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Evaluation of Nutritional Surveillance System's Tasks and Duties at Primary Health Care Centers in Baghdad City

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Abstract

Objectives: The study aims at evaluating the nutritional surveillance systems' tasks and duties in primary health care centers in Baghdad city

Methodology: A descriptive design, using evaluation approach, is carried throughout the present study to evaluate the nutritional surveillance system in primary health care centers for the period of January 2nd 2020 to March1st 2021.The Nutritional Surveillance System will be exploited as adopted instrument for the present study.A probability, multi-stage simple random sample of (30) primary health care centers (main, family and sub main) distributed in Baghdad AL-Russafa and AL-Karkh directorate. The instrument is concerned with the evaluation of nutritional surveillance systems' tasks and duties through (48) items which are divided in to ten main domains of detecting and recording cases, epidemiological surveillance, effective search for nutritional statuses, prove the diagnosis of nutritional status, reports preparation, data analysis, early readiness to contain cases, respond to cases, feedback and supervision.Content validity of the questionnaire is determined by panel of (10) expertsand Internal consistency reliability is employed for Evaluation Questionnaire, is obtained through Cronbach alpha correlation coefficient.Data are collected through the use of the study instrument and the interview technique as means of data collection. Data are analyzed through the use of descriptive statistical data analysis approach of frequencies, percentages, total scores and ranges.

Results: The study findings indicate that the majority of the majority of the primary health care centers have poor level of overall evaluation of nutritional surveillance systems' tasks and duties (86.6%).

Conclusion: The study findings depict that the majority of manpower who are working in nutrition unit have experienced poor attitudes regarding nutritional surveillance system which may result into poor performance.

Recommendation: Follow up the nutritional surveillance systems' feedback from the Ministry of Health and the Nutrition Research Institute and issue instructions relying on it

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Keyword: Nutritional surveillance system; Tasks and duties; Primary Health Care Centers

Introduction

The nutrition and health problems of today are quite different from those of 20–30 years ago. In some countries, sudden climatic changes have occurred at irregular intervals leading to drought, flooding and famine, while other countries have suffered as a result of war or sudden changes in the world economy on which they depend. Obviously, such factors cannot be eliminated (Kraay, & McKenzie, 2014)

Food and nutrition surveillance is intended to provide all the necessary information, periodically at varying intervals in time according to the needs in each particular case. The establishment of a surveillance system will enhance the monitoring of both population-specific and Region-specific trends in nutrition-related risk factors and conditions. (Al Jawaldeh, 2013).

Monitoring is the ongoing collection, analysis, and interpretation of data on the program (inputs, activities, outputs, and outcomes). The primary purpose of monitoring data is to enable program managers to assess the performance of programs for program improvement (Perrin, 2012).

Nutrition surveillance in low-income countries involves the regular and systematic collection of data on nutritional outcomes and exposures, as specified in 1976 in the first guidance on the subject: “Surveillance should provide ongoing information about the nutritional conditions of the population and the factors that influence them (Black, et.al. 2013).

Methodology

A descriptive design, using evaluation approach, is carried throughout the present study to evaluate the nutritional surveillance system in primary health care centers for the period of January 2nd 2020 to March1st 2021.

The present study is conducted on (30) primary health care centers which are distributed as (5) main, (5) family medicine and (5) sub main at Al-Russafa Health Directorate in Baghdad City and (5) main, (5) family medicine and (5) sub main at Al-Karkh Health Directorate in Baghdad City.

A probability, multi-stage simple random sample of (30) primary health care centers (main, family and sub main) distributed in Baghdad AL-Russafa and AL-Karkh directorate.

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The Nutritional Surveillance Systems' tasks and duties will be exploited as adopted instrument for the present study. Such instrument is composed of (10) components that include detecting and recording cases, epidemiological surveillance, effective search for nutritional statuses, prove the diagnosis of nutritional status, reports preparation, data analysis, early readiness to contain cases, respond to cases, feedback and supervision. The questionnaires are presented as follows:

a.Detecting and recording cases:

This part is comprised of (5) item. This part is measured on 3-Level Type (Likert Scale) of Good = (9-10), Fair = (7-8) and Poor = (5-6).

b. Epidemiological surveillance:

This part is comprised of (2) item. This part is measured on 3-Level Type (Likert Scale) of Good = (4), Fair = (3) and Poor = (2).

