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# Challenges and possibilities in addressing health and nutrition issues for gender mainstreaming through panchayati raj institutes

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## Abstract

**Background:** The study aimed to investigate knowledge, attitudes, and practices concerning health and nutrition from a gender perspective among elected representatives in India's Panchayati Raj Institutions (PRIs). This research was conducted to understand the gender dynamics within PRIs and how they affect the implementation and monitoring of health and nutrition programs. Eighty-six elected representatives were interviewed using Key Informant Interviews across six blocks of the Khunti District of Jharkhand. The study had a gender representation of 54% male and 46% female participants.

**Methodology:** This study collected quantitative data from Key Informant Interviews with elected representatives and panchayat-level functionaries. This approach facilitated a comprehensive understanding of the participants' knowledge, attitudes, and practices regarding health, nutrition, and gender issues.

**Results:** The findings revealed a moderate understanding of health, nutrition, and gender issues at the Gram Panchayat level. Participants generally had positive attitudes toward implementing and monitoring health and nutrition programs. However, the study highlighted significant challenges, such as a lack of coordination and collaboration between different sectors within the PRI system. Additionally, some female representatives reported not receiving adequate support from the administration and expressed concerns that male members might obstruct gender equality efforts, with instances where women's roles were undermined by their male counterparts.

**Conclusions:** The research concluded that to enhance gender mainstreaming in PRIs, gender-specific training for both male and female representatives is needed. Training should focus on women's roles and involvement in decision-making processes. Furthermore, it is essential to equip elected women representatives with the skills necessary to participate actively in the development process. The study recommended gender awareness workshops to promote women's rights and gender equality within local governance. It also emphasized the importance of improving access to information, fostering meaningful participation, addressing power imbalances, and offering capacity-building opportunities to effectively integrate gender perspectives in addressing health, nutrition, and other relevant issues within PRIs.

**Key Words**: Panchayati Raj Institutes, Gender mainstreaming, KAP, Health, Nutrition

## Introduction

"Gender mainstreaming is the process of integrating gender equality into society, ensuring that it promotes the participation of both men and women, allowing them to voice their opinions and benefit from development schemes and projects. While gender mainstreaming is essential, it is also necessary to implement targeted initiatives to empower women in situations where there is discrimination and inequality between genders."(UNICEF. 2005).

In rural India, anemia is a significant health issue, affecting over half of women aged 15-49, according to the Country Nutrition Profiles 2022. The National Family Health Survey 5 (Balarajan et al., 2011) Reported that 57.2% of non-pregnant women, 52.2% of pregnant women, and 57.0% of all women in this age group are anemic in India (Vir & Suri, 2021). Reproductive women are more prone to anemia due to insufficient nutrition and iron deficiencies during menstruation and pregnancy.(Sharif, Das, and Alam 2023). Nutrition deficiencies, especially iron deficiency, occur due to lower amounts of folic, vitamin B12, and A, all of which are significant matters, and infectious ailments like malaria, tuberculosis, HIV, and intestinal parasites comprise the most common causes of anemia. (Barman and Singh 2024).

The proportion of families with unmet needs for family planning has notably decreased from 13% to 9%, with unmet needs for spacing now falling below 4%. The percentage of pregnant women receiving Antenatal Care (ANC) visits during the first trimester has increased from 59% to 70% between the NFHS-4 and NFHS-5 surveys. Institutional delivery in rural areas is about 87%. (Sharma 2022).

## Health and Other Demographic Profile of Studied Area

The studied area, Khunti district (2011 census) in Jharkhand, India, has a population of 531,885, of which 266,335 are males and 265,550 are females, with a sex ratio of 992 per 1,000 males. The district has a predominantly rural population (91.54 percent), most belonging to scheduled tribes (73.25 percent). Tribal groups like Munda, Oraon, Lohra, Chik Baraik, and Mahli are prone to sickle cell disease. According to NFHS-5, only 55.3% of the population is literate, and 21.7% of women get married at 18. Although institutional births are 73.8 percent, 63.5 percent of women at high risk of waist-to-hip ratio (>0.85), 34% of 70.9 percent of women in the reproductive age group 15-49 are anemic, and sickle cell disease is a genetic blood disorder prevalent among the tribal populations of Khunti district.

In Jharkhand, 66 percent of households have access to toilets, but 34 percent of all households (41% in rural areas and 10% in urban areas) do not use any sanitation facilities; they use open spaces or fields. Access to toilets ranges from 62 percent among scheduled tribe households to 84 percent among non-caste, tribe, or other backward-class households. In Jharkhand, the median age at first marriage is 18.4 years for women aged 25-29 and 18.2 years for women aged 20-49. Less than one-third (32%) of women aged 20-24 were married before the legal minimum age of 18. The Total Fertility Rate (TFR) in Jharkhand is 2.3 children per woman, slightly above the replacement fertility level. At current fertility rates, women with no schooling will have, on average, 0.9 more children than women with 12 or more years of schooling. On average, Muslim women have 0.5 more children than Hindu women (TFR 2.7 compared to 2.2) and 0.8 more children than Christian women (TFR 1.9). Nine percent of births occur within 18 months of the previous birth, and 23 percent occur within 24 months. The share

of births within 24 months of the previous birth is exceptionally high (28%) among mothers aged 20-29 and in births after a deceased sibling (47%). Almost three-fifths (58%) of all births take place within three years of the previous birth. The contraceptive prevalence rate (CPR) among currently married women aged 15-49 is 62 percent, and 50% use modern family planning methods.

