Awareness Regarding POSHAN ABHIYAAN Before and After Additional Intervention Packages among Pregnant Women, Raigad District, Maharashtra

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Abstract:

Introduction: Maternal and child health services were proposed to escalate institutional deliveries, to bring down the out-of-pocket expenditure, to bring forth the quality care and nutrition to mother and baby and consequently curtail maternal mortality rate (MMR) and infant mortality rate (IMR). The objective of the study, To assess the awareness regarding POSHAN ABHIYAAN before and after additional Intervention Package among pregnant women. To compare the awareness regarding POSHAN ABHIYAAN before and after additional Intervention Package among pregnant women. Methods: A community-based study was conducted at Anganwadi centres, Raigad District, Maharashtra, India, among 528 pregnant women. They were interviewed using a structured validated questionnaire. Additional Intervention Package was implemented to the intervention group. Data were analysed using Statistical Package for Social Science version 24. Findings: 57.15% had average awareness score regarding POSHAN ABHIYAAN in the pre-test. Major source of information was (ASHA) Accredited Social Health Activist (52.2%). Majority of pregnant women were multigravida (68.21%). Age group of pregnant women showed a significant association (p-0.043) with level of awareness regarding POSHAN ABHIYAAN. Implementation of Additional Intervention Package in the intervention group showed a markable upgrade in the awareness score (91.4%) regarding POSHAN ABHIYAAN. Conclusion: Implementation of Additional Intervention Package revamped the community and family level participation in the present study. Thus, sessions with health education and community-based activities along with implication of community groups will help to perk up POSHAN ABHIYAAN service awareness. Uptake can be enhanced through proper channelising the resources.

Keywords: 1.Pregnant Women, 2. POSHAN ABHIYAAN, 3. Awareness, 4. Additional Intervention Package

1. Introduction:

Globally, there has been a decline in the Maternal Mortality Ratio (MMR) by 34 percent – from 342 death to 223 deaths per 100,000 live births from $2000 - 2020^1$. This translates into an average annual rate of reduction of 2.1 percent. While substantive, this is about one third of the 6.4 percent annual rate needed to achieve the Sustainable Development Goal (SDG) of 70 maternal deaths per 100,000 live births by 2030^1 . The Maternal Mortality Ratio (MMR) is defined as the number of maternal deaths during a given time period per 100,000 live births. The Maternal Mortality Ratio (MMR) of India has improved

significantly and now stands at 97/ lakh live births. The country has witnessed a progressive reduction in MMR from 130 in 2014 - 2016 to 97 in 2018 - 2020.²

2. Literature Review

Under the National Health Mission (NHM), India has made a concerted effort to provide accessible quality maternal and newborn health services and minimize preventable maternal deaths. The National Health Mission has made significant investments to ensure provision of healthcare services, particularly for effective implementation of the maternal health programs to accomplish the specified MMR targets.³ Governement schemes such as Janani Shishu Suraksha Karyakram and Janani Suraksha Yojana have been modified and upgraded to more assured and respectful service delivery initiatives like SurakshitMatritvaAashwasan (SUMAN). POSHAN ABHIYAAN with an aspect to improve nutritional outcomes for children, pregnant women and lactating mothers it also focused on promoting quality care in a respectful and dignified manner ensuring choice of birthing to all pregnant women. Awareness and uptake of maternal health services reduces maternal morbidity and mortality.

POSHAN Abhiyaan (Prime Minister's Overarching Scheme for Holistic Nutrition) was launched on March 08, 2018 by the Prime Minister in Jhunjhunu, Rajasthan to curb the malnutrition crises across the country. POSHAN ABHIYAAN mission is a conjunction of various schemes/programmes including the Pradhan Mantri Matru Vandana Yojana (PMMVY), Anganwadi services, Ministry of Women and Child Development (MoWCD), the National Health Mission (NHM) of the Ministry of Health and Family Welfare (MoHFW) and other urban local bodies through relevant ministries. The POSHAN Abhiyaan aims to target the unique 1000-day window of childbirth and pre- and post- delivery support to mothers.⁴ Mission POSHAN 2.0 was launched by Finance Minister Nirmala Sitharaman in February 2021 to prevent further backsliding of nutrition indicators. Mission POSHAN 2.0 brings together the Integrated Child Development Services (ICDS), Anganwadi services, Supplementary Nutrition Programme, POSHAN Abhiyaan, scheme of Adolescent Girls and National Creche Scheme.⁵

Awareness and uptake of maternal health services is influenced by multiple factors and this requires focused attention to achieve the SDG target of MMR less than 70/ lakh live birth by 2030. A study conducted at a district hospital, Mangaluru, Karnataka found that the one-third of the ANC and PNC mothers were aware of the name of JSY (32.4%), but fewer knew the benefits amounting to an overall awareness of 9.6 percent. Accredited Social Health Activist (ASHA) was the major source of information for all the maternal health schemes.⁶ In another study conducted in rural area of West Bengal, India, showed overall 68.75% mothers had poor awareness regarding free entitlements of JSSK. Only 18.75% mothers were aware about free normal vaginal delivery and free drugs and consumables each. Parity of mother had statistically significant influence on the awareness level regarding JSSK.⁷

However, the uptake of any services depends on the awareness among the beneficiaries. With this background the present study was conducted to assess and promote the awarenessregarding POSHAN ABHIYAAN.

