

Evaluation of knowledge and Satisfaction among service recipient of (Integrated Management of Neonatal and Child Health Program) in Primary Health Care Centers in Baquba City

Mazin Khalid Abdullah (MST)¹, Basim Hussein Bahir (PhD)² ,
Oday Kahtan (BM)³

^{1,3} Public Health Department of Diyala , Diyala, Iraq

² Community Health Department ,College of Health and Medical Technology
,Baghdad ,Middle Technical University, Iraq

Abstract

Background: Integrated Management of Neonatal and Child Health Program (IMNCH) is an approach to offering solid evidence. It is used as a strategy to draw national and international investment into many initiatives to improve child health because it is diagnostically superior to conventional routine practice.

Objective: To assess the knowledge and satisfaction rate among Integrated Management of Neonatal and Child Health Program care takers.

Patients and Methods: A cross sectional study was conducted in two sectors (The health care sector in baqubah first and second) that offers health services in Baquba city from 15th December 2015 to 1st of June 2016. A convenient sample of 150 cases were included in the study from the age of two month to five years. Data collected by special designed questionnaire that adopted from world health organization.

Results: The result showed that 87.3 % of health providers prescribed oral medicine for child out of them 86.3% of service recipient know how many times day that should be given while 25.2% of them know how many days that should be given. oral rehydration solution was prescribed 31.3% of children majority of health takers 87.2% known quantity of water to maxed with one sachet of ORS Showed that 24.7% of service recipients bring back the child immediately to primary health care center when the child unable to drink or breast feed and 23% of service recipients bring back the child immediately when the child becomes sicker or develop fever or difficult breathing and 30%when the child breathing is fast or difficult breathing and 18% of service recipient were satisfied about care that provided for children while 82% of service recipients were not satisfied.

Conclusion: The satisfaction rate of service recipients about the service that provided in primary heath care center in Baquba city were poor.

Keywords: IMCI, diseases, health, childhood

OPEN ACCESS

Correspondence Address: Mazin Khalid Abdullah
Public Health Department of Diyala , Diyala, Iraq

Email: mazinalrashide0@gmail.com

Copyright: ©Authors, 2023, College of Medicine, University of Diyala. This is an open access article under the CC BY 4.0 license

(<http://creativecommons.org/licenses/by/4.0/>)

Website:

<https://djm.uodiyala.edu.iq/index.php/djm>

Received: 16 October 2022

Accepted: 8 November 2022

Published: 5 April 2023

Introduction

Conventional routine has not been enough to improve children's survival, sick children manage by controlling certain diseases. The Integrated Management of Childhood Illnesses (IMCI), which includes interventions for diarrhea and acute respiratory infections, is a strategy that emerged in response to dissatisfaction with the specific disease control program [1-4]. This strategy was created in the middle of the 1990s to address significant issues with children's health in developing nations by the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), and their technical partners [2]. Before they turn five, eleven million children die each year in low- and middle-income countries. Pneumonia, diarrhea, measles, malaria, and HIV—oftentimes in conjunction—cause half of these deaths [4,2,5,6].

An approach to offering solid evidence is IMCI. It is used as a strategy to draw national and international investment into many initiatives to improve child health because it is diagnostically superior to conventional routine practice. India conducted the initial evaluation [7]. The integrated management of childhood illness (IMCI) strategy's elements are designed to deal with the primary issues. The first part focuses on enhancing health workers' abilities during training and proper performance; this includes assessing signs and symptoms, classifying the illness, giving caregivers the necessary education to recognize malnutrition and anemia, checking their status for vaccinations, offering nutritional counseling, and effectively communicating with mothers. The second element of the IMCI strategy is enhanced

support for the healthcare system, including oversight and equipment and medication accessibility. The final element focuses on family practices that enhance community and child health and can be customized in different nations based on local epidemiology, health system traits, and cultural norms [8]. The establishment of a special protocol to ensure its application in Iraq is required in order to improve the standard of health services provided by IMNCH program trainers in child health care in the ministry of health in Iraq [9]. This study sought to determine the degree to which primary health care centers in Baquba City's caretakers were satisfied with the IMNCH program.

Patients and Methods

Study design

A cross sectional study was conducted in two sectors (The health care sector in baquba first and second) that offers health services in baquba city from 15th December 2015 to 1st of June 2016.

Sample size convenient sample of (150) service recipient was enrolled in the study using special questionnaire that was adopted from (WHO) which include time that spent in primary health care center, prescription any oral medicine, how many time for how many days, quantities of water with ORS and satisfaction about health care that provided to child.

