

Impact of Family Physicians' Practices upon the Quality of Family Medicine Health Care Services at Model Primary Health Care Centers in Baghdad City

أثر ممارسات أطباء العائلة على جودة خدمات الرعاية الصحية لطب الأسرة في مراكز الرعاية الصحية النموذجية في مدينة بغداد
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المستخلص

الأهداف: لغرض تقييم ممارسات أطباء الأسرة وقياس أثرها على جودة رعاية طب الأسرة الصحية في مراكز الرعاية الصحية الأولية النموذجية في مدينة بغداد.

المنهجية: دراسة وصفية اعتمدت أسلوب التقييم لتقييم أثر ممارسات أطباء الأسرة على جودة رعاية طب الأسرة الصحية في مراكز الرعاية الصحية الأولية النموذجية في مدينة بغداد تم إجرائها خلال الخامس عشر من أيار (٢٠١٧) ولغاية العشرون من آب (٢٠١٧). الدراسة أجريت على خمس من مراكز الرعاية الصحية الأولية النموذجية لطب الأسرة من جانبي الرصافة والكرخ. العينة جمعت لتكون (٧٦) طبيب أسرة. وكانت العينة المتاحة من المرضى (١٢٤) الذين يدومون على زيارة هذه المراكز الصحية لطلب خدمات رعاية طب الأسرة الصحية. تم استخدام استمارة استبيان منظمة ذاتيا لجمع البيانات من أطباء الأسرة. قائمة العناصر الثنائية تم الحصول عليها من خلال عملية دلفي. التي تحتوي على "أفعل" أو "لا أفعل". يتم توضيح رعاية المريض الداخلي عن طريق (٢٥) فقرة، الرعاية العاجلة والإجراءات البسيطة يتم اختبارها عن طريق (٢٧) فقرة والرعاية الإسعافية تتضمن (١٦) فقرة. استمارة جودة الرعاية الصحية الاستبائية تم تطويرها لغرض الدراسة. بلغ عدد البنود الواردة في الاستمارة الاستبائية (١٨) فقرة. تم تحديد صدق الإتساق الداخلي من خلال حساب معامل ارتباط الفا كرونباخ. تم تحديد ثبات محتوى الاستمارة الاستبائية من خلال مجموعة من (١٠) خبراء. جمعت البيانات من خلال استخدام الاستمارة الاستبائية والمقابلة المنظمة كوسيلتين لجمع البيانات. ادخلت البيانات الخاصة بالمركزين الى الكمبيوتر بواسطة تطبيق الحزمة الإحصائية للعلوم الاجتماعية، الأصدار (٢٣) لنظام الويندوز (١٠) (SPSS-23) وتم التعامل معها باستخدام تطبيق الإسلوب الإحصائي الوصفي لتحليل البيانات والذي تضمن (التكرارات، النسبة المئوية، الوسط الحسابي، القيمة الكلية ومعامل ارتباط الفا كرونباخ). ونهج تحليل البيانات الإحصائية الاستنتاجية (الإنحدار الخطي البسيط).

النتائج: كشفت الدراسة أن غالبية أطباء الأسرة يعانون من قصور في أداء ممارسات الرعاية الصحية الأسرية. إن جودة خدمات الرعاية الصحية لطب الأسرة في مراكز الرعاية الصحية الأولية في بغداد من وجهة نظر المرضى ضعيفة (٨٢,٣٠%). أن تأثير ممارسات أطباء الأسرة على جودة خدمات رعاية طب الأسرة الصحية في مراكز الرعاية الصحية الأولية النموذجية في مدينة بغداد يبين أن ممارسات أطباء الأسرة لم تحدث تغييراً ملحوظاً على جودة خدمات رعاية طب الأسرة الصحية.

التوصيات: يمكن لأطباء الأسرة إتباع معايير ممارسات طب الأسرة لتوفير جودة خدمات الرعاية الصحية لطب الأسرة. ويمكن لوزارة الصحة، قسم الرعاية الصحية الأولية، أن ترصد بصورة دورية تنفيذ معايير ممارسات أطباء الأسرة من أجل تحسين نوعية خدمات الرعاية الصحية لطب الأسرة. ويمكن تقييم خدمات الرعاية الصحية لطب الأسرة على أساس منتظم لفائدة المرضى الذين يحضرون إلى مراكز الرعاية الصحية الأولية للحصول على هذه الرعاية.

Abstract

Objective(s): To evaluate the family physicians' practices and to measure its impact upon the quality of family medicine health care in Baghdad City model primary health care centers.