3. Objective of the Study

The objective of this study is to assess the level of awareness about POSHAN Abhiyaan and implement additional intervention to promote awareness among the pregnant mothers in rural Anganwadi centres, Raigad District, Maharashtra.

4. Method of the Study

A time-series experimental and community-based research study was conducted in the selected Anganwadi centres of Alibag, Khalapur, Panvel-1, Panvel-2, Sudhagad, Uran blocks of Raigad District,

Maharashtra between April 2021 to February 2022. Multistage Cluster sampling method conducted for selection of 528 pregnant mothers in first trimester (264 pregnant mothers in each group- Intervention group and Comparison group) among selected 100 Anganwadi centres. The Institutional Ethics Committee verified and cleared the ethics for the study. Informed consent was obtained from the study participants.

A structured Interview questionnaire was developed with reference to awareness regarding POSHAN Abhiyaan services such as antenatal services, antenatal visits, registration, medication, immunization, financial assistance, THR (Take Home Ration), free institutional delivery and transportation facility. To intervene the awareness regarding free entitlements in the POSHAN Abhiyaan program an Additional Intervention Package was developed which included trimester-wise activities with active participation of study participants (Pregnant mothers), family and community health workers (Anganwadi workers, Anganwadi Helpers, ASHA).

Additional Intervention Package (AIP) comprised of Synchronous Instructional Teaching (SIT), Health Education and Community Based activity on various topics in each trimester as mention below.

| Timepoints | Synchronous Instructional | Health Education | Community Based |
|-------------|---------------------------|--------------------------|-------------------|
| | Teaching (SIT) Module of | | Activity |
| | POSHAN ABHIYAAN by | | |
| | MoWCD- | | |
| I Trimester | | a. Poshan Abhiyaan | a. Role play on |
| | a. Antenatal care | Programme | handwashing |
| | b. Immunization | | |
| II | a. Anemia prevention | a. Nutrition and healthy | a. Poshan mela |
| Trimester | b. Birth preparedness | diet | exhibition |
| | | | b. Nutrition and |
| | | | recipe contest |
| III | a. Complementary | a. Postnatal care | a. Group activity |
| Trimester | feeding | b. Obstetric | on Suposhan |
| | b. Optimal breastfeeding | complications | divas |
| | | _ | b. Skit on |
| | | | Kangaroo |
| | | | mother care |

 Table 1: Additional Intervention Package (AIP)

Interview schedule was conducted for Pre-intervention assessment of awareness regarding POSHAN Abhiyaan for intervention group and comparison group. Additional Intervention Package was implemented for the pregnant mothers of Intervention group after 1 week. Post-intervention assessment of awareness was conducted 10 days apart in each trimester and post delivery for pregnant mothers of both the groups.

The Socio-demographic profile and the awareness regarding POSHAN Abhiyaan services were analysed and expressed using descriptive statistics. Demographic variables of study participants were compared with the awareness scores of pregnant mothers in both the groups and calculated using simple logistic regression. Scoring of POSHAN Abhiyaan Awareness was done, a sum of 1 score for every right response and a score of 0 for every wrong response was given. With total 60 awareness questions it was classified into three score levels; Poor score (0 - 20), Average score (21 - 40), Good score (41 - 60). Data was analysed by Friedman's test, chi-square test and Wilcoxon Signed Rank Test to find out the statistical significance.

5. Data Analysis

Majority of pregnant mothers were in the age group of 25 - 29 years in intervention group (35.9%) and comparison group (36.0%). Most of the pregnant mothers had primary school education in intervention group (33.1%) and comparison group (37.0%). 59.2% intervention group and 60.0% comparison group pregnant mothers were housewife. 31.78% were primigravida and 68.21% were multigravida in the present study. Majority of pregnant mothers in intervention group (49.4%) and comparison group (55.0%) gained information regarding POSHAN Abhiyaan services from ASHA and others from ANM, Anganwadi workers, medical officer, family and others.