Statistical Analysis

The analysis of data was carried out using the available statistical package of SPSS-22 (Statistical Packages for Social Sciences version 22). Data were presented in simple measures of frequency, percentage. The score

was applied as 2 points for Yes and 1 point for No, or 2 points for Done and 1 point for Not done.

Results

A total number of 150 care takers that undergo IMNCH program were enrolled in this study. Table (1) showed that 77% of

health workers in first Baquba sector were trained on IMNCH program while 75.9% of health workers in second baquba sector were trained on IMNCH program and percent of trained heath provider were 76.6 % in both health sectors.

Table (1): Distributions of trained health providers in IMNCH program

Baquba sectors	Trained health workers		Not trained health workers	
	NO.	%	NO.	%
First Baquba heath sector	37	77	11	23
Second Baquba health sector	22	75.9	7	24
Total	59	76.6	18	23.4

Table (2) demonstrated that the main reasons for consultation were fever, cough &fever, vomiting, cough, diarrhea, tonsillitis,

were (27.3%, 24.6 %,16.6 %,13.3%, 9.3%, 6.6%) respectively in both sectors.

Table (2): The main presenting complaint of children

Main reasons for Consultation	First Baquba heath sector		Second Baquba heath sector		Total	
	N	%	N	%	N	%
Fever	24	26.6	17	28.3	41	27.3
Cough &fever	20	22.2	17	28.3	37	24.6
Vomiting	17	18.8	8	13.3	25	16.6
Cough&cold flu	12	13.3	8	13.3	20	13.3
Diarrhea	9	9	5	8.3	14	9.3
Throat problem	6.6	6	4	6.6	10	6.6
Other problem	2	2.2	1	1.6	3	2.3
Total	60	90	40	60	100	150

Table (3) showed that 87.3% of health providers prescribed oral medicine for child. Out of them 86.3% of care takers know how many times that the drug should be given while 25.2 % of them know how many days

that should be given Oral rehydration solution was prescribed 31.3% for children. majority of health takers 87.2 known quantity of water to mixed with one be sachet of ORS.

Table (3): Exit interview of care takers about drug instruction

Care takers	N=150	%
Health provider prescribe any oral medicine for child	131	87.3
Know how many time the drug should be given	113	86.3
Know how many days the drug should be given	33	25.2
The ORS prescribed	47	31.3
Know quantities of water to mix with 1sachet of ORS	41	87.2

Table (4) showed that 24.7 % of care takers bring back the child immediately to primary health center when the child unable to drink or breast feed and 22% of care takers bring back the child immediately to primary health center when the child becomes more sick or develop fever and 30% of care

takers bring back the child immediately to primary health center when the child breathing is fast or difficult breathing and 23.3% % of care takers bring back the child immediately to primary health center when the child have blood in stools .

Table (4): Exit interview of care takers who know the sings of immediately return to primary health care center

The signs	N=150	%
Unable to drink or breast feed	37	24.7
Becomes sicker or develop fever	33	22
Breathing is fast or difficult breathing	45	30
Blood in stools	35	23.3

Table (5) showed that 31.4 % of care takers were fathers and 56% of care takers were

mothers and 12.6% of care takers were other member of family.

Table (5): Relationship of service recipient with sick child

Care takers	NO.	%
Father	47	31.4
Mother	84	56
Others	19	12.6
Total	150	100

Figure (1) showed that 18% of care takers were satisfied with the care provided for

their children while 82% of care takers were not satisfied.



Figure (1): Satisfaction of service recipient with health services

Figure (2) demonstrated the time that spent in primary health care center were 71% of service recipient thought it was acceptable

while 29% of care takers thought it was long time.



Figure (2): Time that spent in primary health care center

Discussion

The most captivating finding was that a significant number of health workers 76.6% were trained in the IMNCH program. This finding appears to be in line with those of studies conducted in India [10], Malawi [11], and South Africa [12], which found that 76%, 70%, and 74% of health workers,

respectively, had received IMNCH program training.

The current study's findings, however, were better than those of a previous study conducted in Bulawayo, Zimbabwe [13], which discovered that only about 20% of health workers had received training in the IMCI program.

According to this study's findings on the relationship between service recipients and sick children, mothers make up the majority. Which was consistent with a number of other studies conducted in [Ethiopia in 2004], Malawi [14], and Mulanje District [15] which discovered that the child mother accounted for the majority of people who brought the child to the primary health care centers; Regarding drug instruction, the findings of this study indicate that a significant percentage (87%) of health professionals prescribe oral medications for children. This result was higher than that of studies conducted in Rwanda [16] and Alexandria [17], which found that 62% and 75.1%, respectively, of health professionals did the same.

But as regard oral rehydration solution prescription the result of current study is less than of study that done in Rwanda in 2008(18) which was found that 80% of health workers prescribed ORS.

