Innovational Journal of Nursing and Research (IJNR)

International Peer Reviewed Journal

Research article

A comparative study to assess the awareness and knowledge regarding mission Indradhanush among PHC workers and CHC workers, those who are working in the rural area of Anand district

Shivani Rana*, Jinal Patel, Mayur Ram, Priyanka Goswami, Gupta Chetan
Late Ratibhai Prabhudas Patel Nursing College, Shree Ode Education Society, Ode, Gujarat, India.

Abstract

Aims: 1. To assess the knowledge regarding mission Indradhanush 2. To compare the level of knowledge of PHC & CHC Workers. **Materials and Methods:** Descriptive research design was used and non probability convenient sampling technique was adopted to achieve the goal of the study. The tool consist of two parts. First part consist demographic data of the sample and second part consist of knowledge questionnaires. The Community Health Centre (CHC) Primary Health Centre (PHC) (30 CHC & 30 PHC workers) residing in selected area of Anand District. **Result:** The data was collected by using self structured questionnaires and the tool was organized in two parts. (Demographic characteristics, Knowledge on mission Indradhanush). The results of the study showed that there was a significant difference in overall mean knowledge score between CHC & PHC workers on MI. Level of knowledge of scores among CHC workers, the mean score and SD score was 15.16+ 2.30. Level of knowledge of score among PHC workers, the mean score and SD score was 13.76+ 1.94. The overall mean knowledge score on mission Indradhanush for CHC workers were 15.16 (75.8%) whereas mean knowledge score for PHC workers were 13.76 (68.8%). Significant difference in PHC & CHC workers on mission Indradhanush. ['t'=2.59] ($P<0.05$, df= 58). It indicates that CHC workers had more knowledge than PHC workers regarding mission Indradhanush. CHC workers had 0% of poor, 43.33% of average and 56.66% of good knowledge on mission Indradhanush. PHC workers had 0% of poor, 73.33% of average and 26.6% good knowledge on mission Indradhanush. **Conclusion:** Statistically there was a significant difference in mean knowledge score between PHC & CHC workers on mission Indradhanush. It indicates that CHC workers had more knowledge than PHC workers regarding mission Indradhanush.

Key Words: Assess, Knowledge, Mission indradhanush, CHC workers, PHC workers.

***Corresponding author**: **Ms Rana Shivani,** Late Ratibhai Prabhudas Patel Nursing College, Shree ode Education Society, Ode, Gujarat, India**.** Email: shivanirana5497@gmail.com

1. Introduction

Mission indradhanush has been launched to reach out to the children where routine vaccination cannot be reached out. The objective of Mission Indradhanush is to increase full immunization coverage in India to at least 90% children by 2020. It was launched by union health minister J.P. Nadia on 25 December, 2014 and implementation started on 7 April, 2015.

Access this article online

http://innovationalpublishers.com/Journal/ijnr | e-ISSN: 2456-1320

How to cite this article: Ms. Rana Shivani, A comparative study to assess the awareness and knowledge regarding mission Indradhanush among PHC workers and CHC workers, those who are working in the rural area of Anand district. Int J Nur Res 2018; 4(3): 196-201.

Three phases of Mission Indradhanush have been completed in which 497 districts across 35 states/UTs have been covered. In NE states, during the three phases of Mission Indradhanush, 85 districts were covered. As of now, 505 districts across 35 state/UTs have been covered under various phases of Mission Indradhanush. Till 1st March 2017, a total of 2.1 crore children and around 56 lakh pregnant women have been immunized. Also, around 60 lakh Vitamin A doses have been distributed along with 52 lakh ORS packets and 1.8 crore Zinc tablets. From 1% annual increase in coverage of Full Immunization, Mission Indradhanush has resulted in a 5-7% annual expansion in the immunization cover. Formal survey data is awaited in this regard. [1] Government of India partnering with WHO, UNICEF and other partners is leveraging the knowledge and

infrastructure built during the polio campaign to step up routine immunization. This campaign, called Mission Indradhanush is targeting coverage for the seven vaccine preventable diseases.2000 doctors and field monitors who were working with the WHO on the Polio eradication programmed are now part of the nationwide initiative to vaccinate all unvaccinated and partially vaccinated children, under the Universal Immunization Programme by 2020. [2] It aims to immunize all children under the age of 2 years, as well as all pregnant women against seven vaccine preventable diseases.