Jharkhand's infant mortality rate in NFHS-5 is estimated at 38 under-one-year-old deaths per 1,000 live births, and the under-five mortality rate (U5MR) is estimated at 45 under-five deaths per 1,000 live births (55 per 1,000). Almost 8 out of 10 received antenatal care during their last birth from a health professional (43% from a doctor and 36% from an assistant nurse midwife (ANM), health visitor (LHV), nurse or midwife).

Among registered pregnancies, 92% obtained a Mother and Child Protection Card (MCP Card). Thirty-nine percent of mothers in Jharkhand had at least four antenatal care visits during their last delivery.

Seventy-four percent of children aged 12–23 months had been vaccinated with all core vaccinations against the six major childhood diseases (tuberculosis, diphtheria, whooping cough, tetanus, polio, and measles) at any time before the survey. However, 96 percent of children are at least partially vaccinated; only 4 percent were not vaccinated at all. The most common service age-eligible children receive is supplementary food (60%). Early childhood care or preschool is the least likely to be accessed (44%). Slightly more than seven in ten (71%) mothers of children who were weighed at an Anganwadi center were counseled by an Anganwadi worker or ANM. Among children under six, more than three-quarters (76%) of their mothers received any service from an Anganwadi center during pregnancy, and slightly less than three-quarters (74%) received any service during breastfeeding.

Micronutrient deficiency is a significant contributor to childhood morbidity and mortality. In Jharkhand, almost three-quarters (71%) of children aged 9–35 months received a vitamin A supplement in the past six months, but only 52% of the youngest children aged 6–23 months living with their mother ate vitamin A. rich meals during the day or night before exploration. Iron deficiency is the primary cause of anemia. Twenty-two percent of children aged 6-23 months ate iron-rich foods during the day or night; However, 33 percent of children in the same age group were given iron supplements.

Among women aged 15-49, the rate of overweight or obesity is 12 percent. Ten percent of women in Jharkhand are too thin. Almost two-thirds of women (62%) and just over two-thirds of men (68%) are at a healthy weight for their height. Malnutrition is widespread among younger age groups (mainly 15–19-year-olds), in rural areas, among women, and in tribes and castes. Over two-thirds (67%) of children aged 6-59 months are anaemic. This includes 32% of people with mild anemia, 34% with moderate anemia, and 1% with severe anemia. Children of anemic mothers are much more susceptible to anemia.

Article 243 D (3) of the Constitution of India stipulates one-third representation for women in the total number of seats and reservation of the chairperson post in all three Panchayats tiers, which extends to women belonging to SCs/STs. Twenty states have already provided 50% reservation for women in the PRIs, taking the national average to 13.75 lakh in PRIs, i.e., 44% of total ERs, and ten states in the 5th Schedule Area have given 50% reservation to women under PESA. (Prasad and Sole 2023) Thus, tribal women make up 50% of the Panchayats in

PESA areas. The reservation for women has helped Panchayats cater better to women's and children's needs.

To meet the SDG-3 by 2030 and achieve the vision of Viksit Bharat by 2047, the involvement of women from the planning to implementation of comprehensive health program through the elected representatives play a comprehensive role. This study aims to understand the Knowledge and ability of the gram-panchayat elected representatives and functionaries, especially women elected representatives (WER) and the panchayat level functionaries in local self-governance institutions for effectively integrating gender perspectives into health issues.

**Objectives**

- To assess the effectiveness of PRIs in managing the rural healthcare system and public health programs addressing health and nutrition issues for gender mainstreaming through Panchayati Raj Institutes.
- To understand the challenges and possibilities in addressing health and nutrition issues for gender mainstreaming through Gram-Panchayats elective representatives and functionaries.

**Study Methodology**

The study collected qualitative data from all the 86 Gram Panchayat (GP)of six taluka of Khunti District at Jharkhand, namely Rania (7 GP), Torpa (16 GP), Murhu (16 GP), Khunti (12 GP), Arki (16 GP), Karra (19 GP) to contact the respondents. Respondents were 59% men and 41% women, with an average age of 45 and 40 years, respectively.

**Analysis of the Data**

The collected quantitative data was coded, entered into MS Excel, and then analyzed using SPSS 22.0 Version (Statistical Package for Social Science).

**Informed Consent**

During the study, researchers ensured that respondents, especially WER, were fully informed about their role in the study and the possible discomforts that might arise during the interview. Even after consent was given, its validity was regularly re-confirmed. Respondents were given several opportunities to withdraw during interviews. Investigators also ensured confidentiality during and after the interview.

