

Assessing achievement of Special Routine Immunization Week among relatively immobile internal migrants in Uttar Pradesh, India

Abstract

Introduction: Yet, approximately 30% dwellers are internal migrants in India. Migrant is one who resides away from his/her native home due to variety of reasons. In Uttar Pradesh, these relatively immobile internal migrants generally comprise of Nomad, Brick kiln and Migratory construction workers. The present study was carried out with the objective of evaluating the achievements of first phase of Special Routine Immunization Week (SRI week) in terms of improvement of immunization status of a community of internal migrants in Lucknow. **Materials and Methods:** The study was a community-based observational, which undertook relatively immobile internal migrant communities attributed to local administration of Community Development Block, Sarojininagar, Lucknow. The study was conducted during 24-30th April 2013, covering equal numbers of households (each 100) from the three type of communities selected randomly. An attempt of in-depth interview with the adult member was made to reveal the underlying issues of the study. **Results:** Of the three communities, migratory construction workers outnumbered in the literacy status (7.46%). The immunization coverage in all the three communities prior to the SRI week was 24.63% while post to the first phase of SRI week was 81.12%, thereby achieving immunization by 56.49%. The present study also showed no relation between vaccination achievement during SRI week and literacy status of different communities. **Conclusions:** There is a need of having such sessions at regular intervals repeatedly as well as conducting focused studies on these groups to identify the various factors which are responsible for poor immunization coverage and keep them in mind while planning such special immunization activities.

Key words: Intensification of routine immunization, marginalized communities, special immunization weeks

**S. P. Patel,
Ashish Srivastava**

Department of Community
Medicine and Public Health, King
George's Medical University,
Lucknow, Uttar Pradesh, India

Address for the Correspondence:

Dr. S.P. Patel,
Department of Community
Medicine and Public Health, King
George's Medical University,
Lucknow - 226 008,
Uttar Pradesh, India.
E-mail: patelkgmclco@gmail.com

Access this article online

Website: www.ijmedph.org

DOI: 10.4103/2230-8598.151265

Quick response code:



INTRODUCTION

Davis defined India as a relatively immobile society.^[1] Yet with respect to place of birth, approximately 30% dwellers are internal migrants in India.^[2] A Substantial proportion of these internal migrants is involved in casual work and belongs to low socioeconomic strata of the society. Lack of awareness together with rapid change of residence due to the casual nature of their work excludes these migrants from preventive care as well as essential health care services. Health care planners in India have often highlighted the problem of poor coverage of immunization in these relatively immobile internal migrants (marginalized populations). According to Government of India's own estimates, close to 75 lakh children every year miss the benefits of immunization and a majority of those missing the opportunity belong to these underserved and marginalized populations.^[3] In Uttar Pradesh, these relatively immobile internal migrants generally comprise of Nomads, Brick kiln workers, and Migratory construction workers. Immunization against common childhood diseases has been an integral component of mother and child health services in India since adoption of the primary health care approach. Immunization Program in India was introduced in 1978 as Expanded Program on Immunization, which gained momentum in 1985 as Universal Immunization Program (UIP). Initially, the target of UIP was to cover at least 85% of all the infants.^[4] However, National Population Policy-2000 revised the target of achieving 'Universal immunization' of children by 2010.^[5] The coverage of this program has been steadily increasing since its inception and currently

the full immunization coverage in India (for children of age group 12-23 months) stands at 61%.^[6] However it bears a significant lack to justify with the goal of Universal immunization. Hence, in order to further galvanize the efforts for achieving Universal Immunization coverage, Government of India declared 2012-2013 as the “Year of Intensification of Routine Immunization” and along with State Governments has been organizing special immunization weeks every year.^[5] Special immunization weeks comprises of 4 weeks (1-week each in the month of April, June, July and August) during which special immunization sessions are held in high-risk areas across the country. It also aims at “catching up” with the children of marginalized populations, which includes relatively immobile internal migrants. The present study was done with the objective of evaluating the achievements of first phase of Special Routine Immunization Week (SRI week) in terms of improvement of immunization status of a community of internal migrants in Lucknow.

