

KNOWLEDGE OF HEALTH WORKERS REGARDING INTEGRATED MANAGEMENT OF NEONATAL AND CHILDHOOD ILLNESS AT SELECTED HEALTH CENTERS OF AMRITSAR, PUNJAB. A PILOT STUDY

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ABSTRACT

Background: Every day, millions of parents seek health care for their sick children, taking them to hospitals, health centres, traditional healers etc, surveys revealed lack of proper assessment and treatment by these health workers. The reduction in Neonatal and infant mortality rates over the past years has been slow. It envisaged training of primary care workers and medical officers in identification, management and referral of neonatal and childhood illness. **Materials and Methods:** The pilot study aimed to assess the Knowledge of health workers regarding Integrated management of Neonatal and Childhood Illness at selected health centers of Amritsar, Punjab. Health workers who were fulfilling the inclusion criteria were recruited using a convenient sampling technique and quantitative research approach. Data was collected from total 40 health workers including Medical officers, ANMs, ASHA workers and Community health officers. The self structured knowledge questionnaire consist of 30 items which was developed by the researcher to assess the knowledge of health workers regarding individual items of IMNCI. **Results:** The reliability of the self structured questionnaire was found to be .815 which was calculated by Cronbach's Alpha. The pilot study was found to be feasible in terms of availability of subjects. The time required to collect the data was approximately 20-30 minutes. It also showed that 40% health workers were having average knowledge and 13(33%) having good knowledge, 8(20%) were having poor knowledge and only 3(8%) were having excellent knowledge. **Conclusion:** This depicted that the overall knowledge of the health workers as lessened which is needed to be addressed and retraining of health workers should be conducted after a stipulated time period.

KEYWORDS: Knowledge, health workers, IMNCI.

INTRODUCTION

Over the last 3 decades the annual number of deaths among children less than 5 years of age has decreased by almost a third. However, this reduction has not been evenly distributed throughout the world^[1] Infant and child mortality remains high in developing countries, where almost 10 million deaths occur annually in children under-5 years old most deaths are from common, preventable and easily treatable childhood diseases.^[2] Most of these deaths occur in low and Middle income countries, where the interaction of common infections (including neonatal sepsis, measles, diarrhea, malaria, and pneumonia) with poor nutritional status, combined with inadequate health infrastructure and poverty, results in poor health outcomes.^[3]

This has resulted in a policy push toward a multipronged strategy aimed at integrating improved healthcare services with better case management skills and healthier community practices to reduce child mortality and morbidity.^[3]

During the mid-1990s, the World Health Organization (WHO), in collaboration with UNICEF and many other agencies, institutions and individuals, responded to this challenge by developing a strategy known as the Integrated Management of Childhood Illness (IMCI).^[4] Integrated management of neonate and childhood illness (IMNCI) guidelines are a simplified system of diagnosis and treatment design for the use by the health workers with limited training.^[3]

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) strategy under RCH Phase II in 2005. IMNCI, fostering holistic approach to child health and development, using a set of interventions for the integrated treatment and prevention of major childhood illnesses, the IMNCI strategy aims to reduce death as well as the frequency and severity of illness and disability. The strategy includes three components: improving case-management skills of health workers, improving health systems support, and improving family and community practices.^[5]

Every day, millions of parents seek health care for their sick children, taking them to hospitals, health centres, pharmacists, doctors and traditional healers, surveys have revealed that many sick children are not properly assessed and treated by these health care providers, and that their parents are poorly advised. Neonatal and infant mortality rates pose a major public health challenge and progress in reduction over the past years has been slow.^[6]

It envisaged training of primary care workers and medical officers in identification, management and referral of neonatal and childhood illness.^[7]

Several reasons support the use of community health workers (CHWs) as a complement to health facilities as a source of medical care for children. Compared with health facilities, CHWs are geographically closer and available when health facilities are closed. Moreover, CHWs are community members, and therefore cultural and linguistic barriers that may be present at health facilities are overcome.⁹ Even though IMCI is being incorporated into the national health-care programmes of

many developing countries, little is known about Health Workers performance.^[8]

METHODS

This was a community based Pilot study using a quantitative method to assess the knowledge of health workers regarding Integrated management of neonatal and childhood illness at selected health centers of Amritsar Punjab, using a convenient sampling technique and a quantitative research approach. Written and verbal consent from the participants was taken before the collection of data.

Data was collected from total 40 health workers including Medical officers, ANMs, ASHA workers and Community health officers who were willing to participate in the research were recruited as study participants. The health workers not present during the data collection were excluded from the study.

The data was collected in Community health center, Primary health centers and Health wellness centers of Verka Block of Amritsar and Urban Health centre Gopal nagar of Amritsar Punjab. The self structured knowledge questionnaire consist of 30 items which was developed by the researcher to assess the knowledge of health workers regarding individual items of IMNCI. The data was collected on 40 health workers who were fulfilling the inclusion criteria. The reliability of the self structured questionnaire was found to be .815 which was calculated by Cronbach's Alpha.

The pilot study was found to be feasible in terms of availability of subjects. The time required to collect the data was approximately 20-30 minutes.

RESULTS

Table 1: Frequency and percentage distribution of participants according to Socio-demographic characteristics of Health workers.

