

A Bird's Eye View Of The Health Care System And Health Scenario For 1000 Days Care Mothersin Barshi Block of Solapur District In Maharashtra, India

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Abstract- *Health of the mother and child plays a vital role in reducing IMR, MMR, NNMR, and U5MR, etc. Hence depth understanding of the components impacting it gives better insights; for the planning of the health-specific interventions for the targeted population i.e. women under 1000 days care. This study is an attempt to understand the status of 1000 days of care and its components in rural parts of Maharashtra; National Family Health Survey-4 (NFHS-4) data used for statistical comparison. Due to several biological and socio-economic reasons one woman needs more attention for better health care than men. This study incorporates the parameters of women health like age of marriage, level of awareness on ANC, mother's education and its correlation with 1000 days care, anemia and Government schemes etc.*

Keywords- Health Care System, Health Scenario, Women Health, 1000 Day's Care, Mothers education, ANC, NFHS-4 etc.

I. INTRODUCTION

According to WHO, health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. A health care system consists of all organizations, people, and actions whose primary intent is to promote, restore, or maintain health. This includes efforts to influence the determinants of health as well as direct health-improving activities. A health system is, therefore, more than the pyramid of publicly owned facilities that deliver personal health services. It includes, for example, a mother caring for a sick child at home, private providers, behavior change programs, vector-control campaigns, health insurance organizations, occupational health and safety legislation, etc. It also includes inter-sectoral action by the government, for example, encouraging the ministry of education to promote female education, a well-known determinant of better health. According to the Census 2011 of India, 68.84 percent of Indians, i.e. 833.1 million, reside in villages where the healthcare system is not satisfactory. According to a study by Tripathy & Khan (2018 & 2020), the accessibility to health

care services remains poor in rural India. The goal of Good Health and Well-being as a part of the Sustainable Development Goals adopted by the United Nations in 2015 emphasizes better women and child health-care. It targets reducing Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), Neo-Natal Mortality Rate (NNMR), and Under 5 Mortality Rate (U5MR), etc.

This paper sheds light on the condition of pre-natal and post-natal health-care services in rural Maharashtra and the implementation of a central government-sponsored program for the betterment of the same. Janani Suraksha Yojana (JSY) is a 100% centrally sponsored scheme under the umbrella of NRHM which integrates cash assistance with antenatal care during the pregnancy period, institutional care during delivery, and immediate post-partum period in a health center by establishing a system of coordinated care by field level health worker.

For this, a study of the implementation of 1000 days of care of mothers and children was conducted in the year 2019. It has been observed that several biological and socio-economic reasons contribute to the present state of the plight of women making it extremely essential to pay immediate attention to the betterment of health care services for women and children. They face several physical and biological changes in their stages of life for which they need some extra care and protection in society. Under the circumstances, such a study becomes very important for planning the health-specific interventions for the targeted population i.e. women under 1000 days care.

II. STUDY AREA AND METHODOLOGY

This study was conducted in the Barshi block of Solapur district in Maharashtra. The state, district, and block were purposively selected and four villages were randomly selected for the study. For the collection of data mainly interview schedules and participatory tools were used. The schedule was prepared based on research needs and

information on baseline study. The research population was 2500 and a sample size of 203 was taken from the 4 villages through stratified random sampling during the period of 28 February to 22 April 2019. Some participatory tools were also used for a better understanding of the actual scenario. According to Tripathy & Khan (2020), participatory tools are helpful to understand the ground reality.

The State of Maharashtra has been at the forefront of healthcare development in India. Healthcare facilities are being provided by public, private, and voluntary sectors from basic to advanced health care services. Public health services aim at providing reliable, accountable, adequate, quality preventive, and curative health care to the population including an emphasis on improving maternal and child health. In tribal and rural areas public health infrastructure become all the more important as these are the only available options to the communities.

III. OVERVIEW OF THE HEALTH CARE SYSTEM

The Government of Maharashtra has created a three-tier health infrastructure to provide comprehensive health services. The primary tier comprises of Sub-centres, Primary Health Centres (PHC), and Community Health Centres (CHC). The sub-district hospitals and district hospitals constitute secondary tier whereas, well equipped medical colleges and super-specialty hospitals located in major cities are at the tertiary level.

