Adherence to Guidelines of Integrated Management of Childhood Illness in Management of Acute Respiratory Infection in an Urban Maternal and Child Health Center-Egypt

Randa S Abd El Fatah[1] , Ekram M Abdel Khalek[2] *,Ahmed M Mahmoud Hany[2], Osama M El-Esheer[3], Assma M Soliman[2]

[1] MOHP, Assiut, Egypt

[2] Public Health and Community Medicine Department, Faculty of Medicine, Assiut University, Egypt

[3] Pediatrics Department, Faculty of Medicine, Assiut University, Egypt

Abstract

Background: One of the core ingredients of the Integrated Management of Childhood Illness (IMCI) strategy is controlling children respiratory infection (ARI). The implementation of this policy makes it possible to manage respiratory infection. More than 10% (14%) of the Egyptian children had ARI according to Egyptian Demographic Health Survey (EDHS) 2014. **Objectives:** The present study aimed to describe the management of acute respiratory infections according to IMCI strategy in an urban MCH Center. **Methods:** A cross-sectional study was conducted at Kedwany MCH Center in Assiut city, Egypt. Exit interviews with the caregivers of 300 children diagnosed with acute respiratory tract infections were done using semi-structured questionnaires. Three inventories were conducted emphasizing the availability of IMCI-recommended drugs, vaccines, and equipment at the center. Data were collected from the IMCI records during the study period. **Results:** According to IMCI classification, 12.7% of the studied children had pneumonia/cough or cold and 87.3% of them had not. Prescription of ARI treatment was done for 99.7% of cases and all of them were accurate; 84.3% of children received cough syrup and 42.7% received antibiotics. All of the checked records were filled according IMCI guidelines. The center was well equipped and supplied by requirements. **Conclusion:** 73.7% of the studied children suffering from acute respiratory tract infections were of age less than 2 years. The IMCI-recommended drugs, equipment, and vaccines were available at the study center. Healthcare providers should give emphasis to children caregivers about the signs and symptoms of respiratory infection indicating their need for immediate return for follow-up.

Keywords: IMCI guidelines, Respiratory infections, Under five children

Introduction:

Acute respiratory infection is among the prevalent causes of childhood morbidities and mortalities.(1) Responding to this challenge, The Integrated Management of Childhood Illnesses (IMCI) was developed as a child health improvement strategy in 1990s.(2)

IMCI is a complex approach integrating multiple interventions across different measures.(3) This strategy ensures that sick children are managed comprehensively at primary contact levels.(4) Acute respiratory tract infection (ARTI), especially pneumonia, is a major public health issue in many developing countries and a common cause of death among children.(5)

Children younger than 5 years of age experience 3-8 episodes of upper respiratory tract infections per year. The greatest incidence of lower respiratory tract infections occurs in the first year of life and

***Corresponding author:** habeba2002eg@yahoo.com

steadily declines during childhood.[6] A Multi-Country Evaluation (MCE) of IMCI effectiveness, cost, and impact was previously conducted including Uganda, Tanzania, Peru, Brazil and Bangladesh and many studies were published from it.[3,7,8, 9,10]

In 1996, IMCI was adopted as a child healthcare program in Egypt and its coverage rose from 3% of primary healthcare facilities in 2000 to 98% in 2012.[11] A retrospective analysis, based on data from registration, assessing the effect of IMCI implementation on child mortality between 2000 and 2006 in 213 Egyptian districts detected that the adoption of IMCI was correlated with double of the annual mortality reduction rate for children.[12]

The World Health Organization (WHO) considered Egypt as a successful model in IMCI implementation at the national scale.[13] Delivering high quality and affordable health services is considered as a difficult challenge.