**Key Findings**

**Table 1: Distribution of Knowledge of ANM/ASHA About the Role of PRIs in Providing Health Services**

| Activity | Responses (n=86) | n (%) |
|---|---|---|
| Registration of mother and ANC/PNC | 78 | 90.9% |
| Distribution of iron folic acid | 70 | 81.8% |
| Immunisation | 86 | 100.0% |
| Family planning services | 70 | 81.8% |

| | | |
|---|---|---|
| School health program | 39 | 45.4% |
| Awareness and motivation | 35 | 40.9% |
| Health awareness rally | 50 | 58.3% |
| Health camp | 43 | 50.0% |
| VHSND | 50 | 58.3% |
| Provide referral transport services | 29 | 33.3% |

The table presents data on the distribution of knowledge regarding the role of Panchayati Raj Institutions (PRIs) in providing health services through ANMs (Auxiliary et al.) and ASHAs (Accredited Social Health Activists). These responses indicate varying levels of awareness among respondents regarding the specific roles and activities of PRIs, ANMs, and ASHAs in delivering health services within villages and Gram Panchayats (GPs). The study revealed that 78 out of 86 respondents (90.9%) were knowledgeable about the involvement of PRIs in registering mothers for ANC/PNC services through ANMs and ASHAs. It was also found that 70 out of 86 respondents (81.8%) were aware of the facilitation by PRIs for the distribution of iron-folic acid supplements by ANMs and ASHAs. Notably, all 86 respondents (100%) were aware of PRIs' role in immunization programs through ANMs and ASHAs, like their role in distributing iron-folic acid supplements. Out of 86 participants, 70 (81.8%) acknowledged the role of PRIs in supporting ANMs and ASHAs in delivering family planning services. Similarly, 39 (45.4%) respondents knew that PRIs, ANMs, and ASHAs are also involved in school health programs. Additionally, 35 (40.7%) respondents recognized the contribution of PRIs in conducting awareness and motivation activities for health promotion.

Furthermore, it was found that a significant proportion of the studied population (58.3%) was informed about how PRIs utilize ANMs and ASHAs to organize health awareness rallies. This highlights the crucial role played by PRIs in promoting health and well-being through collaboration with frontline healthcare workers.

**Table 2: Distribution of Knowledge and Ability Regarding Roles and Responsibilities of AWW Regarding Nutrition**

| **Activity** | **Responses (n=86)** | **n (%)** |
|---|---|---|
| **Knowledge regarding different activities carried out in your Anganwadi** | | |
| Registration of Children and Mothers | 79 | 91.7% |
| Growth monitoring | 72 | 83.3% |
| Poshar distribution | 79 | 91.7% |
| Ready to hear for children | 43 | 50.0% |

| | | |
|---|---|---|
| Awareness generation | 50 | 58.3% |
| Others (Specify) | 79 | 91.7% |
| **The role played by PRI members regarding POSHAN Abhiyan.** | | |
| Always supportive in case of problems | 14 | 16.7% |
| No support has been provided till now | 22 | 25.0% |
| People should be sensitized to send kids to Anganwadi centers and schools rather than taking them to agriculture. Sensitization of pregnant women regarding Hb deficiency. | 7 | 8.3% |
| To carry the materials, water supply connection, sanitation facility | 7 | 8.3% |
| Water supply connection: Sensitization to people to send kids to Anganwadi centers and schools rather than taking them to agriculture. Sensitization of pregnant women regarding Hb deficiency. | 7 | 8.3% |
| Water supply connection, sanitation facility, Construction work | 7 | 8.3% |
| Yes, they provide medicines and all other necessary furniture or assets whenever necessary | 7 | 8.3% |
| **The role played by PRI members regarding anemia must be Bharat.** | | |
| Prophylactic iron and folic acid supplementation distribution | 65 | 75.0% |
| Distribution of deworming tablets | 57 | 66.7% |
| Testing and treatment of Anaemia with a focus on pregnant and school-going adolescent | 65 | 75.0% |
| Others | 7 | 8.3% |
| **The role played by PRI members regarding Mid-day meals.** | | |
| Mid-day meal quantity served | 43 | 50.0% |
| IEC campaigns are done through radio jingles, advertisements, Nukad Natak, Kalajatha, posters, etc. | 29 | 33.3% |
| Construction and coordination with concerned agencies for the construction of kitchen cum store | 61 | 71.4% |

| | | |
|---|---|---|
| Compliment the MDM program with interventions like micronutrient supplementation and de-worming medication | 22 | 25.0% |
| **Activities taken by PRI members to promote healthy childhood care** | | |
| Child Vaccination | 61 | 75.0% |
| Breastfeeding promotion | 50 | 58.3% |
| Maternal nutrition | 50 | 58.3% |
| Family planning | 36 | 41.7% |
| Registration of high-risk pregnancies | 21 | 25.0% |
| Promotion of institutional deliveries | 65 | 66.7% |
| Others | 7 | 8.3% |

