

Evaluation of Maternal and Child Health Service in Baghdad City' Primary Health Care Centers

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Abstract- Objective(s): The present study aims at evaluating the delivery of maternal and child health services provided by staff nurses in Baghdad city's primary health care centers.

Methodology: A descriptive design using the evaluation approach carried out in primary health care centers for the period from 22th October 2015 to 26th September 2016. The present study is carried out at (10) primary health care centers selected from (10) health sectors distributed in Baghdad City according to the Ministry of Health, Directorate of Primary Health Care Classification. A non-probability (convenient) sample of (100) staff nurses is selected for the purpose of the present study. A questionnaire, of (3) parts, is adopted and used for data collection to evaluate the phenomenon underlying the study and the overall items included are (28) items. The reliability of study instrument is determined by using Pearson Correlation Coefficient (r) = 0.88 significant at $P > 0.05$ level. Validity of the study instrument is determined through panel of (10) experts throughout a pilot study. Analysis of data conducted through the application of descriptive data analysis approach.

Results: the study findings present that the overall evaluation of maternal and child services are fair (78.5 %). Which reveals that there are some services not provided within the recommended standards.

Conclusion: Such results for the evaluation of maternal and child health services indicates that most of the services are fairly provided by the staff nurses and therefore the study recommends that nurses in primary health centers need be involved in educational-training programs regarding maternal and childcare services.

Index Terms- Evaluation, Maternal and Child Health Services, Primary Health Care Centers.

I. INTRODUCTION

Throughout the world, especially in the developing countries, more than (150) million women become pregnant each year and an estimated (500,000) of them die from pregnancy-related causes. Maternal health problems are also the causes for more than seven million pregnancies to result in stillbirths or infant deaths within the first week of life. Maternal death, of a woman in reproductive age, has a further impact by causing grave economic and social hardship for her family and community. Other than their health problems, most women in the developing countries lack access to modern health care services and increases the magnitude of death from preventable problems (1).

Maternal and child services is a specialized area of care focuses on the health needs and identifiable response of women, their partners, and families to real or potential health problems associated with childbearing. Maternal and child health is one of the component of primary health care (2).

Maternal and child health services are concerned with preventive and curative activities at all levels of care. In this area, five types of activity can be identified: clinical services-treatment of disease, antenatal care (disease prevention and education are main areas to be stressed), care of newborns and children (the maintenance of growth charts, health education and immunization) family planning, and health education (3).

In addition, WHO Bank child Health, and poverty working Group have suggested that a simple set of six preventive activities and two therapeutic activities could significantly decrease the extent of burden among children. Basic preventive activities include prenatal care, breast-feeding, birth spacing, hygiene, immunizations and insect control. Recommended therapeutic interventions include effective home management of illness and promote medical attention when needed (4).

According to the UNFPA, maternal deaths would be reduced by about two-thirds, from (287,000) to (105,000), if needs for modern family planning and maternal and newborn health care were met. Therefore, investing in family planning and improved maternal health care brings many benefits including reduced risks of complications and improvement in health for mothers and their children (5).

Iraq as one of the developing countries has been subjected to some of the most complex emergencies, conflict and security situations in the world today. Health facilities have sustained serious damage and are in need of urgent rehabilitation. PHC centers have "deteriorated" due to lack of maintenance, lack of supplies, reduced or inadequate health workers or inadequate support services. The available estimates place Iraq among the (68) countries that account for (97%) of maternal and child deaths (Maternal death for every 100,000 live births is 22-99 death). The main causes behind this high rate are poor birth practices, inadequate referral or availability of emergency obstetric care, high level of anemia among pregnant women (35%), which particularly affect rural women and those in the Centre and South Regions, and the lack of adequate health professionals and structural damage to facilities (6).

The contribution of primary care to the health of populations and organization of health systems is well documented in the international scientific literature (7).

The present study aims at evaluating the delivery of maternal and child health services by staff nurses who are working in Baghdad's primary health care centers.

II. METHODOLOGY

A descriptive design using the evaluation approach is conducted in primary health care centers for the period from 22th October 2015 to 26th September 2016. The present study is carried out at (10) primary health care centers selected from (10) health sectors distributed in Baghdad City according to the Ministry of Health Directorate of Primary Health Care Classification. A non-probability (convenient) sample of (100) staff nurses is selected for the purpose of the present study. A questionnaire, of (3) parts, is adopted and used for data

collection. The reliability of study instrument is determined by using Pearson Correlation Coefficient (r) = 0.88 significant at P>0.05 level. Validity of the study instrument is determined through panel of (10) experts throughout a pilot study. Data analysis is conducted through the application of descriptive analysis approaches.