Health services researches are concerned with studying different aspects of healthcare services including: utilization, costs, quality, accessibility, delivery process, organization, financing, and outcomes.[14]

A study was conducted for the assessment of IMCI approach in Alexandria and revealed that IMCI approach decreased the health care costs of sick children, improved the relationship between children caregivers and healthcare providers, and increased their satisfaction.[15]

The evidence clearly shows that the WHO case management approach of acute respiratory infections and the wider use of available vaccines will reduce ARI mortality among young children by half to two-thirds. [16]

There are many challenges facing IMCI program such as insufficient essential drugs and equipment, training of health workers and supervision after training, in addition to providing home care to the child.[5]

There is a deficiency in the published papers about IMCI in Egypt. This study aimed to describe IMCI management of acute respiratory tract infections among under five children in Egypt.

Methods:

Research design: This is a cross-sectional study.

Study setting: The present study was conducted at Kedwany Maternal and Child Health (MCH) Center located in the eastern area of Assiut Governorate.

This center was selected based on its adequate implementation of IMCI strategy where it covers the strategy's 3 components in addition to the sufficient population size the center serves.

Sample size: A sample size was calculated using Open Epi version 6based on the

prevalence of 14% of ARIs among under-five children according to the Egyptian Health Issues Survey [17] and a confidence level of 95%. Level of significance is less than 0.05. Accordingly, the sample size was estimated to be 186, but it was raised to 300 to avoid non-response.

Study population: The caregivers of all sick children aging from 2 months to 5 years who attended to the studied MCH center and diagnosed with acute respiratory tract infections according to IMCI approach were invited to participate in the study. A pilot study was carried out on 20 cases and then these cases were excluded from the study.

Tools of the study:

The first tool was a semi-structured questionnaire including questions about socio-demographic characteristics, process of IMCI evaluation, and a subjective question about child caregivers' satisfaction on the provided health services.

The second tool was used for the assessment of technical quality of healthcare services. The data were gathered from IMCI sheets (patients' medical records) and reviewed by using the WHO questionnaire adapted to the Egyptian context.[18]

The necessary data such as registration of age, sex, compliance, etc.. were collected from IMCI records during the studied period to obtain information about the compliance of healthcare providers to the management of ARIs according to IMCI strategy. (See Table 5)

The thirdtool was an observation checklist of IMCI facilities, supplies, and equipment. This tool was constructed based on the checklist used by IMCI supervisors in the Ministry of Health and Population for follow-up.

Operational definition:

Acute respiratory tract infection is a clinical state presenting with rapid breathing more than expected upper limit for age with or without chest in drawing, too sick to feed, nasal discharge, cough, fever with or without auscultatory findings of less than two weeks. [16]

Data collection: Data were collected through a face-to-face exit interview with children caregivers by the principal researcher3 days per week which were chosen randomly.

The approximate time spent for filling each questionnaire was around 20-30 minutes. Data collection was extended to five months. The facility audit was conducted through 3 inventories(visits) for the availability of essential drugs, equipment, and supplies needed to implement IMCI case management guidelines (Along one month, the first visit was done on the first day of the month, the

second one on the middle of the month, and the third visit was done on the last day).

The researcher remained at the facility till the end of working hours until all IMCI sheets were reviewed (patients' medical records) for completeness and consistency.

As the researchers' assessment of ARIs management according to IMCI guidelines aimed to evaluate the physicians' adherence to the guidelines, the principal investigator and the first author received an IMCI training workshop.

The first author is a physician in another MCH center applying IMCI strategy. So, she is aware of IMCI program case management guidelines and has clinical experience.

Data management:

Data were statistically analyzed using the Statistical Package for Social Science software (SPSS version 20). Descriptive statistics were done for numerical data by mean and standard deviation, while number and percentage were used for categorical data.

Ethical considerations:

Formal administrative approval was taken before the beginning of the study by the Assiut Faculty of Medicine Ethical Committee of the study proposal. Also, the approval of Directorate of Health was obtained. Children caregivers' consent was obtained after explaining the study objectives. Confidentiality and security of data were assured.

Results:

Table (1) shows that 36% of the studied children were less than 2 years of age; 37.7% of them ranged from 2 to 4 years and 26.3% were more than or equal to 4 years.

A percentage of 26.7%of children caregivers sought medical advice during 1-2 days of their child illness, 40.7% sought advice after 3-4 days, and about one third of them sought advice after this period (Table 2).

