Original Research Article

A study of factors affecting the knowledge of Janani Shishu Suraksha Karyakram among health workers in rural block Shirur of Pune district, Maharashtra

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ABSTRACT

Background: Government of India launched the Janani Shishu Suraksha Karyakram (JSSK) on 1st June 2011, a new national initiative, to make better health facilities for women and child. The scheme is estimated to benefit more than 12 million pregnant women who access govt. health facilities for their delivery. The objective was to study the factors affecting the knowledge of Janani Shishu Suraksha Karyakram (JSSK) among health workers in rural block Shirur.

Methods: A cross-sectional study was conducted among health workers in field practice area of rural block Shirur which is the rural field practice area of B J Government Medical College, Pune. It consists of 9 primary health centers and total 43 subcenters. A pilot study was conducted before initiating the study and the proforma was tested. The data was collected during the weekly meeting at primary health center. All the health workers were given prior information regarding the day of interview. The information regarding the knowledge of JSKK was recorded on the pre-structured and pre-tested proforma was recorded. The detail information regarding of the health workers, duration of service, educational status and training of JSSK etc. was recorded.

Results: About 34.64% health workers were having excellent knowledge whereas 46.53% of health workers were having adequate knowledge of JSSK. The age distribution of health workers according to knowledge showed no statistically significant association with knowledge. Among the female health workers majority were having excellent and adequate knowledge and difference observed in knowledge was statistically significant. Among the ANM only one was having poor knowledge of JSSK. Out of 16 LHV, 10 were having excellent knowledge. Majority of the health workers with less than 10 years of service were having excellent and adequate knowledge. Excellent and adequate knowledge was statistically significantly associated with the training status of the health workers.

Conclusions: Female health workers (ANM and LHV) were having better knowledge as compared to other health workers. The training status of health worker has impact on their knowledge of JSSK.

Keywords: Janani Shishu Suraksha Karyakram, Factors affecting knowledge, Health workers

INTRODUCTION

Government of India launched the Janani Shishu Suraksha Karyakram (JSSK) on 1st June 2011, a new national initiative, to make better health facilities for women and child. The scheme is estimated to benefit more than 12 million pregnant women who access govt. health facilities for their delivery.¹ In 2013, about 50,000 women in India died due to pregnancy-related complications.² A major proportion of health expenditure in India is met by households (61.8%) followed by the government (28.2%), business firms, and external flows.³,⁴ Often, the health expenditure in India is catastrophic for the resource-constrained households.⁵
Similar pictures are also noted for maternity care, especially in rural and slum areas.\textsuperscript{6,7}

Poor households often resort to borrow cash or sell assets to meet the health expenditure.\textsuperscript{8,9} The household costs are broadly categorized as direct cost and indirect cost. While direct costs include users’ fee, investigation charges, costs for food, drugs, transport, special attendants at the health facility and blood transfusion, the indirect costs include loss of wages, cost for the stay of the persons accompanying, and cost for the home attendants. Direct cost incurred by the end user was considered as out-of-pocket (OOP) expenditure and both the terms were used interchangeably.\textsuperscript{7}

\textbf{Objectives}

To study the factors affecting the knowledge of Janani Shishu Suraksha Karyakram (JSSK) among health workers in rural block Shirur of Pune district of Maharashtra.

\textbf{METHODS}

A cross-sectional study was conducted during the period of June 2016 to December 2016 among health workers in field practice area of rural block Shirur which is the rural field practice area of B J Government Medical College, Pune. The study was conducted among the public health facilities i.e. primary health centers and subcenters of Shirur block. It consists of 9 primary health centers and total 43 subcenters.

Following inclusion and exclusion criteria was used to select the study population.

\textbf{Inclusion criteria}

Inclusion criteria was all health workers i.e. ANM, MPW, Health assistant male, health assistant female from Shirur block P.H.C. and subcenters willing to participate in study were included in study.

