Research Paper

Volume : 2 | Issue : 10 | October 2013 • ISSN No 2277 - 8179

Assessment of Agreement Between Imnci Trained Medical Officers and Investigator to Classify Sick Under-Five Children in Bhavnagar District, Gujarat

Medical Science

KEYWORDS : IMNCI, Medical officer, Under five children

Dr. Ashvin. B. Rathod	Department of PSM (Preventive and Social medicine), Govt. Medical College Bhavnagar-364001, Gujarat, India.
Dr. K. D. Bhalani	Department of PSM (Preventive and Social medicine), Govt. Medical College Bhavnagar-364001, Gujarat, India.
Dr Harshad Patel	Department of PSM (Preventive and Social medicine), Govt. Medical College Bhavnagar-364001, Gujarat, India.
Dr. Prashant. M. Jadav	Department of Biochemistry, Govt. Medical College Bhavnagar-364001, Gujarat, India.

ABSTRACT

Objectives:
To assess the degree of agreement between IMNCI trained medical officers and investigator to classify sick under-five children.
Methods: A cross sectional study was conducted in 14 PHCs, two from each block, one with the highest and another with the lowest RCH indicator grading.
Results: The agreement of young infants between classification of medical officer and investigator was 84.6 % & kappa value for the same was 0.74.Similarly the agreement of children between classification of medical officer and investigator was 86.41% & Kappa value for the same was 0.62.
In case of young infants, the agreement between MOs and investigator's management was 81.81%. In case of sick children management, the agreement between MOs and investigator's management was 72.85%.

INTRODUCTION

Government of India (GOI) has been doing a lot of efforts to improve the community treatment seeking practice and skills and knowledge of health care providers by introducing many child health programmes since last three decades. In 1978, Diarrheal Disease Control Programme (DDCP) was launched in India. In 1985-86, the focus shifted to strengthening case management of diarrhea for children under age of five years and National Oral Rehydration Therapy (ORT) Programme was introduced.

Subsequently, DDCP and ARI control programme (initiated in 1989-90) became part of Child Survival and Safe Motherhood Programme in 1992 and Reproductive and Child Health (RCH) Programme in 1997. WHO/UNICEF proposed Integrated Management of Childhood illnesses (IMCI) in 2005 in RCH-2.[1]

Due to very high neonatal mortality, India has further amended this strategy by including management of neonatal illnesses and the strategy was renamed as Integrated Management of Neonatal and Childhood Illness (IMNCI). The IMNCI programme was introduced in India in the year 2005, under National Rural Health Mission.

Integrated management of neonatal & childhood illness (IMNCI) was started in Gujarat in the year 2005. Gujarat is the first state in India to scale up IMNCI implementation to the entire state, in a phased manner after a pilot study in Valsad district with UNICEF support. This scale up was planned in three phases

In Bhavnagar district, the IMNCI training was given to health care providers Anganwadi Workers (AWWs), ANMs and medical officers in the year 2006. The objective of training was to improve knowledge and practices of health care providers. So this study was carried out to assess the degree of agreement between IMNCI trained medical officers and investigator to classify sick under-five children.

MATERIAL AND METHODS

All 7 blocks of Bhavnagar district were included in the cross sectional study conducted in year 2011-12. Then, two primary health centers were selected from each block, one with the highest and another with the lowest RCH indicator grading.

Selection of Study respondents:
Inclusion criteria:
IMNCI trained MO from the selected PHCs.

Exclusion criteria:
MO not trained for basic IMNCI.

If any of the medical officers at the selected centre was not trained for basic IMNCI or did not want to participate in the study or was not available due to any reason even after fixing prior appointment with him / her, next centre, meeting our selection criteria was selected.

After obtaining written permission from a chief district health officer, data collection was started. A date of the visit of the centre was fixed in consultation with medical officer. MOs of all PHCs were asked to show last 10 case sheets of each age group. Available case sheets (maximum 10 filled case sheets per PHC) were re-classified by the investigator based on the sign & symptoms identified (encircled) by MOs.

The study was approved by the Institutional Review Board, government medical college, Bhavnagar on 30th January 2012.

RESULT

Table I: Agreement in Classifications of young infants & sick children in available filled case sheets at PHCs of Bhavnagar district: MOs V/S Investigator.

Young infants (0-2 months)				Agreement in classifications	Kappa value
Investigator's classification	Classifications done by MOs**				
	Red	Yellow	Green		
Red	9	3	0	84.6 %	0.74
Yellow	0	1	1		
Green	0	0	12		
Children (2 months – 5 years)					
	Red	Yellow	Green		
Red	0	7	0	86.41 %	0.62
Yellow	0	9	4		
Green	0	0	61		

The analysis revealed that the agreement of young infant between classification of medical officers and investigator was 84.6 % & kappa value for the same was 0.74.

Similarly the agreement of children between classification of medical officers and investigator was 86.41 % & Kappa value for the same was 0.62.

Table II: Agreement in management of young infants & sick children in available filled case sheets at PHCs of Bhavnagar district: MOs V/S Iinvestigator.

Patents' Category	Agreement* in management MOs (N=14)
Young Infants (0- 2 months)	81.81%
Children (2 month- 5 years)	72.85%

In case of young infants, the agreement between MOs and investigator's management was 81.81%. In case of sick children management, the agreement between MOs and investigator's management was 72.85%.

DISSCUSSION

In our study it was found that agreement between medical officers and investigator to classify under five children was substantial.

Study of Hemant D et al[2] in Panchkula district of north Haryana (2010) showed that the agreement between ANMs' classifications with investigator's classifications of children (0- 5 years) was 68.75% & kappa value 0.50 which indicate moderate agreement between them.

In our study it was found that the agreement between MOs and investigator's management was 81.81% in case of young infants while in case of sick children, it was 72.85%.

Study of Pavitra Mohan et al[3] in India (2010) found that the agreement between the health provider's management & the surveyor's management of cases according to IMNCI guideline was 71.5%, 93.3% & 76.1% in Rajasthan, Orissa and Bihar respectively.

The study of Nidhi Chaudhary et al[4] in the Panchkula district of Haryana (2003) showed that the agreement between health provider's management with actual IMNCI management was 47.9%.

CONCLUSION

From this study, the agreement in classifying and managing under five children was good between medical officers and investigator.

RECOMMENDATIONS

Efforts are needed to review IMNCI programme in district level meeting. The district IMNCI co-ordination committee should meet regularly to address the issue of IMNCI training, review & implementation.

ACKNOWLEDGEMENT

We are grateful to Dr M. P Singh, Dr K.D Bhalani and Bhavnagar health department for their kindly support to conduct this study.

REFERENCE

1. Bandyopadhyay S, Kumar R, Singhi S, Aggarwal A. Are primary health care workers skilled enough to assess the severity of illness among young infants? Indian Paediatric 2003; 40:713-18. | 2. Pavitra M, Baya K, Singh S, Bahl R, Puri A, Kumar R. Assessment of implementation of integrated management of neonatal and childhood illness in India. J Heath Popul Nutr 2011;29(6):629–38. | 3. Chaudhary N, Mohanthy PN, Sharma M. Integrated management of childhood illness (IMCI) follow up of basic health workers. Indian J Pediatr. 2005;72:735 9. | 4. Shewade H, Aggarwal A, Bhavneet B. Integrated management of neonatal and childhood illness (IMNCI): Skill assessment of health and integrated child development scheme (ICDS) workers to classify sick under-five children. Indian J Pediatr. 2012; 72:735 -39. |