In Table (3), healthcare providers diagnosed the studied children as follows; common cold (85.3%), pneumonia (12.7%), and bronchial asthma (2.0%). According to IMCI classification, 12.7% of the studied children had pneumonia/cough or cold and 87.3% of them children had not. None of the cases was diagnosed as severe or very severe pneumonia.

Regarding treatment, 84.3% of the studied children received cough syrup and 42.7% received antibiotics. As shown in Table (4), the physician demonstrated the way of drug administration for 99.3% of the participants.

The physician or nurse advised 41% of the caregivers when they need to return to MCH for a follow-up visit. More than three quarters of the studied caregivers, (76.7%)

were not informed about the signs indicating the need for immediate return to the MCH center.

The majority of children caregivers (87.7%) were satisfied with the healthcare services, 8.7% were very satisfied, and 3.7% were dissatisfied. The reported causes of dissatisfaction were the bad manner of physicians dealing with them at the clinic (54.5%) and poor communication skills during consultation (45.5%).

Structure, process, and outcome assessment:

The center was well-equipped and supplied by requirements such as tongue depressor, functional scale for weighing children, thermometers, stop watch/clinic doctor, and refrigerator for vaccines which were available all over the month.

The IMCI-recommended drugs were available at the health center. A shortage in short-term drugs was noticed in the third visitat the end of the month. Regarding IMCI indicators, it was found that all the children included in the study were diagnosedby a trained physician, prescription of antibioticswas provided for ill children(Table is not shown).

As shown in Table (5), the data about name, age, weight, temperature, and type of the visits of the examined children were registered in all the checked records. The sex of the child was recorded in 99.7% of the cases. Assessment of danger signs was done for 99.7% of the studied cases.

It was found that all of the checked records were filled according to IMCI guidelines. Prescription of ARI treatment was done for 99.7% of cases and all of them were accurate.

Discussion:

Acute respiratory tract infection (ARI) is the main cause of 30% of medical consultations and 25% of children hospital admissions. [5,19] Also, ARI has a marked burden on the health system in the form of health centers' utilization.[20]

However, in a study by Oyejide and Osinusi, it was shown that the most affected age group with ARI was 10-19 months age group in Western Nigeria. [21]

In the present study, the age of studied children is ranging from 2-60 months and ARI was more frequent among the children aging from 2 to 4 years (37.7%). This can be explained by the fact that the age of 2 years is the age of breastfeeding weaning; this may have affected the incidence of ARI in addition to the exposure of these children to the risk factors of infection.

Montasser and her colleagues (2012) conducted a study about ARIs among rural children in Egypt and found that ARIs proportion was high in the children below 2

years (67%) and this proportion decreased with increasing age. [22]

In another study, Prajapati and his colleagues in Ahmedabad found more ARI cases in the children of 1-4 years age group (47.3%), followed by those of the 0-1 year age group (40.0%), and 12.7% in the 4-5 years age group .[23]

There is a difference between males and females in incidence of ARIs depending on the infectious agent because anatomical and hormonal differences between both genders can affect the occurrence of infection. [24] In the current study, male and female patients were similar in infection with ARI.

This indicates no sex bias in seeking medical care. However, Wadgave and his team detected more cases of ARI infemales. [25] Jha et al. in Pune found more cases of ARI in females (52.3%) compared to males (47.7%);[26] this difference may be attributed to the nutrition discrimination between males and females in the developing countries and/or the differences between both sexes in immunization status that affect the resistance and susceptibility to respiratory tract infection. On the other hand, Prajapati et al. found that 56.3% of ARI cases were males. [23]

Klein and Flanagan (2017) said that exposure to infectious diseases is similar in both female and male children, but males are more susceptible because they have weaker immune system than females naturally.[27]

In this study, most of children with ARI were urban residents; this may attributed to the fact that the study area is located in the city. So, it is more accessible to urban people than rural residents. Moreover, this reflects that health seeking behaviors are higher in urban residents than the rural population who usually had low education and socioeconomic status.