A total score is computed for the measurement of the maternal and child health care services adequacy. It is measured as Adequate, fair, and inadequate for the overall evaluation and each individual services.

III. RESULTS

Table (1): Overall Evaluation of Maternal and Child Health Services

Overall Evaluating	Adequate 84-64.5	Fair 64.4-45.8	Inadequate 45.7-28
Maternal and Child Health Services	14.3 %	78.5 %	7.2 %

The table shows that the majority of maternal and child health services are fairly provided by the staff nurses (78.5%).

Table (2): Evaluation of the Maternal and Child Health Services in Primary Health Care Center

[1] Mother and Child Health Care Services	[2] Adequate [3] 21-17	[4] Fair [5] 16-12	[6] Inadequate [7] 11-7
Breast Cancer Screening Services	[8] 30 Adequate 15-12.4	[9] 48 Fair 12.3-8.7	[10] 22 Inadequate 8.6-5
Immunization for the Mother and Child Services	Adequate 18-14 36	Fair 13-10 43	Inadequate 9-6 21
Integrated Management of Children Illness	Adequate 12-10 34	Fair 9-7 43	Inadequate 6-4 23
Family Planning Services	Adequate 15-12.4 48	Fair 12.3-8.7 32	Inadequate 8.6-5 20
Total	14.3 %	78.5 %	7.2 %

This table shows that mother and child care services are fairly provided by nurses (48%), breast feeding services are fairly provided (50%), immunization for mother and child are fair (43%), immunization services for adults are fairly provided, integrated management of children illness are fairly provide (43%), and family planning services are adequately provided (48%).

Table(3): Mean of Scores for Maternal and Child Health Services' Items

List	Items	Alwa ys	Some time	Neve r	M.S	RS	Sig.
1	Mother and Child Care Services:						

1.1	Recording pregnant' data with respect to weight, height and lab tests.	43	30	27	2.16	72.0	S
1.2	Educating pregnant mothers about proper nutrition and exercise.	21	65	14	2.07	69.0	S
1.3	Follow-up tests for pregnant women.	41	25	34	2.07	69.0	S
1.4	Supporting for pregnant mothers about how to deal with pregnancy discomforts (nausea, vomiting and back pain.	24	55	21	2.03	67.66	S
1.5	Measuring of the pregnant.	33	46	21	2.12	70.66	S
1.6	Monitoring the growth and development of newborn in the review card.	23	58	19	2.04	68.0	S
1.7	Health education for mothers on how to deal with the newborn during bathing and status appropriate to breast-feed.	24	55	21	2.03	67.66	S
2	Breastfeeding Services:						
2.1	Supporting and encouraging exclusive breastfeeding.	41	25	34	2.07	69.0	S
2.2	Educating the family about the importance of breastfeeding for newborn.	24	55	21	2.03	67.66	S
2.3	Reporting pregnant about all benefits of breastfeeding.	33	46	21	2.12	70.66	S
2.4	Explaining and demonstrating the best way to breastfeed.	23	58	19	2.04	68.0	S
2.5	Refraining from giving industrial teats or pacifiers.	24	55	21	2.03	67.66	S
2.6	Helping to shape breastfeeding supporting groups and referring mothers to them pristine singers, especially.	23	58	19	2.04	68.0	S
3	Immunization of the Mother and Child Services:						
3.1	Vaccinating mother during pregnancy.	38	45	17	2.21	73.66	S
3.2	Immunization Campaign especially vaccines during outbreaks of epidemics.	47	31	22	2.25	75.0	S
3.3	Educating parents about the importance of vaccines and its impact on children's health.	28	50	22	2.06	68.66	S
3.4	Implementing of vaccination campaigns during national immunization days.	28	52	20	2.08	69.33	S
3.5	Following vaccination as scheduled by the Ministry Of Health based on	52	36	12	2.40	80.0	HS