Four phases of mission Indradhanush have been completed in 528 districts across the country. More than 2.47 crore children and around 67 lakh pregnant women have been vaccinated under mission Indradhanush so far. The first two phases of mission Indradhanush led to an increase of 6.7% full immunization coverage in 1 year as compared to 1% increase in the past/ this increase has been more prominent in rural areas as compared to urban areas. [3]

Need of the study

Primary health care is a set of health services that can meet the needs of the developing world. Community health workers act as a bridge between health system and community in providing this care. Appropriate knowledge and communication skills of the workers are key to their confidence and elementary for success of the system. SSWe conducted this study to document the perceptions of these workers on their knowledge and communication needs, image building through mass media and mechanism for continued education. An important component of the rejuvenated concepts of PHC is community health workers, (CHWs) Who act as a bridge between the health care delivery system and the community. Mary & Rosemary have described how CHWs enable health programmers' to achieve three interconnected goals; building a relationship between the health care provider and laypersons in the community; improving appropriate health care utilization; and educating people to reduce health risks in their lives. Highly appropriate knowledge and interpersonal communication, expertise, in addition to basic clinical skill supplies and supervision is a key to work of community health workers. The community health workers can empower the community to identify its need and can assist in planning strategies. To achieve the desire result in order to accomplish these successfully community health workers should be culturally sensitive with an ability to build a strong community rapport. [4] In rural settings community health workers plays an important role in increasing access to health care & services successful intervention by community health workers have lead to improvements in maternal & child health including reduction in mortality& morbidity from common childhood illness by providing vaccines. Two-third of children in India do not receive their vaccination on time prolonged in their susceptibility to disease & contributing to ultimately deaths say university of Michigan researcher. Life of many children can be saving by successful immunization but its success depend on knowledge & practice of health care workers who are vaccinating. When knowledge of trainees assesses & it was found that most of health workers know about the disease prevented by vaccination. Knowledge & practice of health workers regarding immunization improved on advancement of education of knowledge & practice was not found statistically significant within the group& between groups. [5] The researcher agree that if India is able to administer vaccinations on time, it will have a major impact on the global status of childhood vaccination & public health. To assess the performance (level of knowledge and skills) of health workers after training in immunization. To seek the opinion of trainers and the trained health workers on course curriculum and methodology followed during the training.

To seek the opinion of supervisors and beneficiaries about the performance and job behavior of health workers. To find out the non-training issues that would enhance on the job performance with respect to immunization service provision. [6] The researchers agree that if India is able to administer vaccinations on time, it will have a major impact on the global status of childhood vaccinations and public health. Healthcare workers knowledge and practice are influential factors in preventing vaccine failure. Adequate knowledge and practices in the cold chain system are important to keep potency of vaccine and effectiveness of immunization.[7]

Objectives

- To assess the knowledge regarding mission Indradhanush.
- To compare the level of knowledge of PHC & CHC Workers.

2. Materials and Method

Research approach: Research approach is a basic procedure for conduction of the research study. Selection of the research approach is depending on the purpose of the study. In view of the nature of the problem under study and to accomplish the objectives of the study assessment was found to be appropriate to describe knowledge regarding mission Indradhanush among CHC &PHC workers. A descriptive survey approach was used in this study as the study was aimed to assess the level of knowledge on MI among PHC & CHC Workers.

Variables in the study

Demographic variables: It includes age, gender, religion, education & previous knowledge regarding MI.

Research variable: Knowledge regarding mission Indradhanush among PHC & CHC Workers.
Population of the study: The target population for this study consisted of the CHC worker & PHC workers in selected rural area of Anand. The sample for the present study comprises of 30 CHC workers & 30 PHC workers of Anand district.