The distribution of the studied children according to IMCI classification was as follows: 12.7% had pneumonia/cough or cold and 87.3% had not. No one had severe or very severe pneumonia. Another study among Egyptian rural children found that the total proportion of pneumonia/cough or cold cases among ARIs patients was 41%, followed by pneumonia (36%), and severe pneumonia or very severe disease which was represented in 23% of the total studied cases. [21]

This may be attributed to the fact that severe ARIs cases are usually referred to the hospitals for admission, while less severe cases are usually treated in primary units. This result is in agreement with Saddam and Al Tawil in Iraq and WHO/ARI program. [5]

IMCI basic guidelines include treatment prescription and show the caregivers how to give oral drugs at home.[26] In this study,

nearly 59% of children caregivers were not informed of the time they need to go to follow-up visits.

Lack of counseling may be because physicians were focusing more on the examination and treatment of the sick child. Abdel Kader (2013) found that a device for immediate follow-up was present in 6.9% of the Alexandrian units applying IMCI.[15]

However, in the present study, caregivers of the majority of children (76.7%) reported that physicians did not advise in this issue. Regarding the caregivers' satisfaction on provided IMCI services in ARTI management, it was found that most of them (96%) were satisfied.

In another study conducted in the same center to evaluate the management of anemia and malnutrition among children according to IMCI, it was reported that 55.4% of the studied cases were counseled about the follow-up and 13.2% were informed of the indications of the need for immediate return.[28]

Supervision was essential in sustaining the quality of care. Two supervisory visits to the studied MCH center were done by the researchers in the last two months of the study. It was found that the studied MCH center was well equipped and supplied during the three visits of assessments. Most of the requirements were available all over the month.

The IMCI recommended drugs were available only in the beginning of the month because the amount of drugs supply is inadequate. The number of sick children observed at the first visit was more than the following two visits. This may be explained by the availability of essential drugs which decreased over the time.

In the current study, assessment of the records revealed that all of them were filled according the IMCI protocol and all children were diagnosed by a trained doctor. Elsharkawyet al. (2018) reported that the application of IMCI guidelines is considered valuable in the prevention of antibiotic abuse.[29]

This is attributed to the training in IMCI which proved to improve health workers performance.[30] In the present study, prescription of antibiotics was done correctly among 42.7% of the cases. This is consistent with Pariyo et al study.[10]

Inappropriate need assessment regarding antibiotics for ARI was found by Johansson and his team (39% cases were prescribed antibiotics, while 27% cases received no antibiotics).[4] This difference may be explained in the view of IMCI

application was inadequate in many low-income countries.

Study limitations:

This study is subject to some limitations as it is a cross sectional study. The observation of health workers was not done because they may perform well during observations and this could affect the results accuracy. The study was conducted at a single center because IMCI application is not applied in all health centers in Assiut Governorate. This limits the generalization of findings.

Conclusions:

Nearly 87% of the studied children hadno pneumonia/cough or cold. A percentage of73.7% of the children suffering from acute respiratory tract infections were under 2 years of age. All children were diagnosed by trained physicians and took treatment. The center was well-equipped and supplied with IMCI recommended drugs and tools. This study recommends that healthcare providers should give emphasis to children caregivers about the time they need to attend for follow up,the manifestations indicating the need for immediate return to MCH center, and proper counseling on child care at home.

Declaration

Competing interests

The authors declare that there is no conflict of interest in this study.

Fund

This study is not funded

Acknowledgments

The researchers would like to thank the staff of Kedwany Maternal and Child Health Center for their support and help and all the children and their caregivers who agreed to participate in this study.

References:

1. World Health Organization (WHO). Children: improving survival and well-being. 2020. Available at https://www.who.int/news-room/fact-sheets/detail/children-reducing-mortality. Accessed March 10, 2020.
2. Necochea E, Tripathi V, Kim YM et al. Implementation of the standards-based management and recognition approach to quality improvement in maternal, newborn, and child health programs in low-resource countries. Int J Gynaecol Obstet. 2015;130: S17-S24.
3. Bryce J, Victora CG, Habicht JPet al. The multi-country evaluation of the integrated management of childhood illness strategy: Lessons for the evaluation of public health interventions.

