>0</td>
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<tbody>
<tr>
<td>Rural Primary Health Care Centers</td>
<td>11</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Results out of these tables depict that the majority of model, urban and rural primary health care centers experience adequate quality of primary health care services.
Table (2): Comparative Differences between Model, Urban and Rural Primary Health Care Centers Relative to the Quality of the Primary Health Care services

<table>
<thead>
<tr>
<th>Primary Health Care Centers</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>841.917</td>
<td>8</td>
<td>105.240</td>
<td>3.065</td>
<td>.193</td>
</tr>
<tr>
<td></td>
<td>103.000</td>
<td>3</td>
<td>34.333</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>944.917</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>580.667</td>
<td>8</td>
<td>72.583</td>
<td>.798</td>
<td>.647</td>
</tr>
<tr>
<td></td>
<td>273.000</td>
<td>3</td>
<td>91.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>853.667</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>1001.250</td>
<td>8</td>
<td>125.156</td>
<td>7.989</td>
<td>.057</td>
</tr>
<tr>
<td></td>
<td>47.000</td>
<td>3</td>
<td>15.667</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1048.250</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df: Degree of freedom, F: F-statistics, Sig.: Level of significance

Results out of this table present no significant differences between these primary health care centers relative to the quality of primary health care services.

Discussion

Part I: Discussion of the Quality of the Primary Health Care Services

Analysis of such quality of care presents well-noted empirical evidence that the majority of the primary health care centers, regardless of their type, have experienced adequate quality of primary health care services with respect to all of its domains (Table 1).

Part II: Discussion of the Comparative Differences between Primary Health Care Centers Relative to the Quality of the Primary Health Care Services

Such comparative differences have indicated that all primary health care centers have adequately employed all the domains of the quality of primary health care services nevertheless of their types (Table 2). Such adequate employment includes the domains of intangibility, reliability, response, emphasis and confidence, and sympathy. This finding presents empirical evidence that the primary health care centers are seriously concerned about achieving the adequate extent for the quality of primary health care services.
In a comprehensive review, of the (128) studies are initially identified, (31) have met the inclusion criteria for the review. Studies identified are diverse in methodology and focus. Components of quality are reviewed in terms of access and effectiveness of both clinical and interpersonal care. Good access and effective care are reported for certain services including: immunization, maternal health care, and control of epidemic diseases. Poor access and effectiveness are reported for chronic disease management programs, prescribing patterns, health education, referral patterns, and some aspects of interpersonal care including those caused by language barriers. Several factors are identified as determining whether high-quality care is delivered. These have included management and organizational factors, implementation of evidence-based practice, professional development, use of referrals to secondary care, and organizational culture. The study finds that there is substantial variation in the quality of Saudi primary care services. In order to improve quality, there is a need to improve the management and organization of primary care services.

Professional development strategies are also needed to improve the knowledge and skills of staff (5).

In a cross-sectional “observational” study, the quality of Primary Health Care (PHC) provided to the elderly from their viewpoint. The study has selected a stratified random sample of elderly individuals, enrolled in 10 of the 20 Basic Health Units (BHU) in the City of Macaiba, State of Rio Grande do Norte, Brazil. After an interview conducted using the adult version of the primary care assessment tool (PCATool-Brazil), the quality level is estimated (0-10, based on desirable attributes) and the association between demographic and socioeconomic factors is analyzed. The participants (n = 100) assigned a score of fair (5.7) to Quality; longitudinally of care is awarded a high score (7.3), however Integrality (4.7), Family Orientation (4.1) and Accessibility (3.8) are considered weak. Socio-demographic factors linked to vulnerability (low income, rural area and older age) are positively associated with different PHC attributes. A margin for improvement in PHC attributes is observed, especially with respect to increasing the focus on the family, extending working hours in
BHUs and enhancing prevention of diseases and ensuing complications (6).

A descriptive-exploratory study aims to evaluate the quality care received by senior citizens in Primary Health Care (PHC) in the Unified Health System, with the objectives of contributing with the comprehensive implementation of humanized conduct and actions for this part of the population. A quantitative approach that was conducted in the city of Santa Cruz, which is located in the Brazilian state of Rio Grande do Norte, with a population of (130) senior citizens. In the results, the classification of the PHC services varied from good to reasonable. Regarding the assistance offered to the aging and comprehensive care, there were failures in accordance with how it’s recommended in the National Healthcare System. The study concludes, through the perspective of the elderly user, the need for the reformulation of the activities which are offered to this population and therefore the implementation of conduct for better service in the area of Primary Health Care (7).

An evaluation study is conducted to examine the experience of primary care center (PCC) users in Brazil, classified according to the quality of its structure, in relation to the aspects of accessibility, continuity, and acceptability. The source of information was the National Program to Improve Access and Quality of Primary Care in 2013-2014. A total of (109 919) interviewees in (24 055) PCCs comprised the sample. Results show that the structure of a PCC was associated with better indicators of accessibility (oral health and medicines) and continuity of care (patient navigation in the health system). No association was found between indicators of accessibility and the PCC structure (8).

A cross-sectional study was conducted in 2010 in Gjilan region, Kosovo, including a representative sample of (1039) PHC users (87% response). Patients' evaluation of PHC services was assessed through EUROPEP, a 23-item instrument tapping different aspects of medical encounter. Mean age of survey participants (56% females) is (41 ± 16) years. About 50% of the participants were satisfied with the overall quality of medical services, doctor–patient relationship and organization of care.
Younger (below median age), urban and employed PHC users reported a significantly higher satisfaction level with the overall health encounter quality. Conversely, there is no sex or educational differences. Considerably fewer PHC users in Kosovo were satisfied with the overall medical encounter compared with their European counterparts. This new and useful evidence may support health professionals and policy makers for improving the quality of PHC in Kosovo, a country struggling and mainstreaming all energies in order to get international recognition (9).

Recommendations
1. Periodic evaluation of primary health care services can be employed.
2. Further and nation-wide research studies can be conducted for the determination of the quality of primary health care services.

References: