Evaluation of Family PHysicians knowledge, Attituds and Practice for Emergency Services

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ABSTRACT:

BACKGROUND:

Provision of emergency care is an integral part of general practice, and family health physicians play a crucial role in the management of medical emergencies.

OBJECTIVE:

To evaluate the emergency health care services delivery at PHC level in family Health centers in Baghdad city, in terms of knowledge, attitudes and practices of the physicians (service providers) towards emergency service.

METHODOLOGY:

A cross-sectional study done in 22 Family Healthcare Centers, targeting all doctors who work in these centers who accepted to participate, 86 out of 100 agreed to participate. A self-administered questionnaire was used to obtain the basic characteristics of participants in addition to assessing their knowledge, attitudes and practices.

RESULTS:

Fifty nine percent of participants disagreed that emergency cases can be effectively managed in primary health care settings while 52.3% had the feeling of adequate self-confidence to respond to emergency cases at the primary care level. Only thirty three percent of participants had positive attitude and 73.3% had fair/good practice, while there were no statistically significant associations between practice scores or attitude scores with other variables.

CONCLUSION:

lack of confidence among some of the interviewed Family physicians of their capabilities in providing emergency services, with fair practice levels and negative attitudes regarding management of emergency cases.

KEYWORDS: Family physician, primary health care, emergency, KAP

INTRODUCTION:

Primary health care (PHC) is a whole-of-society approach to health and well-being centered on the needs and preferences of individuals, families and communities [1]. With this comprehensive and holistic approach, over 90% of patient contact with the health service would take place in primary care [2]. In settings where primary care has been effectively deployed and supported with adequate training and resources, family physicians only refer around 5% of patients from consultations onto secondary care [3, 4].

An emergency can be described as "a type of event or imminent threat that produces or has the potential to produce a range of health consequences, and which requires coordinated action, usually urgent and often non-routine" [5]. This includes epidemics, disasters (e.g. natural and technological), as well as those involving violence and conflict, which can often become protracted. Primary health care has an essential role to play in preventing, preparing for, responding to and recovering from any emergency situation [6].

In emergency situations, primary care can provide essential routine health services, identify and manage emergency cases, prevent disease outbreaks with effective public health measures and play a key role in disease surveillance.

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A primary health care approach develops resilience within health systems and can advance the global aim of achieving universal health coverage and health security [6]. The American Academy of Family Physicians had adopted the concept of emergency medical care as an essential public service and many family physicians currently provide quality emergency department and trauma care throughout the nation, including military, rural, and remote settings [7].

AIM AND OBJECTIVES:

To evaluate the emergency health care services delivery at PHC level in family Health centers in Baghdad city in terms of knowledge, attitudes and practices of the physicians (service providers) towards emergency service.

Methodology:

Study design: A cross-sectional study.

Study Setting: Family health care centers (FHCCs) adopting family health service package, i.e. 22 FHCCs throughout Baghdad city. The data were collected for three months, from 1st March/2019, until 31st of May/2019. To insure all doctors were available, each FHCC was visited twice\week from 9 am to 12 pm.

Target population: All doctors who work in the selected FHCCs were asked to take part in

Data collection tool: the data were collected using an especially prepared questionnaire that included social and basic characteristics of the Family physicians, in addition to questions about the knowledge, attitudes and practices regarding the emergency care. It was formulated after reviewing of previous studies with minor modifications [8, 9]. Six phrases were put for probing the attitudes of physicians, each one with a four-point Likert scale (strongly disagree=1, disagree=2, agree=3 and strongly agree=4). Total scores were classified according to median value into negative (≤17) and positive (17 and more) Validity and reliability

Statistical Analysis: Data tabulation, input and coding was done by the use of IBM© SPSS© (Statistical Package for the Social Sciences) Statistics Version 23. Chi-square test was used to investigate the association between categorical variables. P-value less than 0.05 was considered significant throughout data analysis.

RESULTS:

The mean age of participants was 42.77±9.99 years, working experience in FHCC of 9.41 years, and 70 (81.40%) of participants were females, as shown in Table (1).

Table 1: Special characteristic of the study population.

Variables	Mean	Standard deviation
Age in years	42.77	8.99
Gender	Number	%
Male	16	18.6
Female	70	81.4
Years since graduation	17.09	9.13
Experience in FHCC	9.41 Median=6	7.73

Knowledge about major medical/surgical branches as assessed by continuous medical education (CME) courses were 62(72.1%) for pediatric emergency (EM), 61(70.9%) for obstetric EM, and 59(68.6%) for cardiovascular EM, 35(40.7%) for orthopedic EM and 26 (30.2%) for central nervous EM, as shown in Table (2).

Table 2: Knowledge of Family physicians in areas of emergency care (continuing medical education).

Variables	Number	%
Cardio vascular emergency	59	68.6
Central nervous emergency	26	30.2
Orthopedic emergency	35	40.7
Pediatric emergency	62	72.1
Obstetric emergency	61	70.9

Forty-seven (54.7%) agreed that ES is an essential component of primary healthcare services, 51(59.3%) disagreed that EM can be effectively managed in PHC, 53(61.6%) agreed that emergency services should be regularly updated, 45(52.3%) agreed in feeling of adequate self-confidence to respond to emergency cases at the primary care level, 55(64%) agreed that they need knowledge in EC in PHC setting, and 53(61.6%) agreed that they need training in EC in PHC, as shown in Table (3).

Table 3: Attitudes of Family physicians towards emergency care.