c. Effective search for nutritional statuses

This part is comprised of (2) item. This part is measured on 3-Level Type (Likert Scale) of Good = (4), Fair = (3) and Poor = (2).

d. Prove the diagnosis of nutritional status

This part is comprised of (8) item. This part is measured on 3-Level Type (Likert Scale) of Good = (14-16), Fair = (11-13) and Poor = (8-10).

e.Reports preparation

This part is comprised of (8) item. This part is measured on 3-Level Type (Likert Scale) of Good = (10-12), Fair = (8-9) and Poor = (6-7).

f. Data analysis

This part is comprised of (4) item. This part is measured on 3-Level Type (Likert Scale) of Good = (5-6), Fair = (4) and Poor = (3).

g.Early readiness to contain cases

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This part is comprised of (4) item. This part is measured on 3-Level Type (Likert Scale) of Good = (8), Fair = (6-7) and Poor = (4-5).

h. Respond to cases

This part is comprised of (3) item. This part is measured on 3-Level Type (Likert Scale) of Good = (5-6), Fair = (4) and Poor = (3).

i. Feed back

This part is comprised of (4) item. This part is measured on 3-Level Type (Likert Scale) of Good = (8), Fair = (6-7) and Poor = (4-5).

j. Supervision

This part is comprised of (8) item. This part is measured on 3-Level Type (Likert Scale) of Good = (14-16), Fair = (11-13) and Poor = (8-10).

A pilot study will be conducted on (6) primary health care centers; (2) main, (2) sub, and (2) family medicine primary health care centers to accomplish the internal consistency reliability of the study instruments for the period of 15th January 2020 to 25th February 2020. Content validity of questionnaire is determined by panel of (10) experts. Internal consistency reliability is employed for Evaluation Questionnaire. Cronbach alpha correlation coefficient is computed on responses of (6) centers and it indicates that correlation coefficient for reliability reveals that (r=0.87) which adequate

Data are collected through the use of the study questionnaires, the structured interview technique as means of data collection. Each interview takes approximately (5-10) minutes to be completed.

The data are analyzed through the use of statistical procedures and using the package of SPSS (Statistical Process for Social Sciences) version 23 application Statistical analysis system.

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Results

Table (1): Overall Evaluation of Nutritional Surveillance System' Tasks and Duties in Primary Health Care Centers

List	Overall				
	Scale			F	
1	Good (66-80)	Main	0	0	0
		Family medicine	0		
		Sub main	0		
2	Fair (53-65)	Main	1	4	13.3
		Family medicine	2		
		Sub main	1		
3	Poor (40-52)	Main	9	26	86.6
		Family medicine	8		
		Sub main	9		
	Total		30	30	100

Result out of this table presents the majority of the primary health care centers have poor level of overall evaluation of surveillance system tasks and duties (86.6%).

Table (2): Evaluation of Primary Health Care Centers Detect and record cases as Dimension of Tasks and Duties

List	Detect and record cases		
	Scale	F	%
1	Good (9-10)	1	3.3
2	Fair (7-8)	21	70
3	Poor (5-6)	8	26.6
	Total	30	100

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Results out of this table depict the majority of the primary health care centers have fair level of Detect and record cases evaluation as dimensions of Tasks and Duties (70%).

Table (3): Evaluation of Primary Health Care Centers' Proof of diagnosis of nutritional conditions as Dimension of Tasks and Duties

List	Proof of diagnosis of nutritional conditions		
	Scale	F	%
	Good (14-16)	0	0
	Fair (11-13)	3	10
	Poor (8-10)	27	90
	Total	30	100

Results out of this table reveal that the majority of the primary health care centers have poor level of Proof of diagnosis of nutritional conditions evaluation of the dimensions of Tasks and Duties (90%).

Table (4): Evaluation of Preparation of reports as Dimension of Tasks and Duties

List	Preparation of reports		
	Scale	F	
1	Good (10-12)	4	13.3
2	Fair (8-9)	11	36.6
3	Poor (6-7)	15	50
	Total	30	100

Results out of this table present that the half of the primary health care centers have poor level of preparation of reports evaluation of the dimensions of tasks and duties (50%).