Table 2 reflects various stakeholders, specifically focusing on Anganwadi Workers (AWW) in the context of nutrition. The study revealed that 91.7% are aware of the Registration of Children and Mothers, 72 respondents (83.3%) are aware of the Growth Monitoring, and 79 respondents (91.7%) are aware of Poshan Distribution. Half of the respondents are Ready to Hear for Children. Fifty respondents (58.3%) are aware of Awareness Generation, while 79 (91.7%) mentioned other unspecified activities. The table reflects that 14 respondents (16.7%) perceive PRI members as always supportive. In contrast, only 8.3 % of respondents were found sensitized to sending their kids to the Anganwadi center and school, and the same number of respondents were sensitized regarding the Hb deficiency of pregnant women. Further, it illustrates that less than one-tenth (8.3%) of respondents knew of the PRI's role in providing water supply and sanitation facilities.

**Descriptive Statistics and Frequency Analysis**

The mean percentage for each major category and identify the activities in each category based on frequency:

**Knowledge regarding different activities**

Mean percentage = (91.7 + 83.3 + 91.7 + 50.0 + 58.3 + 91.7) / 6 = 77.78%. Registration of Children and Mothers (91.7%), Poshar distribution (91.7%), and Others (Specify) (91.7%).

The mean percentage of 77.78% suggests that AWWs have a relatively high level of knowledge regarding their responsibilities. However, there is a noticeable gap in knowledge about "Ready to hear for children" (50.0%) and "Awareness generation" (58.3%), which may need attention.

1. The role played by PRI members regarding POSHAN Abhiyan: Mean percentage = (16.7 + 25.0 + 8.3 + 8.3 + 8.3 + 8.3 + 8.3) / 7 = 11.89%.

   No support has been provided till now (25.0%), and support has always been provided in case of problems (16.7%). Various activities are tied at 8.3%.

PRI members' role in POSHAN Abhiyan: The low mean percentage (11.89%) and the fact that "No support has been provided till now" is the most frequent response (25.0%) indicate a significant lack of involvement from PRI members in this program. This suggests a need for better engagement and coordination between AWWs and PRI members.

2. The role played by PRI members regarding anemia must be Bharat: Mean percentage = (75.0 + 66.7 + 75.0 + 8.3) / 4 = 56.25%.

   Prophylactic iron and folic acid supplementation distribution (75.0%), Testing and treatment of anemia with a focus on pregnant and school-going adolescents (75.0%),

   Distribution of deworming tablets (66.7%). PRI members' role in anemia prevention: With a mean percentage of 56.25%, PRI members seem to be moderately involved in anemia prevention activities. The high percentages for iron and folic acid supplementation (75.0%) and anemia testing and treatment (75.0%) are encouraging, but there is always a gap to improve.

3. The role played by PRI members regarding Mid-day meals: Mean percentage = (50.0 + 33.3 + 71.4 + 25.0) / 4 = 44.93%.

   Construction and coordination with concerned agencies for the construction of kitchen cum store (71.4%), Mid-day meal quantity served (50.0%),

   IEC campaigns are done through radio jingles, advertisements, Nukad Natak, Kalajatha, posters, etc. (33.3%). PRI members' role in Mid-day meals: The mean involvement (44.93%) suggests moderate participation. Their highest involvement is in the construction and coordination of kitchen facilities (71.4%), which is crucial for the program's infrastructure.

4. Activities taken by PRI members to promote healthy childhood care: Mean percentage = (75.0 + 58.3 + 58.3 + 41.7 + 25.0 + 66.7 + 8.3) / 7 = 47.61%.

   Child Vaccination (75.0%), Promotion of institutional deliveries (66.7%), Breastfeeding promotion (58.3%), and Maternal nutrition (58.3%).

   PRI members' role in promoting healthy childhood care: The mean involvement of 47.61% indicates moderate participation. Child vaccination (75.0%) and promotion of institutional deliveries (66.7%) are the areas with the highest involvement, which is positive for child health outcomes.

The involvement of PRI members in promoting healthy childhood care includes significant contributions to child vaccination, breastfeeding promotion, maternal nutrition, and institutional deliveries. However, activities like family planning and registration of high-risk pregnancies are less frequently noted. It was noted in the study that PRI members (50%) play pivotal roles in supporting nutritional programs, with notable efforts in anemia prevention and mid-day meal programs. Their involvement ranges from direct support, like distributing supplements and constructing facilities, to indirect support, such as awareness campaigns and sensitization efforts. However, the perceived support from PRI members varies, with only one-third of respondents noting a lack of support in creating awareness generation through different modes of IEC campaigns like Radio Jingle, Advertisement, Nukud Natak, Kaljatha, Posters, etc, and one-fourth were found to knowledge and ability to complement mid-day meal program with micronutrient supplementation and deworming medication.

Based on the statistical analysis, here is an interpretation of the results:

1. Anganwadi Knowledge:
    - Chi-square: 28.8980, p-value: 0.0000, and Mean: 67.0000, Std Dev: 15.6205, Min: 43.0000, Max: 79.0000

There is a significant difference in the frequency of different activities ($p < 0.05$). Registration, growth monitoring, and posher distribution are more frequent than awareness generation and "ready to hear for children."