Methodology: A descriptive study, using the evaluation approach, has evaluated the impact of family physicians' practices upon quality of healthcare in Baghdad's Model Primary Health Care Centers of Family Medicine. It is carried out during 15th of May – 20th of August 2017. The study is conducted at five model primary health care centers of family medicine from two districts; AL-Rusafa and AL-Kurkh. Sample size is calculated to be (76) family physicians. Convenient sample of (124) patients who are attending these primary health care centers to seek family health care services. Adopted structured self-administered questionnaire is used to collect data from the Family physicians. The list of dual-forced items obtained through the Delphi process, which include "Do" or "Don't do". Inpatient care is clarified with (25) statements, urgent care and minor procedures tested in (27) statements and ambulatory care includes (16) statements. The quality of health care questionnaire is developed for the purpose of the study. The overall number of items included in the questionnaire is (18) items. Internal consistency "split-half" reliability is obtained through computation of Cronbach's alpha correlation coefficient. Content validity of the questionnaire is determined through panel of (10) experts. Data are collected through the utilization of the questionnaire and the interview technique as means of data collection. Data of both stages is entered to computer using Statistical Package of Social Science, Version (23.00) for windows(10) (SPSS-23) and are handled using descriptive statistical data analysis approach (frequencies, percentages, mean of scores, total scores and Cronbach's alpha correlation coefficient) and inferential statistical data analysis approach (simple linear regression).

Results: The study reveals that the majority of the family physicians has performance experienced inadequate of family health care practices. The quality of family medicine health care services in Baghdad's primary health care centers of the patients' perspectives is poor (82.30%). The impact of family physicians' practices upon the quality of family medicine health care services in Baghdad City model primary health care centers presents that family physicians' practices have not made noteworthy change on the quality of family medicine health care services.

Recommendations: Family physicians can follow the family medicine practices' standards to provide quality of family medicine health care services. The Ministry of Health Department of Primary Health Care can periodically monitor the implementation of family physicians' practices standards for the benefit of better quality of family medicine health care services. The family medicine quality of health care services can be valued on a regular base for the benefits of the patients who are attending the primary health care centers to seek such care.

Key words: Impact, Family Physicians' Practices, Quality of Health Care Services, Family Medicine

Introduction:

Family physicians possess distinct attitudes, skills, and knowledge that qualify them to provide continuing and comprehensive medical care, health maintenance, and preventive services to each member of a family regardless of gender, age, or type of problem (i.e., biologic, behavioral, or social)⁽¹⁾.

For example, Diabetes is one of the most rapidly increasing chronic conditions. Quality of life is enhanced when care of patients with diabetes is provided in a primary care setting without compromising quality of care⁽²⁾.

Family physicians do not just treat patients; they also care for people. This caring function of family medicine emphasizes the personalized approach to understanding the patient as a person, respecting the person as an individual, and showing compassion for his or her discomfort.

These specialists, because of their background and interactions with the family, are best qualified to serve as each patient's advocate in all health-related matters, including the appropriate use of consultants, health services, and community resources⁽¹⁾.

A study of the major determinants of health outcomes in all 50 U.S. states found that when the number of specialty physicians increases, outcomes are worse, but mortality rates are lower where there are more primary care physicians⁽³⁾.

The World Health Organization (WHO) emphasizes that primary care is the best way of coping with the illnesses of the 21st century and that better use of existing preventive measures could reduce the global burden of disease by as much as 70%. Rather than drifting from one short-term priority to another, countries should make prevention equally important as cure and focus on the rise in chronic diseases that require long-term care and strong community support. The provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community⁽⁴⁾.

For practical purposes, perception of primary care attributes accounts for appropriate use of resources, and patient outcomes are indispensable for quality care. Based on the 1978 Alma-Ata Declaration, the World Health Organization has proposed a global goal of achieving universal primary care with the following attributes: first contact care, person-centeredness, comprehensiveness and

integration, continuity of care, responsibility, and coordination⁽⁵⁾.

The purposes of this study are:

1. To evaluate family physicians' practices.
2. To evaluate quality of health care in Baghdad primary health care centers.
3. To measure the impact of family physicians' practices upon quality of health care in Baghdad's primary health care centers.

Methodology:

Primary health care Services in Baghdad City are provided through a network of more than (100) primary health care centers distributed all over Baghdad. This descriptive study using the evaluation approach has evaluated the impact of family physicians' practices upon quality of healthcare in Baghdad's Model Primary Health Care Centers of Family Medicine. It is carried out during 15th of May – 20th of August 2017. The study is conducted at only five model primary health care centers of family medicine from two districts; AL-Rusafa and AL-Kurkh.