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Table (5): Evaluation of Primary Health Care Centers' Data analysis as Dimension of Tasks and Duties

List	Data analysis		
	Scale	F	%
1	Good (5-6)	1	3.3
2	Fair (4)	18	60
3	Poor (3)	11	36.6
	Total	30	100

Results out of this table depict that the majority of the primary health care centers have fair level of data analysis evaluation of the dimensions of tasks and duties (60%).

Table (6): Evaluation of Primary Health Care Centers' Early Preparedness to Contain Cases as Dimension of Tasks and Duties

List	Early preparedness to contain cases		
	Scale	F	
1	Good (8)	0	0
2	Fair (6-7)	9	30
3	Poor (4-5)	21	70
	Total	30	100

Results out of this table reveal that the majority of primary health care centers have poor level of early preparedness to contain cases evaluation of the dimensions of tasks and duties (70%).

Table (7): Evaluation of Primary Health Care Centers' Responding to Situations as Dimension of tasks and duties

List	Responding to situations		
	Scale	F	

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1	**Good (5-6)**	**0**	**0**
2	**Fair (4)**	**1**	**3.3**
3	**Poor (3)**	**29**	**96.6**
	Total	**30**	**100**

Results out of this table show that the majority of the primary health care centers have poor level of responding to situations evaluation of the dimensions of tasks and duties (96.6%).

Table (8): Evaluation of Primary Health Care Centers' Feedback as Dimension of Tasks and Duties

List	**Feedback**		
	Scale	**F**	
1	**Good (8)**	**0**	**0**
2	**Fair (6-7)**	**0**	**0**
3	**Poor (4-5)**	**30**	**100**
	Total	**30**	**100**

Results out of this table indicate that all of the primary health care centers have poor level of feedback evaluation of the dimensions of tasks and duties (100%).

Table (9): Evaluation of Primary Health Care Centers' Supervision as Dimension of Tasks and Duties

List	**Supervision**		
	Scale	**F**	**%**
1	**Good (14-16)**	**10**	**33.3**

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2	**Fair (11-13)**	**2**	**6.6**
3	**Poor (8-10)**	**18**	**60**
	Total	**30**	**100**

Results out of this table present that the majority of the primary health care centers have poor level of Supervision evaluation of the dimensions of tasks and duties (60%).

Discussion

1. Overall evaluation

Analysis of overall evaluation of such practices presents that the majority of the primary health care centers have poor level (Table 1). This finding provides evidence that such poor level of practices has emerged due to their insufficient background and training relative to this issue.

The world is rallying around the global nutrition targets agreed by the World Health Assembly (WHA) in 2012,3 but currently most countries are not on track to meet them or do not have sufficient data to ascertain whether they are meeting nutrition targets. There is modest global progress on stunting and exclusive breastfeeding but little progress on low birth weight, wasting, overweight and anemia (Kraemer, et.al. 2016).

Among the 193 countries, 94 do not have data to monitor the world health assembly WHA targets, and coverage data for nutrition-specific interventions are very scarce. There are not enough high-quality, country-driven and country-owned nutrition data, and this weakens nutrition accountability (Global Nutrition Report, 2014).

2.Evaluation of Primary Health Care Centers Detect and record cases as Dimension of Tasks and Duties

Analysis of such evaluation depict the majority of the primary health care centers have fair level of Detect and record cases (Table 2). Such finding presents evidence that these primary health care centers not ideal records for cases of nutritional abnormalities due to absence of information system.

The most important aspect of a food and nutrition surveillance system is to ensure effective links between information and action. However, the reliability of data, timeliness of reporting,

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efficient action management and sustainability are challenging. A further challenge is the interpretation of findings. Similar levels of acute malnutrition have different significance, depending on the context. Unless the underlying causes of nutritional disorders are understood, an appropriate response may not be provided (WHO, 2014).

3.Evaluation of Primary Health Care Centers' Proof of diagnosis of nutritional conditions as Dimension of Tasks and Duties

Analysis of such evaluation indicates that the majority of the primary health care centers have poor level of Proof of diagnosis of nutritional conditions (Table 3). This finding can be interpreted in a way that these primary health care centers are not well oriented toward the issue of diagnosis.

Unfortunately, there is no supportive evidence to the present study findings due to its originality as being a new study.