MATERIALS AND METHODS

The study was a community-based observational study conducted on relatively immobile internal migrant communities of Nomad, Brick kiln and Migratory construction workers attributed to local administration of Community Development Block, Sarojininagar, Lucknow. The SRI week was carried out in 4 phases from 24th April to 24th August 2013. But to avoid discrepancy caused due to the effect of migration only the first phase of SRI week (24-30th April) was taken as study subject. A pre-tested, semi-structured questionnaire was used for data collection. The study listed 19 settlements in Nomad community with 502 households, 23 settlements in Brick kiln community with 618 households and 18 settlements in Migratory construction workers community with 362 households. However, considering household as a unit of study subject, 100 households from each of the three communities were enrolled through random sampling. An in-depth interview with the mother/caregiver from

each household was conducted to reveal the underlying issues of the study. The present study covered all the children below 5 years that is ≤12 months and 13-60 months age group. The age of studied children was decided by asking different cross questions from their mother/care giver without any documentary proof of like birth certificate, immunization card, etc. Immunization coverage prior to SRI week was assessed based on history of routine, site of immunization and immunization record if available. Bacille-calmette-guerin (BCG) vaccination was confirmed by looking for BCG scar. Four vaccines — BCG, DPT, Measles and Japanese Encephalitis were considered. Polio was not included as there is a separate program (Intensive Pulse Polio Immunization) running for improving the coverage of its vaccine. Children below 5 years of age whose immunization was complete until date (with respect to the four vaccines) as per UIP schedule were considered as completely immunized for the purpose of this study. A list was also prepared to note the number of children who were due for receiving doses of any of the four vaccines as per the UIP schedule. The data was tabulated and analyzed using Microsoft Excel 2003.

RESULTS

A total of 100 households from each of the three communities (Total 300 households) were selected, which yielded a population of 1479. Children belonging to 0-5 years category comprised 16.24% of the whole population. The overall literacy was 5.76% with a maximum (7.46%) among migratory construction workers and minimum (4.46%) among Nomad families [Table 1]. The immunization coverage in accordance with four vaccines (BCG, DPT, Measles and Japanese Encephalitis), prior to SRI week was found minimum in Nomad of age group 13-60 months (21.26%) and maximum in Brick kiln of ≤12 months age group children (41.67%) [Table 2]. However, the immunization coverage post 1st phase of SRI week was found maximum in ≤12 months age group children of Nomad (85.71%) and minimum in Brick kiln children of age group ≤12

Table 1: Bio-social characteristics of family members in studied settlements (n = 1479)

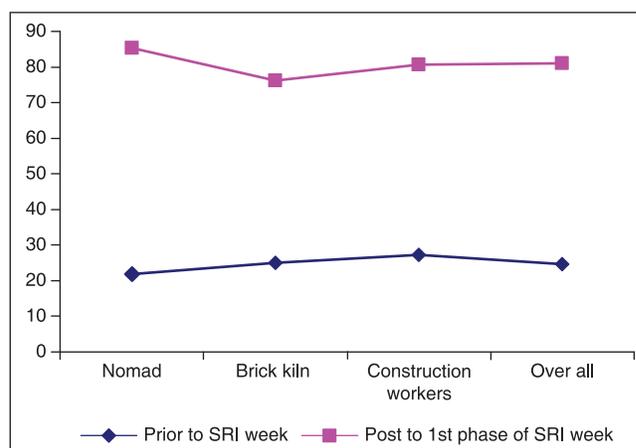
Biosocial characteristics	Nomad	Brick kiln	Migratory construction workers	Total
	Number (%)	Number (%)	Number (%)	Number (%)
Age group				
0-5	88 (16.03)	72 (15.65)	80 (17.02)	240 (16.24)
6-14	100 (18.22)	78 (16.96)	88 (18.73)	266 (17.98)
15-19	41 (7.46)	30 (6.52)	35 (7.45)	106 (7.16)
20-24	47 (8.56)	42 (9.13)	44 (9.36)	133 (8.99)
25-29	53 (8.74)	65 (14.13)	80 (17.02)	198 (13.39)
30-34	48 (8.19)	45 (9.78)	44 (9.36)	137 (9.26)
35-39	45 (23.14)	41 (8.92)	44 (9.36)	130 (8.79)
≥40	127 (100.0)	87 (18.91)	55 (11.70)	269 (18.19)
Total	549 (100.0)	460 (100.0)	470 (100.0)	1479 (100.0)
Literacy status				
Illiterate	429 (95.54)	357 (94.44)	360 (92.54)	1146 (94.24)
Literate	20 (4.46)	21 (5.56)	29 (7.46)	70 (5.76)
Total	449 (100.0)	378 (100.0)	389 (100.0)	1216 (100.0)