Sampling technique: In present study, the samples selected for data collection were those who fulfilled the criteria laid down for the selection of the sample and were available during the period of data collection. They were selected by a purposive sampling technique.

Inclusion criteria:
1. PHC & CHC workers who are willing to participate in study.
2. PHC & CHC workers who knows English.

Exclusion criteria:
1. PHC & CHC workers who are not available at the time of date collection.
2. PHC & CHC workers who are not willingly participate in the study.

Data collection technique and tool: For collecting the data, a set of questionnaire was prepared by the researches. A set of questionnaire for assessment of knowledge was prepared for assessing the knowledge of sample (PHC & CHC workers).
Socio-demographic data that consist of 5 items- age, sex, religion, education & previous knowledge regarding mission Indradhanush etc.
Self-administer knowledge questionnaire is used to assess the knowledge of CHC workers & PHC workers. Following steps are considered in development of tool. The scoring scale consists of one correct option for all multiple choice questions. There are total 20 question items. Score "T" is given for correct response and score "0" is given for incorrect response. The score range from minimum of "score 0" and maximum of "score 20". The knowledge level is arbitrarily divide into 2 category based on self-administered knowledge questioner and accordingly the scores were allotted as Good Knowledge, Average Knowledge, Poor Knowledge.

Development of tool: The following steps adopted in the development of the instruments. The tools are as Review of literature provided adequate content for the tool preparation and Personal experience, consultation with experts and discussion with the pear groups.

Questionnaire to assess knowledge: Each item consists of four options, one correct option for all objective type items. The score is "1" for correct answer and for wrong answer it is "0". The item, which is not responded for them also score is "0".
Reliability of the research: The reliability of the structured interview schedule regarding knowledge on MI was done by test-retest method. The tool was administered to 6 workers. The researcher administered the tool for the same sample after 20 days value for knowledge score was 0.71 respectively, which showed that tool was highly reliable and stable.

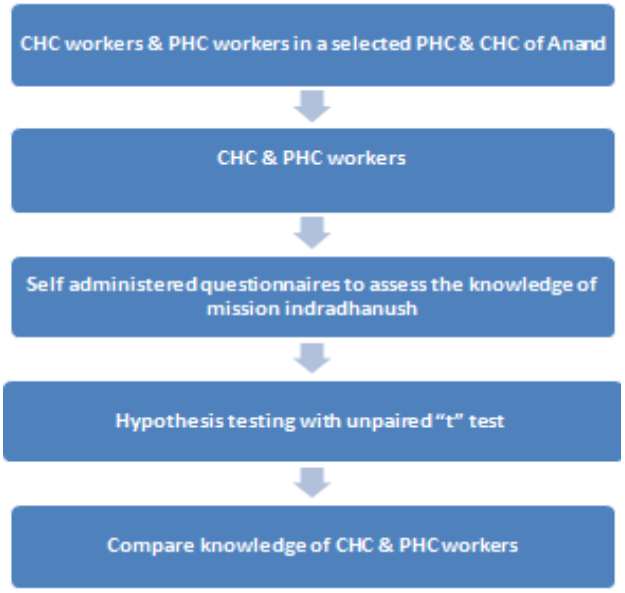


Fig 1: Schematic representation of research design

Pilot study: A sample of 6 CHC workers & 6 PHC workers were choose from the Anand district, who fulfilled inclusive criteria and choose by purposive sampling and a structured questionnaire containing 20 multiple choice questions to assess the knowledge & then compare. Pilot study helps to determine the comparison between CHC workers & PHC workers.
A formal permission obtained from the medical officer of particular CHC & PHC of Anand district. The data collection was done within a given period.