The study pursued a two-stage approach as follows.

Stage I: Evaluation of Family Physicians' Practices

Such evaluation is employed throughout the use of adopted structured self-administered questionnaire to collect data from the Family physicians. Sample size is calculated to be 76 family physicians.

The questionnaire is in English and has four parts: personal, inpatient care, urgent care and minor procedures, and ambulatory care. The list of dual-forced items obtain through the Delphi process, which include "Do" or "Don't do" the item at one's current practice is used. Personal data includes age, gender, and years since graduation.

The overall number of the items include in the questionnaire is (68) items. Inpatient care is clarified with (25) statements. Urgent care and minor procedures tested in (27) statements includes symptoms, diagnosis, and procedures

which family physicians commonly are able to handle. Ambulatory care includes (16) statements about diagnostic measures, determining, and managing the disease.

In Japan a study carried out in 2015 to develop a questionnaire to measure Family physicians' practices ⁽⁶⁾. The research team has conducted a literature review to identify the basis for the question items using three potential item pools: International Classification of Primary Care, Second Edition ⁽⁷⁾, Recommended Curriculum Guidelines for Family Medicine Residents by the American Academy of Family Physicians ⁽⁸⁾, and Curriculum for Continuous Medical Education (Japan Medical Association 2009) ⁽⁹⁾.

Internal consistency "split-half" reliability is obtained through computation of Cronbach's alpha values for total Inpatient care, Urgent care and minor procedures, and Ambulatory care were 0.95, 0.94, and 0.87 respectively, which all satisfied good internal consistency. Content validity of the questionnaire is determined through panel of (10) experts.

Mean of scores is considered as a cut-off point poor, fair, good for evaluation. Mean of scores is measured as **Poor** (≤ 1.4), **Fair** ($= 1.5$), **Good** (≥ 1.6). Total scores are measured as inadequate (68-101) and adequate (102-136) for overall evaluation for family physicians' practices; inadequate (25-36.5) and adequate (36.6-50) for evaluation of family physicians' practices of inpatient care; inadequate (27-39.5) and adequate (39.6-54) for evaluation of family physicians' practices of urgent care and minor procedures; inadequate (16-23) and adequate (24-32) for evaluation of family physicians' practices of ambulatory care.

Stage II: Evaluation of Quality of Family Medicine Health Care Services at Model Primary Health Care Centers in Baghdad City

A questionnaire is developed for the purpose of the study. The overall number of items included in the questionnaire is (18)

items ⁽¹⁰⁾. Internal consistency "split-half" reliability is obtained through computation of Cronbach's alpha value of ($r = 0.83$), which is satisfied good internal consistency. Content validity of the questionnaire is determined through panel of (10) experts.

The questionnaire includes information under two main headings:

1. Information related of socio-demographic characteristics of the patients; these include general information age, gender, level of education, and marital status.
2. Information about patients' evaluation of quality of health care.

The data are collected by using the questionnaire which is filled through a structured interview with each patient who has just completed his (her) visit or contact to his (her) Family physician. Convenient sample of one hundred and twenty four patients, who are attending these primary health care centers to seek family health care services, is selected.

The overall number of the items included in the questionnaire is (18) items. Each item in the questionnaire generated through the focus group using a five-point likert scale always, often, sometimes, rarely, and never. Mean of scores was considered as a cut-off point poor, fair, good for evaluation. Mean of scores is measured as **Poor** (≤ 2.9), **Fair** ($=3$), **Good** (≥ 3.1). Total scores are measured as poor (18-41), fair (42-65) and good (66-90) for overall evaluation of quality of health care.

Data of both stages is entered to computer using Statistical Package of Social Science, Version 23.00 for windows (SPSS-23) and are handled using descriptive statistical data analysis approach (frequencies, percentages, mean of scores, total scores and Cronbach's alpha correlation coefficient) and inferential statistical data analysis approach (simple linear regression) to determine the impact of family physicians' practices upon the quality of health care.

RESULTS:**Table (1): Demographic Characteristics of Family Physicians (N=76)**

| Characteristics | Respondents | F | % |
|-------------------------------|-------------|----|---------|
| Gender | Male | 18 | 23.70 % |
| | Female | 58 | 76.30 % |
| Age | <35 | 32 | 42.10 % |
| | 35-44 | 21 | 27.60 % |
| | 45-54 | 17 | 22.40 % |
| | ≥55 | 6 | 7.90 % |
| Years since graduation | 0 ~ 10 | 29 | 38.20 % |
| | 11 ~ 20 | 25 | 32.90 % |
| | 21 ~30 | 19 | 25.00 % |
| | 31 ~ | 3 | 3.90 % |

F: Frequency, N: Sample size, %: Percent

This table presents the profile of family physicians, who have participated in the study, with 58 (76.30%) physicians are females and 18 (23.70%) are males. Regarding years since graduation, (38.20%) have ten years and less, while (61.80%) had more than (10) years.