months (73.08%) [Table 3]. In this way, immunization coverage in all the three communities prior and post 1st phase of SRI week was found comparable. The coverage prior to SRI week was 21.77%, 25.00 and 27.27% while post SRI week was 85.27%, 76.19% and 80.61% among Nomads, Brick kiln and Migratory construction workers respectively, thereby achieving highest in Nomad (63.50%), less in Migratory Construction workers (53.34%) and least in Brick kiln (51.19%). Finally, the overall improvement in all the selected communities was evaluated as 56.49% [Table 4]. The present study also showed no relation between vaccination achievement of 1st phase SRI week and literacy status of different communities.

DISCUSSION

A UNICEF report states that India remains the nation with largest number of children who have not received immunization. Complete Immunization coverage in rural and urban areas of India is still a dismal 58.5% and 67.4%, respectively.^[7] In the present study, the overall immunization coverage prior to SRI week in these neglected migrating communities of age group 0-5 years was found as 24.63%, which is comparatively lower than the UNICEF report. As per the report of Coverage Evaluation Survey (UNICEF) 2009 of Uttar Pradesh, the total immunization coverage in children aged 12-23 months was found 41.00%^[8] which

is higher than the findings of present study. A study conducted on migrant construction and brick kiln workers in peri-urban areas of Pune found the total immunization coverage in under five children to be 20% that is almost similar to the findings of the current study.^[9] Another study on migrant construction workers in New Delhi found the complete immunization coverage to be 9% in children below 2 years of age.^[10] Also, one more study



Graph 1: Percentage (%) immunization coverage in different communities prior and post to first phase of special routine immunization week

Table 2: Immunization coverage of children in different communities prior to SRI week

Name of vaccine	Number of immunized children in different communities					
	Nomad		Brick kiln		Migratory construction workers	
	≤12 months number (%)	13-60 months number (%)	≤12 months number (%)	13-60 months number (%)	≤12 months number (%)	13-60 months number (%)
BCG	5 (26.31)	18 (26.08)	7 (50.00)	18 (31.03)	4 (28.57)	18 (27.27)
DPT	4 (23.53)	19 (27.53)	6 (50.00)	22 (37.93)	4 (30.77)	23 (34.84)
Measles	1 (20.00)	7 (10.14)	1 (20.00)	11 (18.97)	1 (16.66)	13 (19.69)
Japanese encephalitis	0 (0.00)	0 (0.00)	1 (20.00)	1 (1.72)	0 (0.00)	0 (0.00)
Total	10 (24.39)	44 (21.26)	15 (41.67)	52 (22.41)	9 (27.27)	54 (27.27)

BCG = Bacillie-calmette-guerin, DPT = Diphtheria, Pertussis, Tetanus

Table 3: Immunization coverage of children in different communities post 1st phase of SRI week

Name of vaccine	Number of immunized children in different communities					
	Nomad		Brick kiln		Migratory construction workers	
	≤12 months number (%)	13-60 months number (%)	≤12 months number (%)	13-60 months number (%)	≤12 months number (%)	13-60 months number (%)
BCG	11 (78.57) [14]	0 (0.00) [0]	5 (71.43) [7]	0 (0.00) [0]	7 (87.50) [8]	0 (0.00) [0]
DPT	14 (93.33) [15]	46 (90.19) [51]	8 (72.73) [11]	37 (88.09) [42]	9 (81.82) [11]	44 (88.00) [50]
Measles	5 (83.33) [6]	49 (80.32) [61]	3 (75.00) [4]	32 (71.11) [45]	4 (80.00) [5]	34 (66.67) [51]
Japanese encephalitis	6 (85.71) [7]	60 (85.71) [70]	3 (75.00) [4]	40 (72.73) [55]	4 (80.00) [5]	56 (84.85) [66]
Total	36 (85.71) [42]	155 (85.16) [182]	19 (73.08) [26]	109 (76.76) [142]	24 (82.76) [29]	134 (80.24) [167]

*Figures in big brackets represent number of children who were due for vaccination. BCG = Bacillie-calmette-guerin, DPH = Diphtheria, Pertussis, Tetanus, SRI = Special routine immunization

Table 4: Achievement of 1st phase of SRI weeks in relatively immobile internal migrants

