

Evaluation of Nutritional Surveillance System's Organizational Structure at Primary Health Care Centers in Baghdad City

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Abstract

Objectives: The study aims at evaluating the nutritional surveillance systems' organizational structure 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 organizational structure in primary health care centers for the period of January 2nd 2020 to March 1st 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' organizational structure through (29) items which are divided in to three main domains of Information about primary health care centers, Nutritional education and coaching and Special resources and supplies. Content validity of the questionnaire is determined by panel of (10) experts and 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 primary health care centers have poor level of overall evaluation of the dimensions of organizational structure (90%)..

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

Recommendation: Periodic and regular evaluation and follow-up to primary health care centers of the nutritional surveillance system

Keyword: Nutritional surveillance system; organizational structure; Primary Health Care Centers

Introduction

Program evaluation is the assessment, as systematic and objective as possible, of a planned, ongoing, or completed program that covers its need, design, implementation, impact, efficiency and sustainability, so as to incorporate lessons learned into the decision-making process about the program and inform and guide public policy (Khandker, et.al., 2009).

Nutritional surveillance is the "continuous collection and analysis of nutritional status data in order to give warning of impending crisis or to make policy and programmatic decisions that will lead to improvement in the nutrition situation of the population. This ongoing scrutiny generally uses methods distinguished by their practicality, uniformity and frequently their rapidity, rather than complete accuracy. Its main purpose is to detect changes in trends or distribution in order to initiate investigative or control measures (Manger, & Officer, 2007).

Surveillance system for nutrition and health monitoring should include a broad suite of appropriate indicators that are collected with reasonable frequency, and should focus on geographic areas of a country that are prone to food insecurity and/or other nutrition and health issues. Such monitoring can allow decision makers to identify seasonal as well as geographic trends in the deterioration of the nutrition, health, or food security situation well before the onset of a crisis, and can facilitate the timely initiation of response and mitigation efforts (WHO, 2019)

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).

A food and nutrition surveillance system is an instrument for the formulation, modification and application of the food and nutrition policy of a country. Such surveillance is intended to provide information on the basis of which decisions are made. The principles of a food and nutrition policy exist in every country and occasionally these are formulated as an official policy. Since such a policy affects several different sectors, a food and nutrition surveillance survey has to collect information from these various sectors and analyze and interpret it as a whole (Tuffrey, 2016).

Methodology

A descriptive design, using evaluation approach, is carried throughout the present study to evaluate the nutritional surveillance system organizational structure in primary health care centers for the period of January 2nd 2020 to March 1st 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.

The Nutritional Surveillance Systems' organizational structure will be exploited as adopted instrument for the present study. Such instrument is composed of (3) components that include Information about primary health care centers, Nutritional education and coaching and Special resources and supplies. The questionnaires are presented as follows:

1. Information about primary health care centers

This part is comprised of (6) item. This part is measured on 3-Level Type (Likert Scale) of Good = (11-12), Fair = (9-10) and Poor = (6-8)

2. Nutritional education and coaching

This part is comprised of (14) item. This part is measured on 3-Level Type (Likert Scale) of Good = (20-24), Fair = (16-19) and Poor = (12-15)

3. Special resources and supplies

This part is comprised of (9) item. This part is measured on 3-Level Type (Likert Scale) of Good = (15-18), Fair = (12-14) and Poor = (9-11)

Pilot study

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

Results

Table (1): Overall Evaluation of Nutritional Surveillance Systems’ Organizational Structure in Primary Health Care Centers

List	Overall Evaluation				
	Scale	Center type	F	Total	%
1	Good (45-54)	Main	0	0	0
		Family medicine	0		
		Sub main	0		
2	Fair (36-44)	Main	0	3	10
		Family medicine	1		
		Sub main	2		
3	Poor (27-35)	Main	10	27	90
		Family medicine	9		
		Sub main	8		
	Total		30	30	100%

Results out of this table indicate that the majority of the primary health care centers have poor level of overall evaluation of the dimensions of organizational structure (90%).

Table (2): Evaluation of Primary Health Care Centers’ Information as Dimension of Organizational Structure

List	Information		
	Scale	F	%
	Good (11-12)	0	0
2	Fair (9-10)	15	50
3	Poor (6-8)	15	50
	Total	30	100

Results out of this table reveal the half of the primary health care centers have poor level of information evaluation as dimensions of organizational structure (50%).

Table (3): Evaluation of Primary Health Care Centers’ Education and Nutrition Training as Dimension of Organization Structure

List	Education and Nutrition Training		
	Scale	F	%
1	Good (20-24)	0	0
2	Fair (16-19)	5	16.6
3	Poor (12-15)	25	83.3
	Total	30	100

Results out of this table show the majority of the primary health care centers have poor level of education and nutrition training evaluation as dimensions of organization structure (83.3%).

Table (4): Evaluation of Primary Health Care Centers’ resources and supplies as Dimension of Organization Structure

List	Resources and Supplies		
	Scale	F	
1	Good (15-18)	0	0
2	Fair (12-14)	5	16.6
3	Poor (9-11)	25	83.3
	Total	30	100

Results out of this table indicate the majority of the primary health care centers have poor level of resources and supplies evaluation as dimensions of organization structure (83.3%).

Discussion

1.Overall evaluation

Analysis of overall evaluation of such organizational structure reveals that the majority of the primary health care centers have poor level of overall evaluation (Table 4-1). This finding provides evidence that such poor level of organizational structure has emerged due to absence of systematic instruction and poor organization.

Various monitoring, evaluation and surveillance frameworks exist to guide the development, implementation and evaluation of nutrition programs and systems (Kraemer, et.al. 2016).

1. Evaluation of Primary Health Care Centers’ Information as Dimension of Organizational Structure
 Analysis of such information evaluation depicts that the half of the primary health care centers have poor level of information evaluation (Table 4-1a). This finding provides evidence that such poor level of information evaluation due to absence of systematic instruction and poor organization.

Burch and others (2015), conducts a cross-sectional study composed of a stratified random sample of the municipalities in the State of Minas Gerais, Evaluation of the Food and Nutrition Surveillance System (SISVAN) in food and nutritional management services in the State of Minas Gerais, Brazil aimed to planning, management and evaluation of food and nutrition actions in primary healthcare. A sample of (863) subject from primary health care centers, the findings show that the SISVAN is not used to its full potential; the data generated have not been used for planning, management and evaluation of nutrition services in primary healthcare in the unified health system SUS.

2. Evaluation of Primary Health Care Centers’ Education and Nutrition Training as Dimension of Organization Structure.
 Analysis of such evaluation depicts that the majority of the primary health care centers have poor level of education and nutrition training evaluation (Table 4-1c). This finding can be interpreted that is no training and developmental courses for these centers.

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

3. Evaluation of Primary Health Care Centers’ resources and supplies as Dimension of Organization Structure

Analysis of such evaluation indicates that the majority of the primary health care centers have poor level of resources and supplies (Table 4-1e). Such finding presents evidence that the primary health care centers will not planned how can accessible the needs and resources.

One of the biggest challenges is ensuring effective continuity of the system. One of the main reasons for the failure of surveillance systems in the past was that national or local governments were unable to provide the resources needed to maintain them. When establishing a surveillance system, it is essential to consider and plan for long-term sustainability, especially in areas where there is a high probability of prolonged crisis (WHO, 2014).

Conclusion

1. The study findings depict that primary health care centers have experienced inadequate towerednutritional 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.

Recommendations

1. Follow up the nutritional surveillance systems' feedback from he 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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