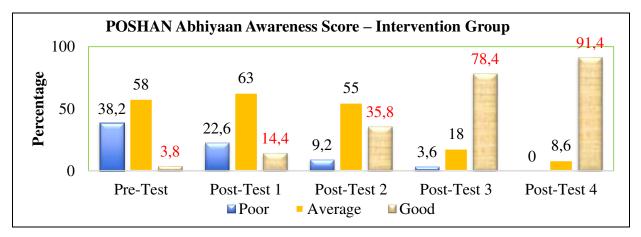


Figure 1Distribution of Awareness score regarding POSHAN Abhiyaan before and after Additional Intervention Package among Pregnant mothers of intervention group

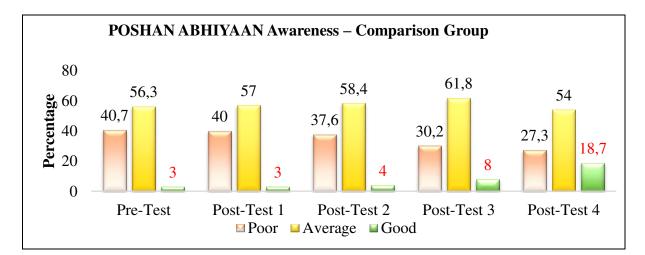


Figure 2 Distribution of Awareness score regarding POSHAN Abhiyaan among Pregnant mothers of Comparison group

Table 2: Comparison of Awareness score regarding POSHAN ABHIYAAN before and afterAdditional Intervention Package among Pregnant mothers of intervention group and comparisongroup

n=494

| Intervention Group | | | | Friedman's Test | P – Value | Sig. At 0.05 |
|--------------------|-------|--------|--------|-----------------|--------------|-----------------|
| Awareness Score | Mean | SD | Median | | v aluc | Level |
| Pre-Test | 25.98 | 10.13 | 25.0 | 978.413*** | 0.000 | |
| Post Test – 1 | 29.13 | 9.87 | 28.0 | | | S |
| Post-Test – 2 | 34.93 | 10.87 | 36.0 | | | |
| Post-Test – 3 | 46.37 | 11.22 | 51.0 | | | |
| Post-Test – 4 | 51.74 | 7.32 | 53.0 | | | |
| Comparison Group | | | | Friedman's Test | p – | Sig. at |
| Awareness Score | Mean | SD | Median | | Value | 0.05 level |
| Pre-Test | 21.34 | 6.3105 | 22.00 | 9.643 | 0.000 | - |
| Post Test – 1 | 22.13 | 6.4909 | 23.00 | | | S |
| Post-Test – 2 | 23.92 | 6.9399 | 24.00 | | | |
| Post-Test – 3 | 26.61 | 7.6336 | 27.00 | | | |
| Post-Test – 4 | 29.96 | 9.0248 | 30.00 | | | |

Comparison of awareness score regarding POSHAN Abhiyaan before and after Additional Intervention Package implementation among pregnant mothers of intervention group (chi $r^2 = 9.784$) and comparison group (chi $r^2 = 9.643$) using Friedman's test showed a statistical significance at 0.05 level.

| Table 3: Comparison of Awareness score regarding POSHAN ABHIYAAN between Pregnant mothers |
|---|
| in intervention group and comparison group. |
| n=494 |

| Awareness score | Intervention group | | Comparison group | | Total | Chi- square | p-Value | Sig. at 0.05 level | |
|-------------------|--------------------|-------|---------------------|-------|-------|----------------|---------|-----------------------|--|
| Pre-Test | f | % | f | % | | Test | | | |
| 0 – 20 (Poor) | 94 | 38.4 | 102 | 41.0 | 196 | 0.558 | 0.756 | NS | |
| 21 – 40 (Average) | 142 | 58.0 | 140 | 56.2 | 282 | - | | | |
| 41 – 60 (Good) | 9 | 3.7 | 7 | 2.8 | 16 | | | | |
| Total | 245 | 100.0 | 249 | 100.0 | 494 | | | | |
| Post Test 1 | I | | | I | 1 | | | 1 | |
| 0 – 20 (Poor) | 55 | 22.4 | 100 | 40.2 | 155 | 33.079** | 0.000 | | |
| 21 – 40 (Average) | 154 | 62.9 | 142 | 57.0 | 296 | - | | S | |
| 41 – 60 (Good) | 36 | 14.7 | 7 | 2.8 | 43 | | | | |
| Total | 245 | 100.0 | 249 | 100.0 | 494 | | | | |
| Post Test 2 | 1 | | | 1 | 1 | | | 1 | |