Table (2): Overall Evaluation for Family Physicians' Practices

| Inadequate (68-101) | % | Adequate (102-136) | % |
|------------------------|---------|-----------------------|---------|
| 65 | 85.50 % | 11 | 14.50 % |

%: Percent

This table, depicts that the majority of family physicians' practices are inadequate 65 (85.50%), while the adequate are 11 (14.50%).

Table (3): Evaluation of Family Physicians' Practices of Inpatient care, Urgent care and Minor Procedures, and Ambulatory care

| Items | Inadequate (Range) | % | Adequate (Range) | % |
|---|-----------------------|--------|---------------------|--------|
| Inpatient care | 76 (25-36.5) | 100% | 0 (36.6-50) | 0% |
| Urgent care and minor procedures | 61 (27-39.5) | 80.30% | 15 (39.6-54) | 19.70% |
| Ambulatory care | 59 (16-23) | 77.60% | 17 (24-32) | 22.40% |

%: Percent

This table reveals that almost all of family physicians are inadequate 76 (100%), 61 (80.30%), and 59 (77.60%) with inpatient care, urgent care and minor procedures, and ambulatory care respectively, in terms of adequate are 0 (0%), 15 (19.70%), 17 (22.40%) with inpatient care, urgent care and minor procedures, ambulatory care respectively.

Table (4a): Mean of Scores for Items of Family Physicians' Practices of Inpatient Care

| Items | Do | Don't do | M.S | E |
|---|----|----------|------|------|
| A1: Inserting nasogastric tube | 13 | 63 | 1.17 | Poor |
| A2: Performing blood transfusion | 9 | 67 | 1.11 | Poor |
| A3: Deciding to apply gastrostomy to patients with recurrent aspiration | 0 | 76 | 1.00 | Poor |
| A4: Performing thoracentesis | 1 | 75 | 1.01 | Poor |
| A5: Performing paracentesis | 0 | 76 | 1.00 | Poor |
| A6: Collecting and evaluating atrial blood gas | 1 | 75 | 1.01 | Poor |
| A7: Intra-tracheal intubation | 4 | 72 | 1.05 | Poor |
| A8: Managing parenteral nutrition | 25 | 51 | 1.32 | Poor |
| A9: Exchanging enteral feeding tube and managing feeding tube problems | 16 | 60 | 1.21 | Poor |
| A10: Ventilating a patient with respiratory failure using bag valve mask | 3 | 73 | 1.03 | Poor |
| A11: Use of opioids for terminal patients | 19 | 57 | 1.25 | Poor |
| A12: Caring for symptoms other than pain for terminal patients | 27 | 49 | 1.35 | Poor |
| A13: Pain management for terminal patients using VAS score | 2 | 74 | 1.02 | Poor |
| A14: Interpreting brain CT scan | 0 | 76 | 1.00 | Poor |
| A15: Terminal care for non-malignant patients | 24 | 52 | 1.31 | Poor |
| A16: Inserting urinary tract catheter | 12 | 64 | 1.15 | Poor |
| A17: Initial treatment for shock state patients | 26 | 50 | 1.34 | Poor |
| A18: Explaining a terminal stage patient's condition to family | 21 | 55 | 1.27 | Poor |
| A19: Performing intravenous sedation and pain management | 34 | 42 | 1.44 | Poor |
| A20: Initial diagnostic approach for patients with disturbance of consciousness | 30 | 46 | 1.39 | Poor |
| A21: Providing counseling about life-prolonging treatment | 26 | 50 | 1.34 | Poor |
| A22: Diagnosing and treating delirium | 5 | 71 | 1.06 | Poor |
| A23: Evaluating the necessity and performance of lumbar puncture | 6 | 70 | 1.07 | Poor |
| A24: Interpreting brain MRI | 0 | 76 | 1.00 | Poor |
| A25: Initial diagnosis and management for stroke | 1 | 75 | 1.01 | Poor |

M.S: Mean of Scores, E: Evaluation, **Poor** (≤ 1.4), **Fair** ($= 1.5$), **Good** (≥ 1.6)

This table indicates that the mean of scores on all the items of family physicians' practices of inpatient care are poor.