SOCIO DEMOGRAPHIC CHARACTERISTICS OF HEALTH WORKERS		
CHARACTERISTICS	FREQUENCY	PERCENTAGE
1. Age		
a) 25-35	16	40%
b) 36-45	7	18%
c) 46-55	16	40%
d) >55	1	3%
2. Designation		
a) Medical officer	1	3%
b) Multipurpose health worker	23	58%
c) ASHA Worker.	4	10%
d) Community health officers	12	30%
3. Experience		
a) <5	8	20%
b) 5-10	10	25%
c) 11-15	7	18%
d) 16-20	2	5%

e) >20	13	33%
4. Area of Posting		
a) Urban	7	18%
b) Rural	33	83%
5. Any previous exposure to the topic		
a) Yes	25	63%
b) No	15	38%
6. Any formal training related to IMNCI		
a) Yes	12	30%
b) No	28	70%

The above table depicted the socio demographic characteristic of health workers. Table revealed out of 40 16(40%) were aged 25-35 and 46-35 years, 7(18%) were aged 36-45 years and 1(3%) was aged above 55 years. Out of total number 23 (58%) were Multipurpose health workers 12 (30%) were Community health officers and 4 (10%) were ASHA workers and only 1(3%) was designated as Medical officer. 13(33%) of them were having more than 20 years of work experience, 10(25%)

have 5-10 years, 8(20%) less than 5 years and 11(18%) 11-15 years and only 2(5%) were having 16-20 years of work experience. 33(83%) of them were posted in Rural Areas and 7(18%) were posted in Urban areas. 25(63%) were having previous exposure to the topic and 15(38%) not having any previous exposure to the topic. And 28(70%) of them got the formal training regarding IMNCI and 12 (30%) didn't got any formal training related to IMNCI.

Table 2 : Level of Knowledge of Health workers regarding Integrated management of Neonatal and Childhood Illness.

	Frequency	Percent	Mean±SD
Excellent (25-30)	3	8%	25
Good (18-24)	13	33%	20±1.78
Average (12-17)	16	40%	14.25±1.48
Poor (0-11)	8	20%	8.12±2.47
Total	40	100%	40.90±9.81

The table 2 portrayed the level of Knowledge of Health workers regarding Integrated management of Neonatal and Childhood Illness. It showed that 16 (40%) health workers were having average knowledge and 13(33%) having good knowledge, 8(20%) were having poor

knowledge and only 3(8%) were having excellent knowledge. This depicted that the overall knowledge of the health workers as lessened which is needed to be addressed and retraining of health workers should be conducted after a stipulated time period.

Table 3 : Association of Knowledge of Health workers with selected socio demographic variables.

	Knowledge Score					χ ²	df	p value
	Excellent (25-30)	Good (18-24)	Average (12-17)	Poor (0-11)	Total			
1. Age(years)								
a) 25-35	2	9	3	2	16	11.057	9	0.272
b) 36-45	0	1	3	3	7			
c) 46-55	1	3	9	3	16			
d) >55	0	0	1	0	1			
2. Designation								
a) Medical officer	1	0	0	0	1	48.831	9	0.000
b) Multipurpose health worker	0	4	15	4	23			
c) ASHA Worker	0	0	0	4	4			
d) Community health officers	2	9	1	0	12			
3. Experience								
a) <5	2	5	1	0	8	19.532	12	0.760
b) 5-10	0	4	1	5	10			
c) 11-15	0	1	5	1	7			
d) 16-20	0	1	1	0	2			
e) >20	1	2	8	2	13			
4. Area of Posting								

a) Urban	0	0	5	2	7	3.001	3	0.391
b) Rural	3	13	11	6	33			
5. Any previous exposure to the topic								
a) Yes	2	9	11	3	25	2.674	3	0.445
b) No	1	4	5	5	15			
6. Any formal training related to IMNCI								
a) Yes	2	5	5	0	12	5.804	3	0.122
b) No	1	8	11	8	28			

The above table depicted the association of knowledge of health workers with selected socio demographic variables. It was found that only designation of the health workers has a highly significant relation with knowledge level of health workers with the p value < 0.000. rest all of the socio demographic variables were found to be non significant.

DISCUSSION

The discoveries of the present study construed that 16 (40%) health workers were having average knowledge and 13(33%) having good knowledge, 8(20%) were having poor knowledge and only 3(8%) were having good knowledge. A similar study conducted by Jabade M revealed that majority of the health workers 60% common knowledge, 26% poor knowledge and 14% good knowledge.^[9] another findings conducted by Thakur N revealed that 15% staff nurses had excellent knowledge, majority of staff nurses i.e. 49% had good knowledge score, followed by 30% staff nurses had average knowledge and 6% nurses had below average knowledge.^[10] also a study conducted by Radhika M concluded that Majority of the ANMs have lack of knowledge in classification and management of neonate and children. Thus these studies concludes that health workers need more supervision and training for better classification and management of neonates.^[11]

One of the significant finding of the ongoing review showed that only designation of the health workers has a highly significant relation with knowledge level of health workers with the p value < 0.000. these findings are supported by a study conducted by Thakur N revealed that Professional experience, Area of working, Professional training institute had influence on Integrated management of neonatal and childhood illness.^[10]

CONCLUSION

The study concluded that majority of the health workers have lack of knowledge on many components of IMNCI. The study indicates the need for supervision and training for better results and quality of services. Their performance can be improved further with drills, exercises and supervised practices.

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Conflicts of interest

There are no conflicts of interest.

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