| 0 – 20 (Poor) | 22 | 9.0 | 94 | 37.8 | 116 | 10.710* | 0.000 | | |
|-------------------|-----|-------|-----|-------|-----|---------|-------|---|--|
| 21 – 40 (Average) | 135 | 55.1 | 145 | 58.2 | 280 | | | S | |
| 41 – 60 (Good) | 88 | 35.9 | 10 | 4.0 | 98 | | | | |
| Total | 245 | 100.0 | 249 | 100.0 | 494 | | | | |
| Post Test 3 | | | | | | | | | |
| 0 – 20 (Poor) | 9 | 3.7 | 75 | 30.1 | 84 | 25.250* | 0.000 | | |
| 21 – 40 (Average) | 44 | 18.0 | 154 | 61.8 | 198 | | | S | |
| 41 – 60 (Good) | 192 | 78.3 | 20 | 8.0 | 212 | | | | |
| Total | 245 | 100.0 | 249 | 100.0 | 494 | | | | |
| Post Test 4 | | | | | | | | | |
| 0 – 20 (Poor) | 0 | 0.0 | 67 | 26.9 | 67 | 26.324* | 0.000 | | |
| 21 – 40 (Average) | 21 | 8.6 | 134 | 53.8 | 155 | | | S | |
| 41 – 60 (Good) | 224 | 91.4 | 48 | 19.3 | 272 | | | | |
| Total | 245 | 100.0 | 249 | 100.0 | 494 | | | | |

The comparison of trimester wise and post-delivery awareness score showed a statistical significance at 0.05 level in both the groups. Comparison of awareness score between intervention group and comparison group indicates that the pre-test awareness score was average in both intervention group (58.0%) and comparison group (56.2%). With Chi-square = 0.558, shows no statistical significance. But in the post-test 4, awareness score was good (91.4%) in intervention group and average (53.8%) in comparison group, Chi-square = 26.324shows statistical significance with p-value < 0.05 level.

Age, education, occupation, family type, socio-economic status, habits, source of information, registration week did not have any statistically significant association with awareness level among the pregnant mothers regarding POSHAN Abhiyaan. Age factor showed a significant association (p- 0.043) with the level of awareness among pregnant mothers in comparison group.

6. Discussion

The present study showed the comparison of pre-test and post-tests using Friedman's test further depicts a statistically significant difference at p-0.05 level in the awareness score regarding POSHAN Abhiyaan among pregnant mothers before and after Additional Intervention Package at different time period. It also illustrated the comparison of trimester wise score regarding POSHAN Abhiyaan among pregnant mothers in intervention group using Wilcoxon Signed Rank Test showed statistical significance at 0.05 level.

The awareness score regarding POSHAN Abhiyaan from 3.8% (good score) in pre-test increased gradually to 91.4% (good score) in post-test 4, which eventually shows the positive effect of Additional Intervention Package implemented in each trimester among the pregnant mothers in the intervention group. In the comparison group, the pre-test awareness score regarding POSHAN Abhiyaan was 40.7% poor, 56.3% average and 3.0% good. After 1 week, with the routine OPD care received by the pregnant mothers in first trimester, the post-test 1 awareness score was 40.0% poor, 57.0% average and 3.0% good. Further, in the post-test 4 conducted post-delivery showed 27.3% poor, 54.0% average and 18.7% good awareness score among the mothers.

A cross-sectional research study conducted in Bangladesh (2018) entitled – maternal awareness to pre-natal health and impact on mother and child health showed a statistically significant association (t = 68.54, p 0.001) between awareness levels of 241 rural and 201 urban mothers. The study further concludes that to assess the impact of intervention on outcomes for mother and child health, further research is required.⁸

Significant participants were aware of the name of the program but did not know the key benefits and services under the program due to which the pre-test awareness score was found to be low in both the groups. However, there is a need to increase the awareness of all Maternal Child Health (MCH) related schemes and programs, which will empower the beneficiaries to access and utilize effectively.

The present study showed ASHA was the main source of information (52.2%), followed by Anganwadi workers, ANM, medical officer, family, others- friends, TV/ newspaper were also reported to be one of the sources of information. Awareness can be increased by utilizing social media/ internet, encouraging the ANC and PNC mothers to share the information. Further, the information regarding all programs/ schemes with equal emphasis on each scheme can be promoted to the community during their Anganwadi visits, registration of pregnancy, antenatal check-up and during the home visit by community health workers.

7. Conclusion

The present study showed a low awareness score among pregnant mothers of both the groups in preintervention assessment, thus, mass media campaign against barriers to awareness and uptake of MCH services should be aired to enlighten the community on its advantages and promote development of healthful environment to reduce maternal and infant morbidity and mortality. Community based activities should be promoted with focussed action at grass-root level to motivate the beneficiaries in rural areas to utilize services and enhance the pregnancy outcome.

There should be display of Information Education and Communication (IEC) materials in hospitals and Anganwadi centres to increase the awareness regarding various available MCH services and self-help groups (SHG). Further qualitative studies are recommended in the future on a large sample.

8. Acknowledgement:

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