	the recommendation of the World Health Organization.							
3.6	Health education of mothers about the immunization program and follow up.	21	46	33	1.88	62.66	NS	
4	Integrated Management of Children Illness:							
4.1	Educating parents about the importance of testing for children.	32	39	29	2.03	63.33	NS	
4.2	Conducting examinations for children in the event of a disease and incidents of emergency.	47	31	22	2.25	75.0	S	
4.3	Disclosing children's genetic diseases.	28	50	22	2.06	68.66	S	
4.4	Taking blood samples of newborns from the age of 72 hours and up to 2 months.	28	52	20	2.08	69.33	S	
5	Family Planning Services:							
5.1	Raising public awareness about family planning.	62	21	17	2.45	81.66	HS	
5.2	Improving educational awareness about sexual and reproductive health.	60	25	15	2.45	81.66	HS	
5.3	Providing the techniques and practices related to birth control.	54	26	20	2.34	78.0	HS	
7.4	Educating women on how to use the contraceptive methods and their side effects.	31	50	19	2.12	70.66	S	
7.5	Educating women on how to use the copper IUD and side effects.	35	37	28	2.07	69.0	S	

MS = Mean of Score, Non Significant = Less than (1.66), Significant = (1.66 – 2.33), Highly Significant = More than (2.33). NS = Non Significant, S = Significant, HS = Highly Significant, RS= Relative Sufficiency.

This table presents the mean of scores for maternal and child health services' items; it is revealed that all of the mother and child care services are significant; most of the breastfeeding services' items are significant; four items of immunization of the mother and child services are significant, one item is highly significant and one item is not significant; three items of integrated management of children illness services are significant and one item is not significant, and finally three items of family planning services are highly significant and two items are significant.

IV. DISCUSSION

Throughout the course of data analysis, the study findings present that the overall evaluation of maternal and child services are fair (78.5 %)(Table 1). Which reveals that there are some services not provided within the recommended standards. Concerning the mother and childcare services, the result indicates that (48) nurses provided the service fairly (Table 2). This is obvious in the mean of score for the items of this service as all the items are significant (Recording pregnant data with respect to weight, height and lab tests, educate pregnant

mothers about proper nutrition and exercise, follow-up tests for pregnant women, supporting pregnant mothers in how to deal with pregnancy discomforts such as nausea, vomiting and back pain, blood pressure measurement for the pregnant, monitoring growth and development of newborn in the review card, and health education for mothers on how to deal with the newborn during bathing and status appropriate to breast-feed)(Table 3). These findings inconsistent with results obtained from study done by Sa'adon and Khalifa (2010), the study focused on determination of quality assurance for maternal and child health services in Baghdad City which indicated that (31%) of the services provided is adequate⁽⁸⁾.

Regarding breast-feeding services, most of the nurses provided the services fairly also (46) (Table 2). This is obvious in the mean of score for the items of these services; six items are significant (Supporting and encouraging exclusive breastfeeding, educating the family about the importance of breastfeeding for newborn, reporting pregnant about all benefits of breastfeeding, explaining and demonstrating the best way to breastfeed, refraining from giving industrial teats or pacifiers, and helping to shape breastfeeding, supporting groups and referring mothers to them singers) (Table 4).

Immunization of the mother and child services, the result presents that most of the nurses are fairly providing the service (43) (Table 2). This is obvious in the mean of score for items of these services; one item is highly significant (Following vaccination as scheduled by the Ministry of Health based on the recommendation of the World Health Organization) and four items are significant (Vaccinating mother during pregnancy, immunization campaign especially vaccines during outbreaks of epidemics, educating parents about the importance of vaccines and its impact on children's health and implementing vaccination campaigns during national immunization days) and one item is not significant (Health education of mothers about the immunization program and follow up) (Table 3).

With respect to the integrated management of children illness services, (43) nurses fairly provided the service (Table 2). This is obvious in the mean of score for the items of these services; three items are significant (Conducting examinations for children in the event of a disease and incidents of emergency, disclosing of children's genetic diseases and taking blood samples of newborns from the age of (72) hours and up to (2) months) and one item is not significant (Educating parents about the importance of testing for children) (Table 3).

Finally, the family planning services' evaluation revealed that almost halve of the nurses (48) adequately provided the service (Table 2). This is obvious in the mean of score for the items of these services; three items are highly significant (Raising public awareness about family planning, improving educational awareness about sexual and reproductive health and providing the techniques and practices that are related to birth control) and two items are significant (Educating women on how to use the contraceptive methods and their side effects and educating women on how to use the copper IUD and its side effects) (Table 3).

Such results for the evaluation of maternal and child health services indicates that most of the services are fairly provided by

the staff nurses and therefor the study recommends that nurses in primary health centers need be involved in educational-training programs regarding maternal and childcare services.

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