\textbf{Exclusion criteria}

Exclusion criteria were health workers included in pilot study will be excluded from final study; health workers not willing to participate in study; those health workers who were absent during the visit due to work burden or on leave will also be excluded from study.

A pilot study was conducted before initiating the actual study and the proforma was tested during the pilot study. The data was collected during the weekly meeting at primary health center. All the health workers were given prior information regarding the day of interview. The information regarding the knowledge of JSSK was recorded on the prestructured and pretested proforma was recorded. The detail information regarding of the healthy workers, duration of service, educational status and training of JSSK etc. was recorded. The semi-structured questionnaire was administered to the health worker who meets the eligibility criteria and willing to participate in study. Information was obtained from health workers including personal baseline data and knowledge of JSSK.

All responses were tabulated by the investigator using Microsoft-Excel 2007 Software. Data analyzed by using SPSS software version 17.0. Statistical tools used were proportions, percentages and other appropriate statistical tests of significance.

\textbf{RESULTS}

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|}
\hline
\textbf{Knowledge} & \textbf{No. health workers} & \textbf{Percentage (\%)} \\
\hline
Excellent & 36 & 35.64 \\
Adequate & 47 & 46.53 \\
Poor & 18 & 17.82 \\
Total & 101 & 100.00 \\
\hline
\end{tabular}
\caption{Distribution according to knowledge score of health workers.}
\end{table}

It was observed from Table 1 that 34.64% health workers were having excellent whereas 46.53% of health workers were having adequate knowledge of JSSK.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|}
\hline
\textbf{Age group} & \textbf{Excellent} & \textbf{Adequate} & \textbf{Poor} & \textbf{P value} \\
\hline
\leq30 years & 7 & 12 & 5 & \chi^2=4.51, df=6, p=0.608 (not significant) \\
31-40 & 15 & 13 & 6 & \\
41-50 & 11 & 15 & 3 & \\
>50 & 3 & 7 & 4 & \\
\hline
\textbf{Sex} & \textbf{Excellent} & \textbf{Adequate} & \textbf{Poor} & \textbf{P value} \\
\hline
Male & 6 & 16 & 16 & \chi^2=27.2, df=2, p<0.000 (significant) \\
Female & 30 & 31 & 2 & \\
\hline
\end{tabular}
\caption{Association between knowledge of JSSK scheme and age and sex of health workers providing the service.}
\end{table}

It was observed from Table 2 that majority of the health workers with excellent knowledge of JSSK were in the age group of 31-50 years. The health workers with adequate knowledge were less than 50 years of age. The poor knowledge was observed in all the age groups. The age distribution of health workers according to knowledge showed no statistically significant association with knowledge. It was observed that out of the total 38 male health workers majority of them were in adequate and poor knowledge group. However among the female health workers majority were having excellent and adequate knowledge. The sexwise difference observed in knowledge was statistically significant.
It was seen from Table 3 that among the ANM only one was having poor knowledge of JSSK. Out of 10 health assistant and 28 MPWs 4 and 12 were having poor knowledge respectively. Out of 16 LHV 10 were having excellent knowledge. It was observed that nature of posting was not statistically associated with the nature of posting. It was seen that majority of the health workers with less than 10 years of service were having excellent and adequate knowledge about JSSK. However in some of the health workers it was observed that poor knowledge with more than 15 years of service. But the duration of service was not statistically associated with the duration of service of health workers providing the service. It was evident from the table that the excellent and adequate knowledge was statistically significantly associated with the training status of the health workers.

**DISCUSSION**

It was observed that 34.64% health workers were having excellent whereas 46.53% of health workers were having adequate knowledge of JSSK. The health workers with poor knowledge were 17.82%. Thus the majority of the health workers were with having satisfactory knowledge about JSSK. It was observed that out of the total 38 male health workers majority of them were in adequate and poor knowledge group. However among the female health workers majority were having excellent and adequate knowledge. The sexwise difference observed in knowledge was statistically significant (p<0.000). As majority of the female health workers are involved in JSSK implementation was having better knowledge as compared to the male health workers.