The study showed that majority of service recipients 87.2% know the quantities of water to be mixed with ORS. It is encouraged to compare this figure with other studies that done in Ethiopia in 2004[14] which showed that 30% of service recipients know the quantities of ORS which was much less than this study.

But seems to be consistent to the study that done in Rwanda [18] which found 80% of service recipients know the quantities of water that mix with ORS.

Current study showed one quarters of service recipients brought back their child immediately to primary health center when the child was unable to drink or breast feed and when the child has blood in stools.

This percentage higher than with other study done in Ethiopia [14] which shows that study 5% of care takers brought back the child immediately to primary health center when child unable to drink and 11% when child had blood in stool.

While for the satisfaction rate of service recipients and the time that spent in primary health care center, the study showed that 18% of care takers satisfied with the care provided to child this result is in agreement with other studies that done in Basra [19], Alexandria [18] which found that 22.5% ,4.1% of service recipients were satisfied about health services respectively.

But as compared with the study that has done in India [10] which showed that 87% of service recipients were satisfied about serves that provide in primary health care centers. This difference may be due to the health services that provided in India is better than in Iraq

As regard satisfaction with time spending in health facilities this study shows that 71% of care taker were satisfied as compared with the study that done in Basra [19] which found that 70 .7% were not satisfied.

Conclusions

Although about three quarters of health workers were trained on IMNCH program but the satisfaction rate of care taker about the service that provide in primary health care center in Baquba city were poor. and high percentage of care takers did not know when to bring back their children to primary health care centers because of insufficient instruction by health provider.

Recommendations

Update the information of the program for those who are trained on it with the need to

review the work of the Special information sessions and increase educational session about the importance of program to all health workers in primary health care center.

Source of funding: The current study was funded by our charges with no any other funding sources elsewhere.

Ethical clearance: Ethical approval was obtained from the College of Medicine / University of Diyala ethical committee for this study.

Conflict of interest: Nil

References

- [1] World Health Organization, Department of Child and Adolescent Health and Development, The Multi-Country Evaluation of IMCI Effectiveness, Cost and Impact(MCE)Progress Report 2000 - 2001 Available:
http://apps.who.int/iris/bitstream/10665/6845/7/1/WHO_FCH_CAH_01.15.pdf
- [2] Bryce J., Victora C., Habicht JP., etal, The Multi-Country Evaluation of the Integrated Management of Childhood Illness Strategy: Lessons for the Evaluation of Public Health Interventions, american jour. of public health: 2004;94(3)P. 406-415.
- [3] World Health Organization, The Multi Country Evaluation of IMCI Effectiveness, Cost and Impact (MCE): Progress report, 2002-2003 Available at:
http://apps.who.int/iris/bitstream/10665/6738/1/1/WHO_FCH_CAH_02.16.pdf
- [4] World Health Organization, Life in the 21st century: a vision for all,1998.
Available at:
http://www.who.int/whr/1998/en/whr98_en.pdf
- [5]Silali M., Utilization of Integrated Management of Childhood Illnesses IMCI for Child health in Western Kenya, journal of biology: agriculture and healthcare: 2014; 4(25) P. 2224-3208.
- [6] Arifeen SE, Hoque D, Akter T, Rahman M, Hoque ME, et al. (2009) Effect of the Integrated Management of Childhood Illness strategy on childhood mortality and nutrition in a rural area in Bangladesh: A cluster randomized trial. *The Lancet* 374: 393–403.
- [7] Black R., Morris S., Bryce J., Where and Why are 10 Million Children Dying Every Year? *the lancet*:2003; vol.361; P. 2226-2234.
- [8] Costello A., Is India Ready for The Integrated Management of Childhood Illness Strategy, *indian pediatrics juor.*:1999; 36(8) P.759-762.
- [9]WHO (2001). Annual IMCI Report 2001. WHO Regional Office for Africa.
- [10]Arabic reference Ministry of health protocol.
- [11] Mohan P., Kishore B., Singh Sh., etal. Assessment of Implementation of Integrated Management of Neonatal and Childhood Illness in India, *journal list j health populnutrv*:2011; 29(6) p 15 .
- [12] WHO, Country Health System Fact Sheet 2006 Comoros, 2006.
Available at:
<file:///C:/Users/udy%20iraq/Downloads/comoros.pdf>
- [13] Chopra M.,Patel S., Cloete K., etal. Effect of an IMCI Intervention On Quality of Care Across Four Districts in Cape Town, South Africa, *arch dis child*: 2001; 2005(90) p398-400.
- [14] Gombe N., Mabaera B., Tshimanga M., Shambira G., etal. Evaluation of the Integrated Management of Childhood Illness Strategy Implementation in Bulawayo City,