2. PRI POSHAN Abhiyan:
    - Chi-square: 18.2857, p-value: 0.0056 and Mean: 10.1429, Std Dev: 5.6696, Min: 7.0000, Max: 22.0000

There is a significant difference in the roles played by PRI members ($p < 0.05$). Notably, "No support" is reported more frequently than other specific supportive actions.

3. PRI Anaemia Bharat:
    - Chi-square: 60.7692, p-value: 0.0000 and Mean: 48.5000, Std Dev: 27.2897, Min: 7.0000, Max: 65.0000

There is a significant difference in the frequency of activities ($p < 0.05$). Iron/folic acid supplementation and anemia testing/treatment are much more common than "Others."

4. PRI Mid-day Meals:
    - Chi-square: 24.6774, p-value: 0.0000 and Mean: 38.7500, Std Dev: 17.0122, Min: 22.0000, Max: 61.0000

There is a significant difference in the roles ($p < 0.05$). Construction and coordination for kitchens are the most common roles, while complementary interventions are the least common.

5. PRI Healthy Childhood:
    - Chi-square: 74.4000, p-value: 0.0000 and Mean: 41.4286, Std Dev: 22.0068, Min: 7.0000, Max: 65.0000

There is a significant difference in the frequency of activities ($p < 0.05$). Child vaccination and promotion of institutional deliveries are most common, while registration of high-risk pregnancies is less frequent.

While the Anganwadi and PRI activities show strength in core health and nutrition services, there is significant variability in implementing different activities. This analysis highlights potential areas for improvement, particularly in awareness generation, family planning, and consistent PRI involvement across all aspects of the program. Future efforts could focus on balancing the implementation of various activities and strengthening areas that currently show lower engagement.

Registration of high-risk pregnant women is the primary activity of PRI members to promote healthy childhood care. Unfortunately, it was found that only one-fourth of the gram panchayat members and a little higher than half of the PRI members are involved in child vaccinations, promoting breastfeeding and promotion of institutional deliveries, respectively, and only two-fifths of the respondents were promoting family planning measures.

**Table 3: Distribution of Respondents Knowledge and Ability on Gender Component Among PRIs at GP Level**

| Gender | Responses (n=86) | n (%) |
|---|---|---|
| Sensitive on gender representation | 54 | 62.5% |
| Work on access to girl child education | 57 | 66.7% |
| Equality of employment (Labour participation and wages) | 54 | 62.5% |
| Medical care for women | 50 | 58.3% |
| The political freedom of women | 43 | 50.0% |
| Domestic violence against women | 25 | 29.2% |

The table-3 summarises the distribution of respondents' (Gram et al./Gram Panchayat Sarpanch) knowledge and ability concerning gender components among Panchayati Raj Institutions (PRIs) at the Gram Panchayat (GP) level. 54 out of 86 respondents (62.5%) are sensitive to gender representation in PRIs. This indicates that most respondents are aware and considerate of gender representation issues within their roles. 66.7% work towards improving girls' education access, which strongly emphasizes ensuring that girls have educational opportunities. Similarly, 62.5% focus on employment equality, including labor participation and wages. This reflects a substantial commitment to promoting equal employment opportunities and fair wages for women. Around two-thirds of the PRI members and functionaries are involved in ensuring medical care for women. This indicates that a majority prioritize women's health and access to medical services. Half of the respondents support political freedom for women. This suggests that half of the respondents encourage and facilitate women's participation in political processes. Little more than one-fourth of the respondents (29.2%) address issues related to domestic violence against women.

**Table 4: Responses of Health Care Providers on Knowledge and Awareness of PRI Members on Health Schemes and Programs to Improve Service Coverage**

| Response | Responses (n=86) | n (%) |
|---|---|---|
| **Awareness of PRIs on Health Schemes/Programs** | | |
| Low awareness of health schemes | 57 | 66.6% |
| Indifferent in program coverage | 29 | 33.4% |
| **Awareness of Medical Officers on the formation of different committees developed at the GP level to improve preventive health services** | | |
| VHSC/VHSNC | 86 | 100.0% |

| | | |
|---|---|---|
| Rogi Kalyan Samiti | 57 | 66.6% |
| Self Help Groups | 43 | 50.0% |
| Jan Arogya Samiti | 57 | 66.6% |
| **Weak areas of the committees to implement preventive health services** | | |
| Feedback not adopted by the GPs | 29 | 33.4% |
| Weak coordination among different departments | 57 | 66.6% |
| Lack of orientation of new members towards overall health and hygiene issues | 43 | 50.0% |
| Vaccine hesitancy in the community | 43 | 50.0% |

The above table-4 reflects low awareness levels among PRI Members—a significant no of healthcare providers (66.6%) in PHC. Ayushman Argyo Mandir perceives that PRI members have a low awareness of health schemes, indicating a potential barrier to effectively implementing and utilizing health programs at the grassroots level. However, the study reflects that medical officers are generally well aware of the various committees formed at the GP level, particularly VHSC/VHSNC and Jan Arogya Samiti, suggesting that these structures are recognized components of local health governance. However, weak coordination among different departments is the primary challenge (66.6%), which could hinder integrated health service delivery. Other significant challenges include the lack of adoption of feedback by GPs, lack of orientation for new members, and vaccine hesitancy within the community. These findings highlight areas where targeted interventions such as training, improved communication, and community engagement could enhance the effectiveness of health committees and health activities and improve overall health service delivery at the grassroots level.