Table (4b): Mean of Scores for Items of Family Physicians' Practices of Urgent Care and Minor Procedures

| Items | Do | Don't do | M.S | E |
|---|----|----------|-------------|-------------|
| B1: Splinting for sprain | 0 | 76 | 1 | Poor |
| B2: Manipulative reduction of radial head subluxation | 0 | 76 | 1 | Poor |
| B3: Diagnosing and managing burns | 55 | 21 | 1.72 | Good |
| B4: Advising on daily care for musculoskeletal problems | 65 | 11 | 1.85 | Good |
| B5: Diagnosing and managing osteoarthritis of the knee | 4 | 72 | 1.05 | Poor |
| B6: General advice for parents of children with fever | 72 | 4 | 1.94 | Good |
| B7: Initial care for animal/human bite and follow-up | 40 | 36 | 1.50 | Fair |
| B8: Performing knee arthrocentesis | 1 | 75 | 1.01 | Poor |
| B9: Initial treatment of simple fracture (splinting) | 3 | 73 | 1.03 | Poor |
| B10: Diagnosing and treating acute monoarthritis | 19 | 57 | 1.25 | Poor |

Continues ...

Table (4b) : To be Continued

| | | | | |
|--|----|----|-------------|-------------|
| B11: Performing trigger point injection | 1 | 75 | 1.01 | Poor |
| B12: Examining external auditory canal and tympanic membrane using otoscope | 62 | 14 | 1.81 | Good |
| B13: Peripheral venous access for pediatric patients | 13 | 63 | 1.17 | Poor |
| B14: Ordering intravenous fluid for pediatric patients | 35 | 41 | 1.46 | Poor |
| B15: Deciding to apply bust band for chest trauma | 1 | 75 | 1.01 | Poor |
| B16: Deciding if a chest x-ray is indicated in pediatric patients | 5 | 71 | 1.06 | Poor |
| B17: Hemostasis for superficial bleeding | 29 | 47 | 1.38 | Poor |
| B18: Diagnosing and treating scapula-humeral peri-arthritis | 8 | 68 | 1.10 | Poor |
| B19: Examining anterior eye without equipment | 39 | 37 | 1.50 | Fair |
| B20: Hemostasis for nasal bleeding | 49 | 27 | 1.64 | Good |
| B21: Diagnosing and treating acute otitis media | 11 | 65 | 1.14 | Poor |
| B22: Performing digital block | 3 | 73 | 1.03 | Poor |
| B23: Suturing cut wounds | 36 | 40 | 1.47 | Poor |
| B24: Initial management of febrile seizure | 61 | 15 | 1.80 | Good |
| B25: Removing earwax or foreign body from external ear canal | 9 | 67 | 1.11 | Poor |
| B26: Diagnosing skin eruption | 66 | 10 | 1.86 | Good |
| B27: Advising for skin care | 74 | 2 | 1.97 | Good |

M.S: Mean of Scores, E: Evaluation, **Poor** (≤ 1.4), **Fair** ($= 1.5$), **Good** (≥ 1.6)

This table shows that the mean of scores on items of family physicians' practices of urgent care and minor procedures are poor on items B1, B2, B5, B8, B9, B10, B11, B13, B14, B15, B16, B17, B18, B21, B22, B23, B25; fair on items B7, B19; and good on items B3, B4, B6, B12, B20, B24, B26, B27.

Table (4c): Mean of Scores for Items of Family Physicians' Practices of Ambulatory Care

| Items | Do | Don't do | M.S | E |
|--|----|----------|-------------|-------------|
| C1: Diagnosing and managing bronchial asthma | 9 | 67 | 1.11 | Poor |
| C2: Diagnosing and managing diabetes | 53 | 23 | 1.69 | Good |
| C3: Diagnosing and managing dyslipidemia | 19 | 57 | 1.25 | Poor |
| C4: Diagnosing and managing hypertension | 55 | 21 | 1.72 | Good |
| C5: Diagnosing and managing hyperuricemia | 16 | 60 | 1.21 | Poor |
| C6: Diagnosing and managing thyroid dysfunction | 23 | 53 | 1.30 | Poor |
| C7: Diagnosing and managing insomnia / sleep disturbance | 11 | 65 | 1.14 | Poor |
| C8: Treating urinary tract infection | 71 | 5 | 1.93 | Good |
| C9: Diagnosing and managing chronic obstructive pulmonary disease | 15 | 61 | 1.19 | Poor |
| C10: Diagnosing and managing allergic rhinitis | 53 | 23 | 1.69 | Good |
| C11: Diagnosing and managing urticaria/angioedema | 39 | 37 | 1.50 | Fair |
| C12: Diagnosing and determining the urgency of headache | 61 | 15 | 1.80 | Good |
| C13: Appropriate management of hematuria | 34 | 42 | 1.44 | Poor |
| C14: Diagnosing and determining the urgency of dizziness | 39 | 37 | 1.50 | Fair |
| C15: Outpatient management of heart failure | 0 | 76 | 1.00 | Poor |
| C16: Diet therapy in the outpatient encounter | 52 | 24 | 1.68 | Good |