3. Results

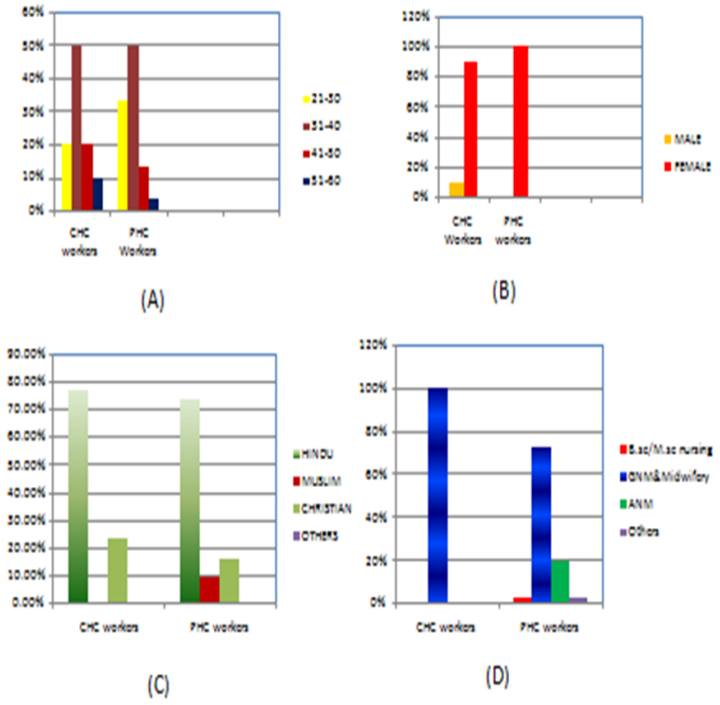
Analyses of demographic data of the sample are described in terms of age, gender, education, religion, previous knowledge regarding mission Indradhanush. Percentage distribution of PHC& CHC workers according to their age, source that highest percentage (50%) of the sample belongs to the age group of 31-40 years and (33.3%) were belonging to 21-30 year (10%) were belonging to 51-60 years. Finding related to gender of the workers showed that majority 27 (90%) of them were female and 3(10%) of the subject were males (Fig 1). 23 (76.6%) and 22 (73.3%) of CHC and PHC workers respectively belongs to Hindu religion and only 10% Muslim population in PHC workers. In case of

Christian population 7 (23.3%) are CHC workers and 5 (16%) are PHC workers. In case of education majority of CHC Workers 30 (100%) & PHC workers 22 (73.3%) is GNM.

Depicts the classification of level of knowledge score among CHC & PHC workers. 43.33% of CHC workers and 73.33 % of PHC workers had average knowledge on mission Indradhanush. 56.66% of CHC workers and 26.66 % of PHC workers had good knowledge on mission Indradhanush. No any CHC & PHC workers had poor knowledge on mission Indradhanush CHC workers had 0% of poor, 43.33% of average and 56.66% of good knowledge on mission Indradhanush. PHC workers had 0% of poor, 73.33% of average and 26.6% good knowledge on mission Indradhanush. Level of knowledge of scores among CHC workers, the mean score and SD score was 15.16± 2.30. Level of knowledge of score among PHC workers, the mean score and SD score was 13.76± 1.94.

The overall mean knowledge score on mission Indradhanush for CHC workers were 15.16(75.8%) whereas mean knowledge score for PHC workers were 13.76(68.8%). Statistically there was a significant difference in mean knowledge score between CHC & PHC workers on mission Indradhanush. ['t'=2.59] (P<0.05 df-58) It indicates that CHC workers had more knowledge than PHC workers regarding mission Indradhanush [Figure no 02].

Fig 2: Percentage distribution of CHC&PHC Workers according to their (A) age, (B) Gender, (C) Religion and (D) Education



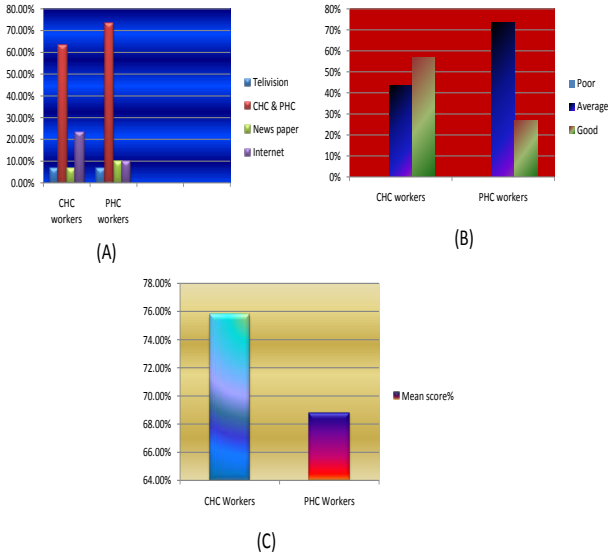


Fig 3: Percentage distributed related (A) previous knowledge of mission Indradhanush, (B) level of knowledge (C) mean score of level of knowledge