Am J Public Health. 2004; 94 (3):406-415.

4. Johansson WE, Nsona H, Carvajal–Aguirre L et al. Determinants of Integrated Management of Childhood Illness (IMCI) non–severe pneumonia classification and care in Malawi health facilities: Analysis of a national facility census. J Glob Health. 2017; 7(2): 020408. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5680530. Accessed January 2 20225.

5. Kiplagat A, Musto R, Mwizamholya D et al. Factors influencing the implementation of integrated management of childhood illness (IMCI) by healthcare workers at public health centers & dispensaries in Mwanza, Tanzania. BMC Public Health 2014; 25;14: 277.

6. Ramani VK, Pattankar J, Puttahonnappa SK. Acute respiratory infections among under-five age group children at urban slums of Gulbarga City: A longitudinal study. J Clin Diagn Res.: JCDR. 2016; 10(5): LC08 -13. Available from: https:// doi: 10.7860/JCDR/2016/15509.7779. Epub 2016. Accessed March 12, 2020.

7. World Health Organization (WHO). Integrated Management of Childhood Illness: distance learning course. 2014. Available at https://apps.who.int/iris/handle/10665/104772. Accessed December 26, 2021.

8. Schellenberg AJ, Bryce J, de Savigny D et al. The effect of Integrated Management of Childhood Illness on observed quality of care of under-fives in rural Tanzania.Health Policy Plan 2004;19(1) :1-10.

9. Bryce J,Victora C, Habicht J et al. Programmatic pathways to child survival: Results of a multi-country evaluation of Integrated Management of Childhood Illness.Health Policy Plan 2006;20 (1):i5-i17.

10. Pariyo G, Gouws E, Bryce J et al. Improving facility-based care for sick children in Uganda: Training is not enough. Health Policy and Planning 2006; 20 (1):i58-i68.

11. World Health Organization (WHO): Egypt IMCI experience: a systematic approach for implementation. 2017. Available at http://www.emro.who.int/child-adolescent-health/imci/egypt-imci-experience-a-systematic-approach-for-implementation.html. Accessed March 15, 2020.

12. Rakha MA, Abdelmoneim AN, Farhoud S et al. Does implementation of the IMCI strategy have an impact on child

mortality? A retrospective analysis of routine data from Egypt. BMJ Open. 2013 Jan 24; 3(1): e001852. doi: 10.1136/bmjopen-2012-001852. PMID: 23355663; PMCID: PMC3563136.

13. Lutter CK, Iannotti L, Creed-Kanashiro H et al. Key principles to improve programmes and interventions in complementary feeding. Matern Child Nutr. 2013; 9 (2): 101-115.
14. Steinwachs DM, Hughes RG. Patient safety and quality: an evidence-based handbook for nurses. Chapter (8): Health services research: Scope and significance Bookshelf ID: NBK 2660 , 2008.
15. Abdel Kader MS. Assessment of Integrated Management of Childhood Illness (IMCI) Approach in Alexandria, Egypt. Sch. J. App. Med. Sci., 2013; 1(3): 177-190.
16. WHO, UNICEF. Handbook IMCI: integrated management of childhood illness: World Health Organization; 2005. Available at https://apps.who.int/iris/handle/10665/42939. Accessed February 10, 2017.
17. Ministry of Health and Population, El-Zanaty and Associates. Egypt: Health Issues Survey. 2015;1–234.
18. WHO (2001): Integrated Management of Childhood Illness (IMCI): Planning, Implementing and Evaluating Pre-Service Training.
19. Radji M, FauziyahS,Oktaviani TW. Cross sectional study on antibiotic prescription for acute respiratory tract infection of children under age of 5 at tertiary general hospital in Jakarta Indonesia. Br Microbiol Res J. 2014;4(7):723.
20. Opiyo N, English M. In-service training for health professionals to improve care of the seriously ill newborn or child in low and middle-income countries. The Cochrane database of systematic reviews. 2010(4):CD007071. doi: 10.1002/14651858.CD007071.pub2. Available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2868967/ Accessed April 5, 2020.
21. Oyejide C, Osinusi K. Incidence of acute lower respiratory infections in a low socioeconomic community. Niger J Paediatr. 1991: 8-21.
22. Montasser N, Helal R,Rezq R. Assessment and classification of acute respiratory tract infections among Egyptian rural children. Br J Med Med Res. 2012; 2(2): 216-227.
23. Prajapati B, Talsania N,Sonaliya K. A study on prevalence of acute respiratory tract infections (ARI) in under five