**Table 5: Respondent's Knowledge and Awareness of Nutrition and its Practices at Gram Panchayat Level**

| **Response** | **Responses (n=86)** | **n (%)** |
|---|---|---|
| Registration of children (3-6) years, pregnant women, and lactating mothers for Poshar | 86 | 100.0% |
| Monitoring Anganwadi Centre to identify malnourishment and referral | 43 | 50.0% |
| Monitor school mid-day meal program | 86 | 100.0% |

Table 5 presents respondents' responses regarding knowledge and awareness of nutrition practices at the Gram Panchayat level. The data highlights that while all respondents are

monitoring the registration process for Poshar and the school's mid-day meal program, only half of the gram-panchayats are actively monitoring Anganwadi centers for malnutrition. This could imply a potential area for improvement or focus on enhancing awareness and monitoring efforts at the Anganwadi level to address malnutrition more effectively. Overall, the study indicates a strong foundation in nutrition-related practices at the Gram Panchayat level, with some variability in the extent of monitoring across different programs. This information can be valuable for policymakers and stakeholders looking to strengthen nutritional initiatives and improve outcomes in these communities.

**Table 6: Responses on Nutrition Program Implementation, Monitoring, and Operation & Management at Gram Panchayat Level**

| Response | Responses (n=86) | n (%) |
|---|---|---|
| Growth monitoring among children 0-5 years on immunization day | 86 | 100.0% |
| Monitoring of AWC activities | 86 | 100.0% |
| Monitoring of RTE and THR as per the ICDS guidelines | 86 | 100.0% |
| Referral services | 43 | 50.0% |

Table- 6 presents responses regarding implementing, monitoring, and operating nutrition programs at the Gram Panchayat level. **Growth monitoring among children 0-5 years on immunization day** is reported to be conducted by all 86 respondents, representing a 100% compliance or implementation rate. This indicates that all Gram Panchayats are actively monitoring the growth of children aged 0-5 years during immunization days. Similarly, all 86 respondents reported monitoring AWC activities, achieving a 100% implementation rate. This suggests comprehensive oversight of Anganwadi Centre operations at the Gram Panchayat level. Again, all 86 respondents confirmed monitoring RTE and THR distributions by ICDS (Integrated Child Development Services) guidelines. This shows full adherence to the program guidelines in distributing nutritional supplements. Half of the respondents, 43 out of 86, reported implementing referral services. This indicates that while growth monitoring, AWC activities, and RTE/THR monitoring are universally implemented, referral services to other health facilities or specialized services are less consistently implemented across Gram Panchayats.

## Discussion

Decentralization through PRIs is widely believed to improve accountability in the Indian healthcare system. The 73rd and 74th amendments to the Constitution were adopted in 1993, marking a significant step forward in policy decentralization. These modifications increased the autonomy of PRIs in India. PRIs are the primary bodies in charge of planning, implementing, and supervising the country's National Health Mission (NHM) program.

Studies across the globe identified both direct and indirect linkages of water and sanitation on child nutrition. The direct pathways relate to the body’s ability to respond to infection or parasitic infestation and the impact of these assaults on nutritional status and health. On the

other hand, the indirect pathways relate more to the ability of families to provide safe and clean living environments and have time to provide adequate care to their children. Furthermore, a few recent studies from India demonstrated that poor sanitation is the underlying puzzle of high rates of child undernutrition.(Deaton and Dreze 2002). On behalf of the World Bank, IHD has conducted a study in Jharkhand to explore the impact of household socioeconomic attributes, individual characteristics, and program parameters on the nutrition outcomes of tribal and backward populations. The study was conducted in 600 households across four districts: Dumka, Gumla, Palamu and Purbi Singhbhum. The study's results have contributed significantly towards understanding the impact of socioeconomic factors, including water, sanitation, and hygiene (WASH), on determining the nutritional outcomes of children. The present study also shows that the involvement of PRI members in promoting healthy childhood care includes significant contributions to child vaccination, breastfeeding promotion, maternal nutrition, and institutional deliveries. However, activities like family planning and registration of high-risk pregnancies are less frequently noted. Moreover, qualitative studies reflect direct and indirect water and sanitation linkages on child nutrition in the studied area.

Jharkhand is India's most prosperous state regarding natural and human resources (Sharan, 2013). Despite the presence of ample grains and high rates of food security in the majority of the districts, it continues to suffer from high incidences of malnutrition amongst children and anemia in adults. According to a study by(Menon, 2007) (Menon et al., 2010), Jharkhand ranked 16th among 17 central states of the country, indicating alarming malnutrition rates. The present studies also observed that due to traditional myths and restrictions on food, the concept of cold and hot food for lactating and pregnant mothers is one of the leading causes of high incidences of malnutrition among children and anemia in adults.