4. Discussion

This chapter deals with discussion part according to results, obtained from statistical analysis based on the data of the study, the review literature, hypothesis which was selected for the study. The present study conducted to assess the level of knowledge on mission Indradhanush among CHC & PHC workers & then compare their knowledge. Non probability convenient sampling technique was used to select the sample. The data was collected from 60 workers (30 CHC & 30 PHC workers). The findings of the study have been discussed with reference to the objectives, hypothesis, and with findings of other studies.

The relevant study showed the comparative study was conducted among PHC Ws about public health services in 6 rural countries of Hubei province, china between august 2013 and April 2014. A random sample of 625 PHCW are taken with assessment at baseline and postcourse. The experimental group had higher mean scores than the control group [8]. In addition to this, a qualitative study was done to assess knowledge and attitude of nurses in community health centers about electronic medicine records.33 staff members were professional nurses. Nurses' knowledge about EMR, positive attitudes to ICT and personal use of ICT devices increases the likelihood of successful implementation at CHCs

Table 1: Frequency and percentage distribution of CHC & PHC workers related to age

Age in year	CHC		PHC	
	Frequency	%	Frequency	%
21-30	6	20	10	33.3
31-40	15	50	15	50
41-50	6	20	04	13.3
51-60	3	10	01	3.3

Table 2 Frequency and percentage distribution of CHC & PHC workers related to gender

Gender	CHC Workers		PHC Workers	
	Frequency	%	Frequency	%
Male	3	10	0	0
Female	27	90	30	100

Table 3 Frequency and percentage distribution of CHC & PHC workers related to religion

Religion	CHC workers		PHC workers	
	Frequency	%	Frequency	%
Hindu	23	76.66	22	3.3
Muslim	00	00	03	0
Christian	07	23.33	05	6.6
Others	00	00	00	0

Table 4: Frequency and percentage distribution of CHC & PHC workers related to education

Education	CHC Workers		PHC Workers	
	Frequency	%	Frequency	%
B.sc/M.sc nursing	00	00	01	3.3
GNM & Midwifery Nursing	30	100	22	73.3
ANM	00	00	06	20
Others	00	00	01	3.3

[9, 10].

Table 5 Frequency and percentage distribution of CHC & PHC workers related to previous knowledge

Previous knowledge	CHC workers		PHC workers	
	Frequency	%	Frequency	%
Television	2	6.66	2	6.66
CHC & PHC	19	63.33	22	73.3
News paper	2	6.66	3	10
Internet	7	23.33	3	10

Table 6: Frequency and percentage distribution of level of knowledge of CHC & PHC workers on mission Indradhanush

Level of knowledge	CHC Workers	PHC Workers		
	Frequency	%	Frequency	%
Poor	00	00	00	00
Average	13	43.33	22	73.33
Good	17	56.66	08	26.66

Table 7: Mean Knowledge score and standard deviation of CHC and PHC workers

Knowledge		CHC Workers			PHC Workers			Unpaired 't' value (P<0.05 df-58)
	Max score	Mean Score	Mean score %	SD	Mean Score	Mean score %	SD	
MI	20	15.16	75.8	2.30	13.76	68.8	1.94	2.59

Demographic characteristics of samples

The study objective is to assess the knowledge regarding mission Indradhanush. Depicts the classification of level of knowledge score among CHC & PHC workers. 43.33% of CHC workers and 73.33 % of PHC workers had average knowledge on mission Indradhanush. 56.66% of CHC workers and 26.66 % of PHC workers had good knowledge on mission Indradhanush. No any CHC & PHC workers had poor knowledge on mission Indradhanush CHC workers had 0% of poor, 43.33% of average and 56.66% of good knowledge on mission Indradhanush. PHC workers had 0% of poor, 73.33% of average and 26.6% good knowledge on mission Indradhanush. Level of knowledge of scores among CHC workers, the mean score and SD score was 15.16± 2.30. Level of knowledge of score among PHC workers, the mean score and SD score was 13.76± 1.94.