It was seen that among the ANM only one was having poor knowledge of JSSK. Out of 10 health assistant and 28 MPWs 4 and 12 were having poor knowledge respectively. Out of 16 LHV 10 were having excellent knowledge. The difference observed in the knowledge of the health workers and their designation was statistically significant. Under NRHM the ANM is responsible for pregnancy registration, 1st, 2nd & 3rd antenatal check up at the clinic and 4th natal check-up at home. She counsel the pregnant woman regarding birth preparedness and also responsible for implementation of JSY and JSSK Scheme. She is involved in disbursement of cash assistance and referral transport. LHV is also involved in implementation of face to face education regarding the motivation for MCH and Family Planning Services. The health assistant and MPW prepares, maintain and utilize village registers containing family records with columns for recording particulars concerning NMEP, EPI, Vital Events, Family Welfare, Environmental Sanitation, NPCB, other local health programmes, educational activities, serves rendered and achievements etc. Thus the ANM and LHV are directly involved in the implementation of the JSSK. Thus this may be that reason for better knowledge as compared to MPW and HA.10

It was observed that nature of posting was not statistically associated with the nature of posting (p=0.08). It was seen that majority of the health workers with less than 10 years of service were having excellent and adequate knowledge about JSSK. However in some of the health workers it was observed that poor knowledge with more than 15 years of service. But the duration of service was not statistically associated with the duration of service of health workers providing the service (p=0.751). It was observed that majority of the health workers with excellent knowledge of JSSK were in the age group of 31-50 years. The health workers with adequate knowledge were less than 50 years of age. The poor knowledge was observed in all the age groups. The age distribution of health workers according to knowledge showed no statistically significant association with knowledge (p=0.608). It was evident from the table that the excellent and adequate knowledge was statistically

| Designation | Excellent | Adequate | Poor | Significance |
|-------------|-----------|----------|------|--------------|
| ANM         | 20        | 26       | 1    | χ²=30.2, df=6, p<0.000 (significant) |
| HA          | 2         | 4        | 4    |               |
| LHV         | 10        | 5        | 1    |               |
| MPW         | 4         | 12       | 12   |               |

| Nature of posting | Excellent | Adequate | Poor | Significance |
|-------------------|-----------|----------|------|--------------|
| Permanent         | 31        | 34       | 17   | χ²=5.05, df=2, p=0.08 (not significant) |
| Contractual       | 5         | 13       | 1    |               |

| Duration of service (in years) | Excellent | Adequate | Poor | Significance |
|-------------------------------|-----------|----------|------|--------------|
| ≤5                            | 6         | 13       | 6    | χ²=8.34, df=12, p=0.751 (not significant) |
| 6-10                          | 12        | 12       | 4    |               |
| 11-15                         | 2         | 3        | 1    |               |
| 16-20                         | 5         | 6        | 2    |               |
| 21-25                         | 2         | 7        | 1    |               |
| 26-30                         | 8         | 4        | 4    |               |
| >30                           | 1         | 2        | 0    |               |

| Training of JSSK | Excellent | Adequate | Poor | Significance |
|------------------|-----------|----------|------|--------------|
| Yes              | 32        | 44       | 5    | χ²=17.7, df=2, p=0.000 (significant) |
| No               | 4         | 3        | 6    |               |

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Table 3: Association between knowledge of JSSK scheme and various factors of health workers providing the service.
significantly associated with the training status of the health workers (p=0.0001).

CONCLUSION

Thus we conclude that the 46.53% of health workers were having adequate knowledge and 34.64% health workers were having excellent knowledge of JSSK. Female health workers (ANM and LHV) were having better knowledge as compared to other health workers. The training status of health worker has impact on their knowledge of JSSK.

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