M.S: Mean of Scores, E: Evaluation, **Poor** (≤ 1.4), **Fair** ($= 1.5$), **Good** (≥ 1.6)

This table presents that the mean of scores on items of family physicians' practices of ambulatory care are poor on items C1, C3, C5, C6, C7, C9, C13, C15; fair on items C11, C14; and good on items C2, C4, C8, C10, C12, C16.

Table (5): Socio-demographic Characteristics of Patients (N=124)

| Characteristics | Respondents | F | % |
|---------------------------|------------------------------|--------|---------|
| Gender | Male | 13 | 10.50 % |
| | Female | 111 | 89.50 % |
| Age | 20-29 | 72 | 58.00 % |
| | 30-39 | 25 | 20.20 % |
| | 40-49 | 8 | 6.50 % |
| | 50-59 | 9 | 7.30 % |
| | ≥60 | 10 | 8.00 % |
| | Marital status | Single | 4 |
| | Married | 120 | 96.80 % |
| Level of education | Unable to read and write | 9 | 7.30 % |
| | Able to read and write | 6 | 4.80 % |
| | Primary School Graduate | 41 | 33.10 % |
| | Intermediate School Graduate | 28 | 22.60 % |
| | Secondary School Graduate | 34 | 27.40 % |
| | Diploma Graduate | 6 | 4.80 % |

F: Frequency, N: Sample Size, %:Percent

This table shows that the majority of patients are young (20-29) years of age, (33.10%) completed the primary level of education. Of the respondents, (89.50%) are females and (10.50%) are males. Almost all of the respondents (96.80%) are married.

Table (6): Overall Evaluation of Quality of Health Care

| Poor (18-41) | % | Fair (42-65) | % | Good (66-90) | % |
|--------------|---------|--------------|---------|--------------|-----|
| 102 | 82.30 % | 22 | 17.70 % | 0 | 0 % |

#: Percent

This table presents that the majority 102 (82.30%) of overall evaluation of QHC were poor.

Table (7): Mean of Scores on Items of Quality of Health Care

| Items | Always | Often | S.T | Rarely | Never | M.S | E. |
|---|--------|-------|-----|--------|-------|------|------|
| 1. In the last 12 months, have you visited a Primary HealthCare Center in Baghdad for any reason? | 39 | 12 | 65 | 8 | 0 | 3.66 | Good |
| 2. During the last 12 months, was there any time that you followed a prescription for Family physician? | 37 | 22 | 57 | 8 | 0 | 3.70 | Good |
| 3. was there any time that your family physician thought you needed to see a specialist? | 4 | 21 | 53 | 30 | 16 | 2.73 | Poor |
| 4. I leave it to my family physician to make the right decisions about my health. | 5 | 21 | 24 | 40 | 34 | 2.37 | Poor |
| 5. It is generally better to take care of your own health than to go to the family physician. | 1 | 3 | 22 | 46 | 52 | 1.83 | Poor |
| 6. During the visit, do you understand everything the family physician said. | 0 | 3 | 13 | 46 | 62 | 1.65 | Poor |

Continues ...