- Zimbabwe- 2006; sajch march: 2010; 4(8-9). [15] Addis Ababa. Essential servies for health in Ethopia &oromia Regional Health Bureau Health Facility survey (2004) v.14 p 9-25 .
- [16] Dyson Austins Mwandama (2008) . Quality of Integrated Management of Childhood Illnesses (IMCI) in Mulanje District: A cross sectional study.p 25-38.
- [17] Rwanda Ministry of Health . Evaluation report of the Integrated Management of Childhood Illness (IMCI) strategy in the District of Kirehe,Eastern Province in Rwanda(2008) p 14-34.
- [18]Sabah Mohamed .Assessment of Integrated Management of Childhood Illness (IMCI) Approach in Alexandria- Egypt, Sch. Jour. App. Med. Sci.: 2013; 1(3):177-190.
- [19]Abdu al Hussein Sh., Patient Satisfaction with Quality of Care in The Oncology Center in Al-Sader Teaching Hospital in Basra: 2009; 14.

تقييم معرفة ومعدل الرضا لمتلقى الخدمة من برنامج الرعاية المتكاملة لصحة الام والطفل في مراكز الرعاية الصحية الأولية في مدينة بعقوبة

مازن خالد عبدالله^١ ، باسم حسين باهر^٢ ، عدي قحطان^٣

الملخص

خلفية الدراسة: الرعاية المتكاملة لصحة الام والطفل هو نهج لتقديم أدلة جيدة وهو متوفّق من الناحية(IMCI) التشخيصية على الممارسة الروتينية التقليدية ويستخدم كاستراتيجية لجذب الاستثمار الوطني والدولي إلى العديد من المبادرات لتحسين صحة الطفل.

اهداف الدراسة: لتقدير معرفة و معدل الرضا لمتلقى الخدمة من برنامج الرعاية المتكاملة لصحة الام والطفل ضمن مراكز الرعاية الصحية الأولية في مدينة بعقوبة .

المرضى والطريق: أجريت دراسة مقطعة في قطاعين يغطيان الخدمات الصحية في مدينة بعقوبة من الفترة من ١٥ كانون الأول ٢٠١٥ إلى ١ حزيران ٢٠١٦ . وقد تم تضمين عينة ملائمة من ١٥٠ حالة لتحديد معدل رضا المتلقى في الدراسة من سن ٢ شهر إلى ٥ سنوات تم جمع البيانات بواسطة استبيان مصمم خاص معتمد من منظمة الصحة العالمية.

النتائج: أظهرت النتائج أن ٨٧,٣٪ من مقدمي الرعاية الصحية وصفوا أدوية الفم للأطفال من بينهم ٨٦,٣٪ من مقدمي الرعاية يعرفون عدد المرات التي يجب إعطاؤها في اليوم بينما يعرف ٢٥,٢٪ منهم عدد الأيام التي يجب إعطاؤها . تم وصف محلول معالجة الجفاف عن طريق الفم بنسبة ٣١,٣٪ من الأطفال الذين يمتلكون غالبية متلقى الصحة ، ٨٧,٢٪ من الكمية المعروفة من الماء تصل إلى الحد الأقصى بكيس واحد من أملاح الارواء الفموية ، أوضحت أن ٢٤,٧٪ من متلقى الرعاية يعيدون الطفل على الفور إلى مركز الرعاية الصحية الأولية عندما يكون الطفل غير قادر على الشرب أو الرضاعة الطبيعية و ٢٣٪ من القائمين على الرعاية يعيدون الطفل فوراً عندما يمرض الطفل أو يصاب بحمى أو صعوبة في التنفس و ٣٠٪ عندما يتنفس الطفل بسرعة أو صعوبة في التنفس و ١٨٪ من مقدمي الرعاية راضون عن الرعاية المقدمة للأطفال بينما ٨٢٪ من الذين يقولون الرعاية لم يكونوا راضين.

الاستنتاجات: ضعف معدل رضا متلقى الخدمة من برنامج الرعاية المتكاملة لصحة الام والطفل التي تقدمها مراكز الرعاية الصحية الأولية في مدينة بعقوبة .

الكلمات المفتاحية: التدبير المتكامل لصحة الطفل ، الأمراض ، الصحة ، الطفولة

البريد الإلكتروني: mazinalrashide0@gmail.com

تاريخ استلام البحث: ١٦ تشرين الأول ٢٠٢٢

تاريخ قبول البحث: ٦ تشرين الثاني ٢٠٢٢

^١ قسم الصحة العامة - دائرة صحة ديالى - ديالى - العراق

^٢ كلية التقنيات الصحية والطبية - بغداد - العراق