Details of immunization	Type of communities			
	Nomad (%)	Brick kiln (%)	Migratory construction workers (%)	All (%)
Immunization coverage prior to SRI week	21.77	25.00	27.27	24.63
Immunization coverage post 1 st phase of SRI week	85.27	76.19	80.61	81.12
Achievement of 1 st phase of SRI week	63.50	51.19	53.34	56.49

SRI = Special routine immunization

conducted on Brick Kiln workers in peri-urban Kolkata revealed that out of 61 under 5 children, none was completely immunized. [1] Similarly, the present study on these vulnerable groups had the extremely low immunization coverage in under 5 years age group as 21.77% in Nomad, 25.00% in Brick kiln and 27.27% in Migratory construction workers. To catch up with these vulnerable communities, recently, a new program named SRI week has been carried out. The present study observed the immunization coverage post 1st phase of SRI week as 85.27% in Nomad, 76.19% in Brick kiln and 80.61% in Migratory construction workers and thereby the overall coverage was evaluated as 81.12%. Lastly, the achievement of all the three communities was calculated as 56.49% which is possible because of the health workers who went house to house for preparing due list of children and motivating their family for immunization in forthcoming session. This clearly shows that these special immunization sessions help immensely in improving the overall, as well as vaccine specific coverage in marginalized communities. Therefore, there is a need of having such sessions at regular intervals repeatedly as well as conducting focused studies on these groups to identify the various factors which are responsible for poor immunization coverage and keep them in mind while planning such special immunization activities. Also at the district level, state government should attempt to strengthen the aforesaid program by providing special community mobilizer so that coverage can be achieved up to 100%.

REFERENCES

1. Devis K. The Population of India and Pakistan. (Workshop Paper; National Workshop on Internal Migration and Human Development in India 2012). New Jersey: Princeton University Press; 1951.
2. Government of India. Census 2011 Provisional Figures. Available from: <http://www.pib.nic.in/newsite/mainpage.aspx>. [Last accessed on 2013 Dec 30].
3. Government of India. Government to intensify efforts to reach every last child with Vaccination: Immunization communication campaign launched during Special Immunization Week. Available from: http://www.pib.nic.in/release/rel_print_page1.asp?relid=95319. [Last accessed on 2013 Dec 20].
4. Park K. Park's Textbook of Preventive and Social Medicine. 20th edition, Jabalpur: M/S Banarsidas Bhanot Publishers; 2009. p. 112.
5. Government of India. National Population Policy 2000. New Delhi: GOI, Dept. of Family Welfare, Ministry of Health and Family Welfare; Available from: <http://monfw.nic.in/WritReadData/18925/FAMILYWELFARE-38385935.pdf>. [Last accessed on 2013 Dec 20].
6. Government of India. Year of Intensification of Routine Immunization. 2012. Available from: <http://www.pib.nic.in/newsite/erelease.aspx?relid=79602>. [Last accessed on 2013 Dec 20].
7. Gupta D, Mohan P, Chopra PK. Coverage Evaluation Survey 2009. All India Report. United Nations Children's Fund; 2010.
8. United Nations Children's Fund. Coverage Evaluation Survey, 2009. Uttar Pradesh Fact Sheet. Available from: http://www.unicef.org/india/Uttar_Pradesh_Fact_Sheet.pdf. [Last accessed on 2013 Dec 20].
9. Vaidya VM, Hanumante NM, Joshi AM, Mahajan S. Immunization status of underfive children in migrants from periurban areas of Pune. Indian J Community Med 2013;4:457-60.
10. Pandit N, Trivedi A, Das B. Maternal and child health issues among migratory construction workers. Healthline 2011;2:16-1. Available from: <http://www.iapsmgc.org/healthlinevol2issue22011.pdf>. [Last accessed on 2013 Nov 14].
11. Biswas T, Mandal PK, Biswas S. Assessment of Health, Nutrition and Immunization status amongst under-5 children in migratory brick kiln population of periurban Kolkata, India. Sudanese J Public Health 2011;6:7-13.

How to cite this article: Patel SP, Srivastava A. Assessing achievement of Special Routine Immunization Week among relatively immobile internal migrants in Uttar Pradesh, India. *Int J Med Public Health* 2015;5:67-70.
Source of Support: Nil, **Conflict of Interest:** None declared.