children in urban and rural communities of Ahmedabad district, Gujarat. Natl J Community Med. 2011; 2(2): 255-259.

24. Klein SL, Flanagan KL. Sex differences in immune responses. Nat Rev Immunol. 2016; 16(10): 626–638.
25. Wadgave H, Godale,Vishwanath WH. Burden of acute respiratory tract infections in under-fives in urban area. J Med Educ Res. 2011; 1(2): 39-43.
26. Jha AK, Bhawalkar JS, Dixit AK et al. A study of factors associated with presence of ARI in children 1-4 years of age in an urban slum of Pune city. National J of Community Medicine. 2014; 5(2): 179-181.
27. Klein SL, Flanagan KL. Sex differences in immune responses. Nat Rev Immunol. 2016; 16: 626–638.
28. Osman MD, Khalaf RF, Abdel-Salam MD et al. Assessment of IMCI management of undernutrition and anemia in an urban MCH center; Assiut City. The Egyptian Journal of Community Medicine. 2019; 37(1): 35-47
29. Elsharkawy HA, Salem MG, Mohamed EA et al. Comparative study between Integrated Managementof Childhood Illness guidelines and traditional methods in management of acute pharyngitis among children under five years in Zagazig District, Egypt Journal of High Institute of Public Health 2018; 48(1): 36-40.
30. Hoque DE, Arifeen SE, Rahman M et al. Improving and sustaining quality of child healthcare through IMCI training and supervision: Experience from rural Bangladesh. Health Policy Plan. 2013; 29(6): 753-762.

Table (1): Personal characteristics of the studied children at Kedwany Maternal and Child Health Center, Assiut city, 2017

Variable	No. (n= 300)	%
Age: (years)		
▪ < 2	108	36.0
▪ 2 - < 4	113	37.7
▪ ≥4	79	26.3
Sex:		
▪ Male	150	50.0
▪ Female	150	50.0
Religion:		
▪ Muslim	278	92.7
▪ Christian	22	7.3
Residence:		
▪ Urban	157	52.3
▪ Rural	143	47.7

Table (2): Medical history of current respiratory tract infections among studied children

Item	No. (n= 300)	%
Child compliant:		
▪ Cough	299	99.7
▪ Fever	148	49.3
▪ Running nose	189	63.0
▪ Difficult breathing	9	3.0
Period of symptoms:		
▪ 1 – days	80	26.7
▪ 3 – days	122	40.7
▪ ≥5 days	98	32.7
This visit due to this compliant:		
▪ First visit	275	91.7
▪ Follow-up	25	8.3

Table (3): Management of the studied children by healthcare providers

Item	No. (n= 300)	%
Diagnosis:		
▪ Common cold	256	85.3
▪ Pneumonia	38	12.7
▪ Bronchial asthma	6	2.0
Distribution of children according to IMCI classification :		
▪ No pneumonia/cough or cold	262	87.3
▪ Pneumonia	38	12.7
▪ Severe pneumonia or very severe disease	0	0
Treatment:		
▪ Cough syrup	253	84.3
▪ Anti-histaminic	157	52.3
▪ Anti-pyretic	142	47.3
▪ Antibiotic	128	42.7