Table 1 Details about Health care facility

| Sr. No. | Type of Institution | No. |
|---------|--|-------|
| 1 | Sub-centre | 10580 |
| 2 | Primary Health Centres | 1814 |
| 3 | Rural Hospitals | 360 |
| 4 | Primary Health Units | 193 |
| 5 | Mobile Medical Units | 40 |
| 6 | Sub-District Hospitals | |
| | (i) 50 Beds | 58 |
| | (ii) 100 Beds | 28 |
| 7 | District Hospital's | 23 |
| 8 | The hospital's having Medical Collages | 16 |
| 9 | Women Hospitals | 13 |
| 10 | Mental Hospitals | 4 |
| 11 | TB Hospital's | 4 |

To cater needs of medical professionals, several medical and paramedical institutions including Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homeopathy (AYUSH) institutions have been set up. According to Dr. Dharmender Nagar,⁸ Integration of AYUSH Doctors into

Modern Medicine Has Both Benefits and Fallouts as World Health Organization published a report titled the *Health Workforce in India*, which brought forth eye-opening statistics on the situation of healthcare in the country. It found that in 2001 nearly one-third of the practitioners calling themselves 'allopathic doctors' were educated up to only secondary school level, while a whopping 57.3% did not have a medical qualification. Expectedly, this scenario was more distressing in rural areas where only 18.8% of the 'allopathic doctors' had any medical qualification. The report also suggests a huge skew in the availability of doctors in favor of urban areas with the urban density of medical practitioners four times higher than the rural. The document states that together, allopathic, ayurvedic, homeopathic, and Unani medical practitioners accounted for a total strength of 79.7 doctors per lakh population in India.

Maharashtra includes 10,580 sub-centres, 1,814 PHC, 360 CHC. Based on the data of registered medical practitioner's estimated doctor population ratio is 1:1,365 in the State.

Reproductive and Child Health Programme (RCH) – II is being implemented to enhance child health status and population stabilization thereby reducing Maternal Mortality Ratio (MMR),

Infant Mortality Rate (IMR) and Total Fertility Rate (TFR). Under the program, during the 2015-16 expenditure of 453.20 crores, during 2016-17 expenditure of 459.01 crores and during 2017-18 upto December expenditure of 207.86 crores was incurred.

Table 2 IMR, NNMR and TFR of Maharashtra

| Sr. No. | Health Indicator | Maharashtra |
|---------|---------------------------------|-------------|
| 1 | Infant Mortality Rate (IMR) | 19 |
| 2 | Neo-Natal Mortality Rate (NNMR) | 13 |
| 3 | Total Fertility Rate (TFR) | 1.8 |

Challenges

Maharashtra needs to increase spending on health to over Rs. 74 billion by 2018 to meet challenges in the rising cost of medical care. However, with the growing urbanization, there is a need to look at the growing healthcare costs as well. Maharashtra's health budget needs to be a little more ambitious to overcome the lack of public health and medical facilities and fill in skill gaps of huge vacancies in rural hospitals and other centres as well as PHCs.



Image 1: Captured in Upale village (Tal. Barshi) while interviewing with mother under 1000 days care.



Image 2: Captured in Ghanegoan (Tal. Barshi) village while interacting with group of pregnant women and mothers under 1000 days care.

Analysis of Mother’s Information on 1000 Days care:

Sample Distribution – The sample distribution shows that there is a mix of samples from all trimester and also mothers with the 0-2-year-old baby.

Around 39% of the sample population belongs to the mother with the 0-2 year’s baby.

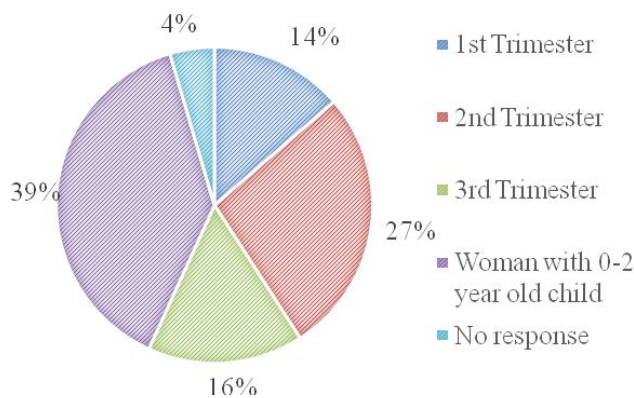


Chart 1 Sample distribution

It is observed that around 70% population belongs to the BPL household hence data would be more relevant to the poor households. During the study, it is observed that 89% of rural households have access to toilet facilities in Rural Maharashtra. According to NFSH -4 (2015-16), 29% of households do not use a sanitation facility, which means that household members practice open defecation. The percentage of such households is much higher in rural Maharashtra, about 50%. This improvement could have been the result of the Swachh Bharat Mission (SBM) by the Government of India.