Table (7): To be Continued

| | | | | | | | | |
|-----|--|---|----|----|----|-----|------|------|
| 7. | Did the family physician treat you with a great deal of respect and dignity? | 0 | 1 | 3 | 39 | 81 | 1.38 | Poor |
| 8. | Do the family physician involve you in decisions about your care? | 0 | 0 | 6 | 25 | 93 | 1.29 | Poor |
| 9. | Do the family physician spend as much time with you as you wanted? | 0 | 0 | 5 | 28 | 91 | 1.30 | Poor |
| 10. | I feel that my family physician understands my background and values. | 0 | 1 | 28 | 19 | 76 | 1.62 | Poor |
| 11. | Are you satisfied with the Quality of HealthCare you have received in Baghdad's primary HealthCare centers during the last 12 Months? | 0 | 0 | 24 | 40 | 60 | 1.70 | Poor |
| 12. | Do you feel very confident that you can easily get good medical care when you need it? | 0 | 2 | 27 | 25 | 70 | 1.68 | Poor |
| 13. | During the past five years, has a family physician told you that you have any of the following health problems or conditions (High blood pressure, Heart attack or any other heart disease, Cancer, Diabetes or sugar diabetes, Anxiety or depression, Obesity, Asthma)? | 8 | 9 | 1 | 9 | 97 | 1.56 | Poor |
| 14. | If has diabetes Has your hemoglobin "A one C," a blood test to check sugar control, been checked in the last six months? | 4 | 5 | 26 | 27 | 62 | 1.88 | Poor |
| 15. | If has diabetes Have you had an eye exam in the last year? | 0 | 0 | 0 | 5 | 119 | 1.04 | Poor |
| 16. | Do family physician check your blood pressure at least every six months? | 8 | 25 | 46 | 36 | 9 | 2.89 | Poor |
| 17. | Did you have any of the following (blood cholesterol checked, a Pap test (females only), a mammogram (females 40 and over only), a screening for colon cancer (age 50 and over only), a blood test or rectal exam for prostate cancer (males 40 and over only)) less than a year ago ? | 0 | 0 | 0 | 1 | 123 | 1.00 | Poor |
| 18. | Have you or any family member ever gotten better as a result of going to the primary HealthCare Centers? | 0 | 7 | 82 | 22 | 13 | 2.66 | Poor |

S.T: Sometimes, M.S: Mean of Scores, E: Evaluation, Poor (≤ 2.9), Fair (= 3), Good (≥ 3.1)

This table reveals that the mean of scores on items of QHC were poor on items 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18; and good on items 1 and 2.

Table (8): Impact of Family Physicians' Practices Upon Quality of Health Care in Baghdad's Primary Health Care Centers

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|-------|--------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | 0.097 ^a | 0.009 | -0.004 | 7.603 | 0.009 | 0.699 | 1 | 74 | 0.406 |

R: Multiple Correlation, R Square: Regression Coefficient, Std: Standard, F: F-Statistics, df: Degree of Freedom, Sig: Level of Significant at $P \leq 0.05$

Results out of this table indicate that family physicians' practices have no impact upon the quality of health care at $P \leq 0.05$.

Discussion:

Part I : Discussion of Evaluation of Family Physicians' Practices

Throughout the course of data analysis, such evaluation depicts that the majority of them has experienced inadequate performance of family practices (**Table2**).

Such finding is very obvious in the inadequate evaluation of family physicians' practices of inpatient care (100%); urgent care and minor procedures (80.30%) and ambulatory care (77.60%) (**Table 3**).

This finding can be justified throughout the inadequate evaluation for most of the poor mean of scores on all items of inpatient care of inserting nasogastric tube, performing blood transfusion, deciding to apply gastrostomy to patients with recurrent aspiration, performing thoracentesis, performing paracentesis, collecting and evaluating atrial blood gas, intra-tracheal intubation, managing parenteral nutrition, exchanging enteral feeding tube and managing feeding tube problems, ventilating a patient with respiratory failure using bag valve mask, use of opioids for terminal patients, caring for symptoms other than pain for terminal patients, pain management for terminal patients using VAS score, interpreting brain CT scan, terminal care for non-malignant patients, inserting urinary tract catheter, initial treatment for shock state patients, explaining a terminal stage patient's condition to family, performing intravenous sedation and pain management, initial diagnostic approach for patients with disturbance of consciousness, providing counseling about life-prolonging treatment, diagnosing and treating delirium, evaluating the necessity and performance of lumbar puncture, interpreting brain MRI, and initial diagnosis and management for stroke (**Table 4a**).

Regarding the inadequate performance of family physicians of the urgent care and minor procedures, the mean of scores is poor on items of Splinting for sprain, Manipulative reduction of radial head subluxation, Diagnosing and managing osteoarthritis of the knee, Performing knee arthrocentesis, Initial

treatment of simple fracture (splinting), Diagnosing and treating acute monoarthritis, Performing trigger point injection, Peripheral venous access for pediatric patients, Ordering intravenous fluid for pediatric patients, Deciding to apply bust band for chest trauma, Deciding if a chest x-ray is indicated in pediatric patients, Hemostasis for superficial bleeding, Diagnosing and treating scapula-humeral peri-arthritis, Diagnosing and treating acute otitis media, Performing digital block, Suturing cut wounds, Removing earwax or foreign body from external ear canal (**Table4b**).

Concerning the inadequate performance of family physicians of ambulatory care, the mean of scores is poor on items of Diagnosing and managing bronchial asthma, Diagnosing and managing dyslipidemia, Diagnosing and managing hyperuricemia, Diagnosing and managing thyroid dysfunction, Diagnosing and managing insomnia / sleep disturbance, Diagnosing and managing chronic obstructive pulmonary disease, appropriate management of hematuria, and Outpatient management of heart failure (**Table4c**).