Table (4): Evaluation of IMCI process by children caregivers

Item	No. (n= 300)	%
Physician told you the diagnosis:		
▪ Yes	296	98.7
▪ No	4	1.3
Physician prescribed treatment:	300	100.0
Physician told you how to give the medication:		
▪ Yes	298	99.3
▪ No	2	0.7
You know how to give the medication correctly:		
▪ Yes	292	97.3
▪ No	8	2.7
Physician or nurse told you when to come back for follow up:		
▪ Yes	123	41.0
▪ No	177	59.0
Physician or nurse told you about signs that indicate the need for immediate return to MCH center:		
▪ Yes	70	23.3
▪ No	230	76.7
Satisfaction of child caregivers on provided IMCI services:		
▪ Very satisfied	26	8.7
▪ Satisfied	263	87.7
Cause of dissatisfaction:		
▪ Attitude of the heath team	6	54.5
▪ Manner of the physician communication	5	45.5

Table (5): Evaluation of IMCI records at Kedwany Maternal and Child Health Center, Assiut city

Item	No. (300)	%
▪ Registration of the child's name	300	100.0
▪ Age registration in months	300	100.0
▪ Weight measurement	300	100.0
▪ Temperature measurement	300	100.0
▪ Sex of the child	297	99.0
▪ Record the type of visit	300	100.0
▪ Check the general danger signs	299	99.7
▪ Evaluation and classification of cough/difficulty breathing: o For how many days o Registration of breaths per minute	 300 300	 100.0 100.0
▪ Evaluation and classification of fever	249	83.0
▪ Prescription of required treatment	299	99.7
▪ Accuracy of prescribed treatment	299	99.7
▪ Prescription of another treatment	275	91.7
▪ Check malnutrition and anemia	283	94.3
▪ Check other clinical signs	300	100.0
▪ Check the child vaccinations	300	100.0
▪ Follow-up advice	291	97.0
▪ Follow the strategy protocol	300	100.0

توافر الأدوية والمستلزمات الموصى بها فبرنامج الرعاية المتكاملة للطفل المريض

م	تاريخ الزيارة	٣/١	٣/١٥	٣/٣٠
توافر المهمات والمستلزمات:				
١	**كتيب البرنامج**			
٢	**دليل الممرضة**			
٣	**نموذج تسجيل الحالات**			
٤	**كارت الأم**			
٥	خوافض لسان خشبية			
٦	موسع الشعب الهوائية			
٧	ترمومترات			
٨	ميزان اطفال صالح			
٩	ساعة ميقاتية /طبيب بالعيادة			
١٠	اسطوانة اكسجين			
١١	ثلاجة طعوم			
١٢	يوجد ترمومتر فى الثلاجة			
١٣	صندوق أمان			
توافر الأدوية الأساسية				
١	اموكسيسيلين شراب			
٢	كوترايمزكسازول شراب			
٣	محلول سالبيوتامول			
٤	شراب باراسيتمول			
الاحالة				
١	توافر نمادج وسجل الاحالة			
المؤشرات				
١	فحص جميع الأطفال بطبيب مدرب			
٢	متوسط عدد الحالات/طبيب في اليوم			
٣	وصف مضاد حيوي للأطفال المرضى			
٤	زيارة اشرافية خلال الشهريين الماضيين			

م	صحة أداء الطبيب	١	٢	٣	٤	٥	٦	٧	٨	٩	١٠	الملاحظات
١	التحقق من علامات الخطر العامة											
٢	تقييم وتصنيف الكحة/ صعوبة التنفس											
٣	تقييم وتصنيف الحمي											
٤	تقرير الإحالة وإجراءاتها											
٥	وصف العلاج											
٦	صحة وصف العلاج											
٧	وصف علاج اخر											
٨	مشورة المتابعة											
٩	مشورة الرعاية المنزلية											
١٠	اتباع بروتوكول الاستراتيجية											
صحة أداء الممرضات:												
١٣	تسجيل اسم الطفل											
١٤	تسجيل السن بالشهور											
١٦	قياس درجة الحرارة											
١٧	تسجيل نوع الطفل ذكر أم أنثي											
١٨	تقدير الوزن بالنسبة للعمر											
١٩	تسجل نوع الزيارة											
٢٠	تسجيل الوزن ببطاقة الطفل الصحية											
٢٢	التحقق من موقف التطعيمات											
٢٣	النصح بقواعد الرعاية المنزلية الثلاث											
٢٤	اتباع خريطة مسئوليات الممرضة											
٢٥	استخدام كتيب الممرضة											
٢٦	استخدام كارت الأم											