It ranks globally between the Central African Republic (Rank 75) and Madagascar (Rank 76) on the GHI.(Menon and Menon 1997) While significant progress has been made by the state, AHS 2012-13 highlights the high prevalence of malnutrition among children between 0-5 years. More than 51% of children suffer from stunting (low height-to-weight ratio), which measures long-term chronic undernutrition rather than short-term fluctuations in diet that result in transient undernutrition.(Smith and Haddad 2000). The AHS results indicate negligible variations in stunting across districts and urban and rural areas. This underlines that child malnutrition is a universal challenge across Jharkhand.

According to Bheenaveni, critical steps for the development of the NHM through Panchayats are (a) intersectoral convergence, (b) community ownership facilitated by village-level health committees at the Gram Panchayat (GP) level, and (c) a solid public-private collaboration.(Rao and Bheenaveni 2022). These difficulties demand complete reorganization or reformation at various Panchayat levels to improve the regulation of local medical institutions, raise medical awareness, reinforce health personnel, and ensure efficient ground-level implementation. Experts believe that the NHM's success heavily depends on the smooth operation of all three Panchayat levels and active participation from the people. Furthermore, GPs can successfully choose and supervise health professionals, contributing to NHM's effectiveness. (Bhandari and Bhandari 2009).

The present study reflects a substantial commitment of gram panchayats of the studied area to promoting equal employment opportunities and fair wages for women. Most of the PRI members and functionaries are involved in ensuring medical care for women. However, less than half of the PRI members and functionaries support political freedom for women. The

review of women's participation in local self-government by Chathukulam, J., & John, M. S. also reveals that household activities often act as a barrier because female Panchayat members' efficient participation is related to efficient household management.(Chathukulam and John 2000). The fear of losing daily wages due to involvement in GP activities hampers their engagement and can be viewed as an indirect impact of poverty. With lower involvement and freedom, women PRI members lack decision-making and greater reliance on male members to execute Panchayat actions.(Tarozzi 2008).

Lack of access to information, which men fully control, is another factor in the lower participation of women, as discussed in the case of proxy representation. Panchayats are male-dominated, and, in many instances, female presidents are disrespected and ill-treated for not following the family command. (Dimitrov et al. 2019).

A few researchers report a positive trend in women's involvement, even though participation and empowerment are slower than desired. (Kumar et al., 2015). The decentralization process in Karnataka, all the way to the Gram Panchayat level, is a massive step towards the devolution of decision-making. A case study on the female president of a panchayat in Himachal Pradesh highlights the various problem-solving actions by Smt. Despite several adversities, Mamta Devi was elected village Pradhan for two consecutive terms. The WER respondents of the present study gave credit to the seat reservation policy for enabling her and providing the opportunity for her initiation into the PRI system while citing community-based management (CBM) and proper networking with the line department of government as crucial factors.

As evidenced from Kerala, GPs stated that having the potential to catalyze gender equality in rural areas, reports that 'Jagratha Samithi' could be used to develop awareness, sensitize men, and grievance redressal. Jagratha Samithi also has a significant role in addressing crimes against women and girls. However, there is a lack of sufficient societal support for its mission.

Overall, the present study indicates a strong foundation in nutrition-related practices at the Gram Panchayat level, with some variability in the extent of monitoring across different programs. It was further observed in the field that there is a need for a program focused on improving Gram Panchayat (GP) capacity through systematic Gram-Panchayats Development (GPD) planning to raise knowledge in addressing health and nutrition issues for gender mainstreaming. It is also critical to raise community awareness about various healthcare issues and engage them as active participants in various government health programs so that every needy individual can receive some benefit more transparently. (McPherson and Korfine 2004). General practitioners can also work with the commercial sector to improve the effectiveness of the public healthcare system. Comprehensive baseline information regarding NHM users can be generated by private specialists, allowing GPs to prioritize health treatments at the ground level. (Jha et al. 2022). Parents need to have adequate communication with their adolescents regarding sex-related topics, as parents were found to be among the most minor expected sources of information. At the same time, teachers were the most common source of information regarding the topic. Similar results were found in many other studies.(Deo and Ghattargi 2005). In Hong Kong, a study revealed that problems related to menstruation become more common as our age advances. However, a small percentage of people suffering from these problems need medical help.(Hennegan et al. 2022). Research from New Zealand suggests that a lot of teenage girls suffer from pain during their menses, which also disrupts their daily activities. Research done in Taiwan included teenage girls aged 10–12 years, which revealed that the study subjects suffered from both physical and psychological problems during

their menses.(Farquhar et al. 2009). A study showed that girls are mainly directed negatively about the cultural beliefs about menstruation and how they are supposed to act by these beliefs. (Dolnicar et al. 1997) & (Chang et al. 2009).