The study objective to compare the level of knowledge of PHC & CHC workers. The overall mean knowledge score on mission Indradhanush for CHC workers were 15.16(75.8%) whereas mean knowledge score for PHC workers were 13.76(68.8%).Statistically there was a significant difference in mean knowledge score between CHC & PHC workers on mission Indradhanush. ['t'=2.59] (P<0.05 df-58) It indicates that CHC workers had more knowledge than PHC workers regarding mission Indradhanush.

Nursing implication

From the finding of the study, following implications are suggested.

- Present study would help to understand level of knowledge of CHC & PHC workers regarding mission Indradhanush.
- The study also emphasizes the need of education to improve the knowledge regarding mission Indradhanush.
- The nurse educator should create awareness of mission Indradhanush.
- An extensive research is necessary regarding MI. The findings of the study will help to expand the scientific body of knowledge upon which further research can be conducted.
- The nurse administrator should take more responsibility to implement various awareness programs regarding MI.

Limitations

- Since the sample was limited to only the PHC&CHC in Anand district.
- The study consisted of only PHC workers and CHC workers.

Conclusion

Result of demographic variable are the majority (50%) of the subject were in the age group of 31-40 years, 100% were females, 76.66% were Hindus, 100% were GNM, 73.3% have previous knowledge on MI from Television. The finding related to level of knowledge of CHC & PHC workers are the majority of good knowledge among CHC workers is 56.66%, and PHC workers is 73.33%. Additional, finding related to comparison of knowledge is CHC workers have more level of knowledge (75.8%) than PHC workers (68.8 %).

References

[1] New vaccines that would be used in Indradhanush Programme. http://pib.nic.in/newsite/PrintRelease.aspx?relid=138342. Press Information Bureau Government of India. Ministry of Health and Family Welfare.

[2] Mayer (1999), "The Long Term Impact of Health in the Economic Growth in Latin America", in Health Growth and Income Distribution in Latin America and the Caribbean : A Study of Determinants and Regional and Local Behaviour, Project Report for the Plan American Health Organisation

[3] Rudra Dutt and KPM Sundaram (2006) "Indian Economy" S. Chand and Company New Delhi 2006 Srinivasa RG. (2001) An analysis of primary health care administration in Karnataka. Punjab University Journal. 2001;12(6):24-28.

[4] International Journal of Community Medicine and Public Health Ramagopal Get al. Int J Community Med Public Health. 2016 Oct;3(10):2944-2948.

[5] Dubey DK, Singh SS. An study on utilization of Immunization services by slum dwellers of municipal corporation area of Rewa city in Madhya Pradesh. Indian Journal of Community Medicine. Vol 25, No.2.April –June-2013:p-110-114.

[6] Ministry of Health & Family Welf Sare, Government of India: Immunization Handbook for Medical Officers (revised edition 2009), New Delhi: Dept. of Health & Family Welfare, Govt. of India; 2009. p. 15.

[7] Aldana JM, Piechulek H, al-Sabir A. Client satisfaction and quality of health care in rural Bull World Health Organ 2001;79:512-517

[8] Reddy, KN and V Selvaraju (1994), Determinants of Health Status in India: An Empirical Investigation, the 76th Annual Conference Volume of Indian Economic Association, IGIDR Bombay.

[9] S. Sharma, "Socioeconomic Factors of Full Immunisation Coverage in India," World Journal of Vaccines, Vol. 3 No. 3, 2013, pp. 102-110. doi: 10.4236/wjv.2013.33015.

[10] Ware and Snyder (1975) 'Dimensions of Patient attitude regarding doctors and medical care services. Medical care, (8),8, 669-82.