الملخص العربى

الألتزام بدليل الرعايــة المتكاملــة للطفــل المريــض فى علاج عدوى الجهازالتنفسي الحادة بمركز حضري لصحة الأمومه والطفوله - مصر

راندا شحاتـه عبـدالفتـاح - إكـرام محمـدعبـدالخالـق- أحمـد محمـد محمـود هانـي - أسامـه محمد العشير- أسماء محمد أحمد سليمان

الخلفية: أحد المكونات الأساسية لاستراتيجيــة الرعايــة المتكاملــة للطفـل المريــض (IMCI) هو التحكم في التهابات الجهاز التنفسي لدى الأطفال. تطبيقا لسياسة يجعل من الممكن تشخيص وتقييم عدوى الجهاز التنفسي. بعدالأهداف الإنمائية للألفية، أصيب ١٤٪ من الأطفال المصريين بعدوى تنفسية حادة وفقًا للمسح الصحى الديموجرافى المصرى (٢٠١٤) .
الأهداف:هدفت هذه الدراسة إلى وصف التهابات الجهازالتنفسي الحادة وفقًا لاستراتيجيــة الرعايــة المتكاملــة للطفـل المريــض في مركز حضري لصحة الأمومه والطفل. **منهجية الدراسة:** أجريت هذه الدراسة مقطعية في مركز كدواني لصحة الأمومه والطفوله في مدينة أسيوط. أجريت مقابلات وجمع ٣٠٠ من مقدمي رعاية الأطفال الذين تم تشخيص أطفالهم بعدوى الجهاز التنفسي الحادة باستخدام استبيانات شبه منظمة. تم إجراء ثلاث قوائم للتأكيدعلى توافرالأدوية واللقاحات والمعدات الموصى بها وفقا لاستراتيجيــة الرعايــة المتكاملــة للطفـل المريــض في المركز. تم جمع البيانات من سجلات المرضى خلال فترة الدراسة. **النتائج:**حسب تصنيف استراتيجيــة الرعايــة المتكاملــة للطفـل المريــض ٨٧,٣٪ من الأطفال لم يكن لديهم التهاب رئوي/ سعال أوبرد و ١٢,٧٪ كانوايعانون من التهاب رئوي. تم وصف علاج التهابات الجهازالتنفسي الحادة في ٩٩,٧٪ من الحالات وكان تجميعها صحيحة. ٨٤,٣٪ من الأطفال تلقوا شراب السعال و٤٢,٧٪ المضادات الحيوية. تم ملأ جميع السجلات التي تم التحقق منها وفقًالإرشادات الرعايــة المتكاملــة للطفـل المريــض، وكان المركزمجهزًاجيدًا بالمتطلبات.**الاستنتاجات والتوصيات**: ٧٣,٧٪ من الأطفال الذين شملتهم الدراسة كانوايعانون من التهابات الجهازالتنفسي الحادة وكان عمرهم أقل من سنتين. كانت الأدوية والمعدات واللقاحات التي أوصت بها استراتيجيــة الرعايــة المتكاملــة للطفـل المريــض متوفرة في المركز محل الدراسة. يجب على مقدمي الرعاية الصحية التركيزعلى مقدمي الرعاية للأطفال حول موعد العودة للمتابعة والعلامات والأعراض التي تشيرإلى العودة الفورية.
الكلمات المفتاحية:الأطفال دون سن الخامسه- دليل التدبيرالمتكامل لصحة الطفل- التهابات الجهازالتنفسي