Educational Level -

According to NFSH -4 (2015-16), the level of schooling of pregnant women also affects the components of 1000 days of care. The infant mortality rate is lowest for children whose mothers have no schooling (Illiterate) and highest for those whose mothers have less than 10 years of schooling (lesser than higher secondary)

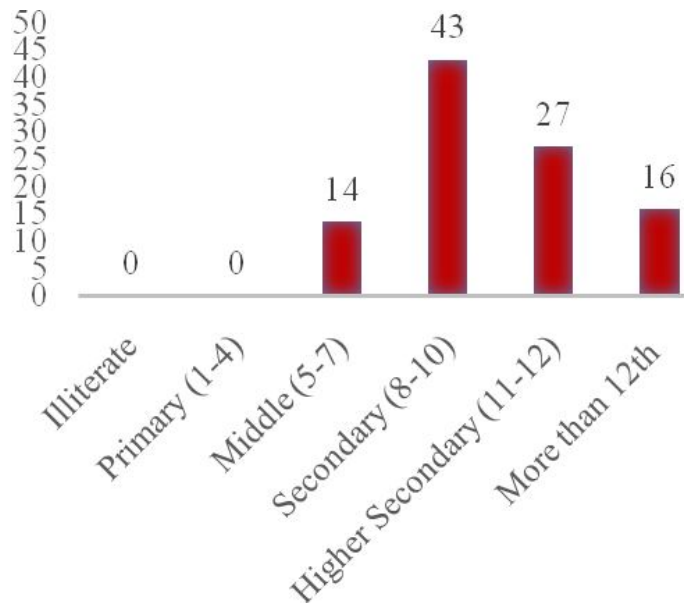


Chart 2 Educational Level of the samples

The study in Maharashtra also found that the education of the mothers under 1000 days program seems to be much better which is the impact of the GoI policies over the last few decades for improving literacy.

Even 43% of the population underwent study until secondary and more than 16% have pursued graduation, hence their understanding about health, nutrition, and 1000 days care seems to be better. Education will reduce negligence towards the health aspect.

Age of Marriage –

There are still few incidences of the early marriages which came out with the sampling

Age of marriage affects mother health if she gets early married, there more risks to her life and children also. As per the literature of NCD's early marriages is one of the causes of cervical cancer.

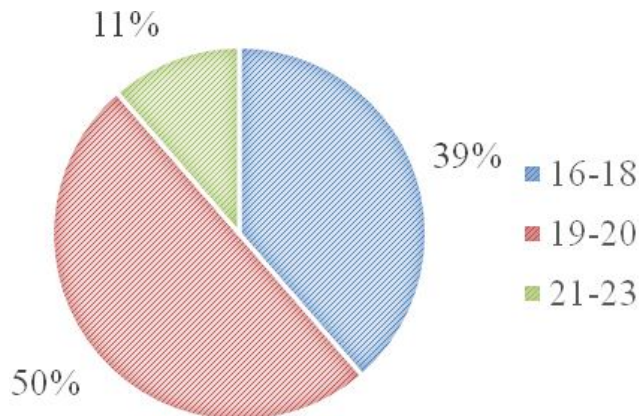


Chart 3 Marriage age of women

According to NFSH -4 (2015-16), one-fourth (25%) of women age 20-24 years got married before the legal minimum age of 18 years, down from 39 percent in NFHS-3.

But according to the study, 39 % of women got married between 16-18 years of age. This shows that still there is a need to create awareness for the legal age of marriage with a scientific and convincing approach. Early marriages are one of the major causes of Non-Communicable Diseases (NCDs).

Awareness status about Ante-Natal Care (ANC)-

The awareness about the components of ANC is higher than 1000 days of care. Around 77% of the targeted population is aware of the components; which means even if they don't know about 1000 days of care but they know the components of it.