4.Evaluation of Preparation of reports as Dimension of Tasks and Duties

Analysis of such evaluation presents the half of the primary health care centers have poor level of preparation of reports (Table 4). This can be interpreted in a way that primary health care centers have experienced lack of preparation of reports concerning the nutritional surveillance system.

Unfortunately, there is no supportive evidence to the present study findings due to its originality as being a new study.

5.Evaluation of Primary Health Care Centers' Data analysis as Dimension of Tasks and Duties

Analysis of such evaluation depict that the majority of the primary health care centers have fair level of data analysis (table 5). This can be interpreted in a manner that the primary health care centers have no data analysis base towards nutritional surveillance system as dimension of tasks and duties.

Ongoing analysis of surveillance data is important for detecting outbreaks and unexpected increases or decreases in nutritional problem or disease occurrence, monitoring nutritional problem and related disease trends, and evaluating the effectiveness of nutrition control

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programs and policies. This information is also needed to determine the most appropriate and efficient allocation of public health resources and personnel (WHO, 2014).

Surveillance data analysis and interpretation should directly support the surveillance system objectives and be performed in alignment with surveillance system processes. The content and structure of a valid surveillance system should be defined and monitored to ensure that quality data are received and available for analysis (Groseclose, &Buckeridge, 2017)

6.Evaluation of Primary Health Care Centers' Early Preparedness to Contain Cases as Dimension of Tasks and Duties

Analysis of such evaluation reveals that the majority of primary health care centers have poor level of early preparedness to contain cases (Table 6). This can be interpreted in a way that these primary health care centers have no ability to early preparedness to contain cases.

Unfortunately, there is no supportive evidence to the present study findings due to its originality as being a new study.

7.Evaluation of Primary Health Care Centers' Responding to Situations as Dimension of tasks and duties.

Analysis of such evaluation shows that the majority of the primary health care centers have poor level of responding to situations (7). This can be interpreted in a way that these primary health care centers have no readiness to responding to situations.

Nutrition surveillance systems within countries provide timely information about the nutritional status or nutrition programs in the country in order to make policy and programmatic decisions to improve the nutrition situation of a population. Global surveillance that documents the number and types of programs in countries, as well as other key indicators such as coverage, are important to support global coordination, understand and develop global guidelines and technical resources, and mobilize resources (Kraemer, et.al. 2016).

8.Evaluation of Primary Health Care Centers' Feedback as Dimension of Tasks and Duties

Analysis of such evaluation indicates that all of the primary health care centers have poor level of feedback (Table 8). This can be interpreted in a manner that the primary health care centers

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have no complete cycle for system to evaluation of nutritional surveillance system as dimension of tasks and duties.

Khalifain (2014), is conduct a descriptive evaluation study, the study aimed to evaluation of primary health care centers, primary health sectors, health directorates in Baghdad Governorate and General Health Directorate/ Ministry of health surveillance system. A probability multistage sample of (54) subjects of primary health care centers are selected, the finding of the study present that the health sector and health directorate delay in sending the data collected.

9.Evaluation of Primary Health Care Centers' Supervision as Dimension of Tasks and Duties

Analysis of such evaluation presents that the majority of the primary health care centers have poor level of supervision (Table 9). This can be interpreted in a way that these primary health care centers have not ability to supervision.

Alemu and others in (2019), conduct concurrent embedded mixed quantitative/qualitative in Dangila district, facility-based cross-sectional study aimed to regular bases to ensure that the system is working as envisioned or not. A sample of (12) health facilities selected, the finding of the study indicates that the supervision checklist obtained in the district was not adequate to assess surveillance activities in detail.

Conclusion

1. The study findings depict that primary health care centers have experienced inadequate towered nutritional surveillance system.

2. They majority of manpower who are working in nutrition unit have experienced poor attitudes regarding nutritional surveillance system which may result into poor performance.

3. Primary health care centers nutrition unit staff thought that the nutritional surveillance system require time frame and resources.

4. Most of nutrition staffs unit have thought that the data collection process are surveillance system. 1

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Recommendations

1.Follow up the nutritional surveillance systems' feedback from the Ministry of Health and the Nutrition Research Institute and issue instructions relying on it.
2.Activating the health indicators that result from the nutritional surveillance system and relying on it in developing health plans that take care of the nutritional status of individuals and society.
3.Establishing rehabilitation, development and refresher courses for the staff who work in the nutrition units to increase their knowledge and improve their performance.

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