Variables	Answer Number (%)			
	Strongly disagree	Disagree	Agree	Strongly agree
1. Believe that emergency service is an essential component of primary healthcare services	5(5.8)	17(19.8)	47(54.7)	17(19.8)
2. Emergency cases can be effectively managed in PHC	3(3.5)	51(59.3)	31(36.0)	1(1.2)
3. Consider that emergency services should be regularly updated	5(5.8)	22(25.6)	53(61.6)	6(7.0)
4. Feel adequate self-confidence to respond to emergency cases at the primary care level	4(4.7)	32(37.2)	45(52.3)	5(5.8)
5. Feel the detailed need of Knowledge in emergency care in PHC setting	2(2.3)	14(16.3)	55(64.0)	15(17.4)
6. There is a need for training in emergency care in PHC	3(3.5)	8(9.3)	53(61.6)	22(25.6)

Previous practices of participants in EC were higher in managing simple wounds (97.7%), effectively doing CPR (86%), managing first and second-degree burns (64%), and managing cases of drug poisoning (65.1%). While they were lower in managing psychiatric violence (50%), managing convulsions during pregnancy (43%), and controlling cases of status epilepticus (36%), as shown in table (6).

Table 6: Previous practices in EC of primary care physicians.

Variables	Number	%
1.Have you managed simple Wounds?	84	97.7
2.Have you previously practiced management of 1st and 2nd degree Burns?	55	64.0
3.Have you managed Convulsions during pregnancy previously?	37	43.0
4.Have you controlled a case of Status epilepticus previously?	31	36.0
5.Have you dealt with Psychiatric violence?	43	50.0
6.Have you managed cases of drug poisoning?	56	65.1
7.Can you effectively do CPR?	74	86.0

DISCUSSION:

The primary perquisite for managing emergency cases is the updated knowledge of the physicians that help in the early diagnosis and management. It is challenging for primary care physician to have updated information and to be competent in every emergency that he may come across.

In the current study, participants received more CME regarding emergency care of pediatrics, obstetrics, and cardiovascular illnesses, compared to orthopedic or central nervous diseases, in addition there were 79.1% participants who preferred hospital-based training in EM care.

These figures were in partial agreement to results of Abu-Grain et al. in KSA, who studied EM practice and barriers to it in 65 physicians working in 13 different PHCCs, and reported that the most preferred CME topics in ER were: cardiovascular ER (66.7% for hypertension, 57% for coronary artery disease, and 49.2% in CPR), CNS (61.9%), obstetric (53.9%) and 49.2% for trauma, in addition 79.4% of their participants preferred hospital-based training [10]. If physicians believe that their information are deficient, their management will definitely be suboptimal, this concept is solidified by the recent systemic review done by Behghadami et al. in Iran, who mentioned that CME does not only improve patients' safety, but also increases physicians motivations [11].

In the current study, almost three quarters of participants agreed/ strongly agrees (A/SA) that ES is an essential component of PHC services, but only 32(37.2%) A/SA that ES can be effectively managed in PHC, and 50(58.1%) A/SA in feeling of adequate self-confidence to respond to emergency cases at the primary care level, while the majority A/SA that they need knowledge in EC in PHC setting and need more training in EC in PHC. This was in comparison to results of Mohey and Al azmi in Egypt who studied 16 PHCCs regarding medical staff attitudes and practices and reported that 76.5% of their physicians' A/SA the ES is essential component of PHC services, 76.5% felt that they were competent in managing emergency cases, 52.9% of physicians felt a great need for knowledge in ES, and 76.5% felt a great need for training in ES [9]. Lower rates reported by Cernuda Martínez et al. in Spain, who studied the limitations and obstacles for effective EC in PHCCs perceived by their physicians, 23.4% of physicians working in urban PHCCs reported lack of practical skill while only 9.57% reported lack of theoretical knowledge [12].

In the current study, previous practices of participants in EC were higher in managing simple wounds, effectively doing CPR, managing first and second-degree burns, and managing cases of drug poisoning. While they were lower in managing psychiatric violence and convulsions and epileptic emergencies, these figures were comparable to results of Abu-Grain et al. in KSA, who reported previous practices were 83.3% for managing cut wounds, 76.2% for burns, and 31.7% for epilepsy [10]. The frequencies in the current study probably reflects personal experience of physicians rather than the actual frequency of cases received, this is evident by the survey (number of patients= 3,033) done in 2009 by Liddy et al. in USA who studied emergency cases seen by family physicians and reported that 32.7% of emergencies cases were cardiovascular, 12.8% were respiratory, 7.1% were endocrine, 6.6% were gastrointestinal, and less than 0.1% for intoxication or other pharmacologic emergencies [13].

In the current study, 29(33.7%) had positive attitude and 63(73.3%) had fair/good practice. Better results regarding attitude scores were reported by Mohey and Al azmi in Egypt who reported that median attitude score was 82.3 from 100, while regarding practice, 85.7% had previous Emergency care practice [9]. Self-confidence and real life training of physicians working in FHCCSs have a crucial role in improving emergency care management and outcome, and this concept was proved by Forde et al. who studied the effects of training of 14 GP in real life scenarios and concluded that class room teaching prevents delivery of a rapid and effective emergency care [14].

CONCLUSION:

1. High number of physicians had negative attitudes about toward management of emergency cases in PHC settings.
2. Family physicians had fair practice levels and negative attitudes regarding management of emergency cases.

Recommendations:

1. Physicians working at FHCCs in Baghdad need practical and hospital-based training for managing different emergency cases, by doing that their attitudes and practices toward emergency health services will definitely improve.
2. Family medicine residency programs should include comprehensive training in emergency health services.

Ethical clearance: The current study received approval by the Iraqi Board of Family Medicine, Department of Health in Al-Karkh and Al-Risafa. Verbal consent was obtained from all participants before they were enrolled.

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