The first 1,000 days can be seen as a combination of five stages/phases – the nine months of pregnancy (antenatal period); a birth passage or delivery process (intranasal period); four weeks following birth (neonatal period); 11 months of infancy; and the final chunk post first birthday until two years when the child is weaned from the breast, and transitions to eating solids. All these critical phases of development, if managed well, reduce the risk of falling in the trap of any form of malnutrition.

The study shows that around 77% of the sample population availed the services in the PHC or Government Hospital.

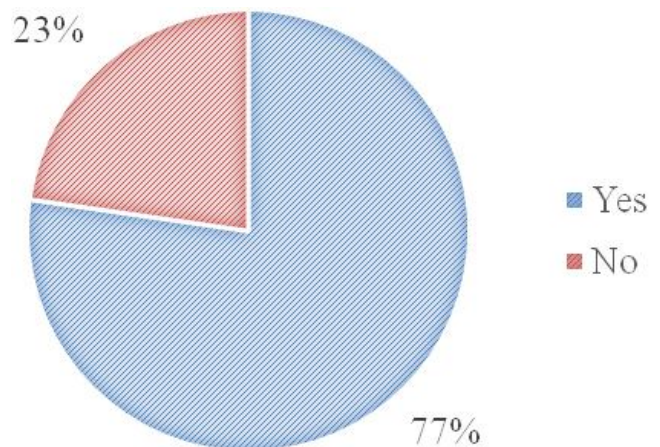


Chart 4 Awareness level of ANC

The study shows that 86% of the sample population taken IFA tablets, which shows that there are positive changes in the perception towards the govt. services.

As per the NHFS-4, 85 %, mothers received iron and folic acid (IFA) supplements, but only 41 percent of them consumed for the recommended 100 days or more.

This can also be the result of incentivized services to the mother and also the ASHA worker from the village.

Around 85 % of the population know the importance of feeding the colostrum to their babies and breastfeeding. This could be the effect of the education of the mothers.

As per the NFHS-4, 72% percent of mothers had four or more antenatal care visits; urban women were more likely to receive four or more antenatal visits than rural women due to accessibility and work contribution in the family. In contrast, the study found that in rural Solapur only 54% of mothers having four or more than four antenatal care visits.

Even when women receive antenatal care, sometimes they do not receive all the services needed to monitor their pregnancy. As per the NFHS-4, in Maharashtra, more than 97 percent of women who received antenatal care for their last birth received each of the services needed to monitor their pregnancy: having their weight taken, their blood pressure measured and urine samples were taken (98% each), and having blood samples taken and having their abdomen examined (97% each).

The Study reaffirms that 98% of mothers in rural Solapur receives each of the services needed to monitor their pregnancy. It reflects the efforts of grass-root health workers in protecting the child and mother. At the same time, 84% of mothers having Mother and Child Protection Card but as per NFHS-4 among the registered pregnancies, 91 % received a Mother and Child Protection Card (MCP Card).

The study indicates that there are around 59% of the mother who knows about the diarrheas and measures to be taken if the child is affected by it. Almost 9 out of 10 mothers of young children (88%) have heard of oral rehydration salt (ORS) packets for the treatment of diarrhea.

According to the study, in the aspect of 'Category of Malnourishment and Growth Monitoring Chart Known', only 39% of mothers are aware of it. After the consistent work of 'Integrated Child Development Services', the food packets and other supplementary diet reaching each Anganwadi in Maharashtra to eradicate the Malnutrition, stunting, wasting among children's. The mothers may not be aware of this component but the services are taken by the households, different strategies are used by ICDS for improving the mother's participation in child's nutrition still there is the scope of work for improving the awareness about these components.

Only 27 % of mother population 'Known Danger Sign of New Born Child during Post Natal Period', here it seems the more focus needs to be given, this should be known to the mothers. So that dangers can be avoided at a preliminary stage and with proactive action. Awareness on this component may help in decreasing the IMR, NNMR, MMR, and U5MR in Rural parts of India where accessibility to quicker health services is limited.

The study shows that 82% of the mothers knew the importance of immunization which shows that there is the interaction between ASHA and Immunization ANM sister. Also, it can be the impact of the National Health Mission Campaigns over Television, Radio, and Newspaper, etc.