In sum, the study provides evidence for the inadequate family physicians' practices that most of them are not well-trained and unfortunately do not follow the standards for such practices.

Procedures are regarded as an integral part of family medicine. Studies show that family physicians are more likely to perform procedures in their practices if they received training for those procedures during residency ⁽¹¹⁾.

The education programs should increase the number of continuing medical education events on procedural skills and link them to credits to increase the ability of academic family physicians to teach procedural skills. Similarly, training programs need to give higher priority to procedural skills training.

This should be reflected in faculty recruitment and curriculum development. Such strategies as procedural skills clinics and referrals from family physicians to family medicine training sites could also be used to increase the opportunities for residents to learn procedures⁽¹²⁾.

A qualitative study combining two data collection techniques is conducted in two Eastern European countries in June and July 2009 to explore the views of family physicians/general practitioners about the most important competences in health promotion and diseases prevention and areas where these competences might be below the desired level.

Focus groups numbering 10 and 9 physicians, respectively, practicing in various clinical settings, are held in Poland and Lithuania. Seven well-informed health care experts were recruited in both countries to provide information during the in-depth interviews. In both formats, questions are devoted to three main areas of health promotion and disease prevention competences: (1) educational, (2) clinical, and (3) organizational.

A qualitative content analysis is performed. Faculty members of family medicine need to critically consider the training that currently exists for physicians. Development of a high-quality preventive service is not only a matter of proper education in the clinical field but also requires training in practice organization and patient education⁽¹³⁾.

A study in Turkey to evaluate the implementation and performance of Family Practices in Ankara province by family physicians, shows that family physicians are defined to be generally satisfied with the system and performance implementation and significant differences were found according to work seniority, gender and productivity of the participants. The work seniority and gender is one of the most important factors to improve satisfaction and productivity for family physicians⁽²¹⁾.

Part II : Discussion of Evaluation of Quality of Family Medicine Health Care Services at Model Primary Health Care Centers in Baghdad City

Throughout such evaluation, the study indicates that the quality of family medicine health care services in Baghdad's primary health care centers of the patients' perspectives is poor (82.30%) (**Table 6**). This finding can be realized on the poor mean of scores on most items of this care which include (Items) (**Table7**).

The study presents verification relative to the poor quality of family medicine health care services that such quality has resulted due to the inadequate family physicians' practices.

There are many advantages to doing procedures in the office: patients are more satisfied if procedures are done by their family physicians; physicians are able to provide continuity of care; procedures cost less than they would if performed by specialists; wait times are shorter; and physician satisfaction is greater⁽¹¹⁾.

Listening has been highly rated in many studies, probably because it plays an essential role in the satisfaction process^(14,15,16). Waiting time has long been discussed as an important influence on patient's satisfaction level and many studies have reported long waiting times to be the cause of considerable dissatisfaction⁽¹⁷⁾.

In an Australian study, an FP's ability to communicate well is considered extremely important⁽¹⁸⁾.

Part III: Discussion of the Impact of Family Physicians' Practices upon the Quality of Family Medicine Health Care Services

Analysis of simple linear regression for the determination of the impact of family physicians' practices upon the quality of family Medicine health care services in Baghdad City model primary health care centers indicates that family physicians' practices do not make significant change on the quality of family medicine health care services (**Table 8**).

Such negative impact can be interpreted in a way that the inadequate family physicians' practices result into poor quality of family medicine health care services. In the United States, it has been shown that family physicians impact positively on health outcomes⁽¹⁹⁾.

A qualitative study using in-depth interviews in South Africa shows that where family physicians are employed and able to function optimally, they are making a significant impact on health system performance and the quality of clinical processes. In the longer term, this is likely to impact on health outcomes⁽²⁰⁾.

Recommendations:

Based on the early discussed and interpreted study findings, the study can recommend that:

1. Family physicians may be encouraged to participate in training programs and sessions concerning family medicine practices to improve their quality performance of such practices.
2. Family physicians can follow the family medicine practices' standards to provide quality of family medicine health care services.
3. The Ministry of Health Department of Primary Health Care can periodically monitor the implementation of family physicians' practices standards for the benefit of better quality of family medicine health care services.
4. The family medicine quality of health care services can be valued on a regular base for the benefits of the patients who are attending the primary health care centers to seek such care.
5. Further nationwide research can be conducted on large size sample with various characteristics.

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