According to the World Health Assembly Policy Brief on Anaemia, **Anaemia** is a condition that is marked by low levels of hemoglobin in the blood. Iron deficiency is estimated to be responsible for about half of all anemia globally, but anemia can also be caused by malaria, hookworm and other helminths, other nutritional deficiencies, chronic infections, and genetic conditions. The concern for the Anaemia is because it can result in maternal mortality, weakness, diminished physical and mental capacity, increased morbidity from infectious diseases, perinatal mortality,

premature delivery, low birth weight, and (in children) impaired cognitive performance, motor development, and scholastic achievement. Anemia is a major health problem in Maharashtra, especially among women and children. The study confirms that only 32% of the targeted population aware of the anemia, which means the more focus needs to be given to these components. Packets of nutritious food have been given to the mothers under 1000 days of care but the consumption of it seems to be questionable. Only 80% of women are consuming distributed supplementary food. Out of 80%, many of the respondents were influenced by the respective ASHA or AWW during the interview. Yet during the FGD, when similar questions asked, the truth came and women replied that most of the part of the distributed food go waste. Hence efforts taken don't give 100 % results.

Out of all targeted population only 63% aware of the PM Matru Vandhana Yojana and 36% aware of its installations. Although almost all getting benefited from PM Janani Suraksha Yojana only 45% targeted population knew about it.

The Gaps observed during the study:

1. **Government systems** unable to reach the desired population through the existing system yet there are opportunities to improve further, some things are happening on the paper only.
2. **Lack of initiatives and motivation** in field workers like ASHA and AWW for creating health and hygiene awareness among adolescent girls. Even though they are assigned to aware adolescents on the health and hygiene aspect, it is not happening thoroughly.
3. Health and hygiene Knowledge is not accessible in **non-stream villages (particularly remote villages) especially in the school, the health education sessions are not happening**; although it's mandatory in schools. If such health and hygiene awareness start from schools; gradually it helps in improving maternal health and reducing mortalities for both mother and child.



Image 3: Captured in Vairag (Tal. Barshi) village while interacting with the mothers under 1000 days care along with ASHA

IV. CONCLUSION

The health of the mother and child under 1000 days of care plays a crucial role in reducing mortalities but to some extent, it is neglected in the rural areas. The lack of awareness is one of the major causes of it. The lower the awareness, the higher deprivation. Women are anemic and suffering from malnutrition. The level of drudgery is high but the level of nutrition intake is low. There is huge scope for the health intervention in Rural Solapur as health services haven't reached many villages. The incorporation of the idea of the kitchen garden is very efficient to maintain the home-based nutrition level. According to Tripathy (2020), a kitchen garden of 4x5 m² can feed a family of 4 members. Though the ASHA workers and Anganwadi Workers take efforts to deliver the promised services to villagers to some extent villagers are not responding to it. The staple food supplement given to the ANC or Pregnant women is not resulting in a greater impact as a percent of women who consume those is very less despite demo and training to the women. With active community participation, the gaps in health care systems can be reduced and improvements can be seen soon.

Civil Society Organisations or NGO's have a significant amount of scope for working on health themes in Rural Solapur.

The organizations like (Development of Human Action) DHAN's, having an institutional structure where field associates have frequent interactions with the Community members mostly once a month for SHG group meetings. Hence involving this cadre of human resources is essential for the effective communication of information for improving the health status of women. Training of all the associates on health awareness, the knowledge about health and hygiene can be repeatedly shared with every group member for a better

impact. Health knowledge should be channelized through all the associates and not only health associates. Hence frequent training programs for the associates should be scheduled with the SUHAM Team. Every month new information and knowledge addition points should be there in meetings along with the revision of the old one. The ASK (Attitude, Skill, and Knowledge) of associates should be upgraded through training. During the study also few associates were involved in interviewing the women.

For improving maternal health the efforts can be taken from the school level, by organizing adolescent girls in groups for frequent interactions with health workers or health associates of DHAN foundation, especially in rural areas. Awareness campaign on Anaemia, Health, Hygiene, and Nutrition in the schools once a month in each school from non-mainstream villages especially for the Adolescent girls will improve attentiveness towards the future harms and precautions to be taken in present. Every month, one hour should be planned for this activity well in advance by health associate or by involving any local doctor for the live session in the school. The informative brochures can be printed and distributed among the girl students for better understanding and further referencing. Different activities can be planned every month like lectures, quizzes, audio-visual aid, etc. For effective implementation and improved participation of adolescents, collaboration with the Schools and involvement of teachers is essential.

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