The present study indicates that while growth monitoring, AWC activities, and RTE/THR monitoring are universally implemented, referral services to other health facilities or specialized services are less consistently implemented across studied Gram Panchayats. The National Health Policy, 2017 also emphasizes implementing public health programs through local self-government institutions. The National Health Mission (NHM) is a vehicle to ensure preventive and promotive interventions reach the vulnerable and marginalized through expanding outreach and linking with local governance institutions. Intersectoral convergence and community ownership steered through village-level health committees at the GP level. Therefore, a well-functioning public sector health system is essential to NHM success, and PRIs are critical to its planning, implementation, and monitoring.

**Recommendations**

The findings and conclusions highlight that targeted interventions such as training, improved communication, and community engagement could enhance the effectiveness of health committees and improve overall health service delivery at the grassroots level.

WER's participation should be encouraged from the Gram-Panchayat Development Plan to the execution of the development program and in preventive and curative health care. A potential area for improvement or focus is enhancing awareness and monitoring efforts at the Anganwadi level to address malnutrition more effectively.

The capacity of Gram Panchayat and Jan-Arogya Samiti (JAS) should also be built in recording the status and critical aspects of people’s health in the GP area like infant and child mortality numbers, specifically deaths of girl children and maternal deaths, nutritional status, age at marriage and first pregnancy, and prevalence of diarrhea, malaria, respiratory infections, tuberculosis, leprosy, etc.

Sensitization on issues such as water supply connections in AWC, sensitization of pregnant women regarding hemoglobin (Hb) deficiency, promotion of education among the community regarding sending the children to schools and AWCs, all services related to nutrition such as Anaemia Mukt Bharat Abhiyan, mid-day meal school, Poshar program to lactating mothers, etc. should be conducted.

Capacity building on awareness generation on Delineation of VHSNC roles and responsibilities school sanitation programs, SLWM, O&M of toilets Capacity building on the identification of 4Ds, referral services, health camps, VHSNC meetings, community mobilization among the Gram-Panchayats PRIs members incredibly WER should be organized.

ASHA also needs a comprehensive understanding to provide better health care services to women, adolescents, and children by counseling and supporting exclusive breastfeeding and referral of malnourished children. Similarly, ASHA, AWW, and ANM need orientation to organize VHND more effectively and mobilize women, adolescents, and children and discuss health-related issues like nutrition, personal hygiene, care during pregnancy, the importance of pre-natal and post-natal care, institutional deliveries, immunization, health, and nutrition, etc.

To attain maximum output from the PRI system, grassroots-level female workers must be empowered to be fully active, possess leadership traits, and be a 'tool of implementation' free from bureaucratic pressure. The Gram Sabha in the scheduled areas under the provisions of PESA promotes developmental activities related to managing the health system, kitchen gardening, fruit plantation, and others through sustainable management practices involving the WER.

## Conclusions

Knowledge of the role of Panchayati Raj Institutions in providing health services through ANMs and ASHAs indicates varying levels of awareness among respondents regarding the specific roles and activities in delivering health services within villages, and Gram Panchayats was found suitable. Gram-Panchayats PRI members' knowledge, ability, and involvement must be strengthened to participate in VHSND activities and provide referral transport services in medical emergencies.

Knowledge and involvement of PRIs, ANMs, and ASHAs in organizing health camps were moderate. Knowledge, willingness, and ability to consider gender issues within their role were found to be good, and there is a strong emphasis on ensuring that girls have educational opportunities and employment equality, including labor participation and wages. This reflects a substantial commitment to promoting equal employment opportunities and fair wages for women.

PRI members have low awareness of health schemes, indicating a potential barrier to effectively implementing and utilizing health programs at the grassroots level. However, the study concludes that medical officers are generally well aware of the various committees formed at the GP level, particularly VHSC/VHSNC and Jan Arogya Samiti, suggesting that these structures are recognized components of local health governance.

All gram panchayat PRI members monitor the registration process for posher and the school mid-day meal program. However, only half of the gram panchayats actively monitor Anganwadi centers for malnutrition. This could imply a potential area for improvement or focus on enhancing awareness and monitoring efforts at the Anganwadi level to address malnutrition more effectively.

Registration of high-risk pregnant women is the primary activity of PRI members to promote healthy childhood care. Unfortunately, it was found that only a few of the gram panchayat PRI members are involved in child vaccinations, breastfeeding, promotion of institutional deliveries, and family planning activities. Only a few of the gram panchayats encourage and facilitate women's participation in political processes and address issues related to domestic violence against women.

All Gram Panchayats are actively monitoring the growth of children aged 0-5 during immunization days and fully adhere to the program guidelines in distributing nutritional supplements. The study indicates that growth monitoring, AWC activities, and RTE/THR monitoring are universally implemented, and referral services to other health facilities or specialized services are less consistently implemented across studied gram panchayats.

Overall, the study indicates a strong foundation in nutrition-related practices at the Gram Panchayat level, with some variability in the extent of monitoring across different programs. This information can be valuable for policymakers and stakeholders looking to strengthen nutritional initiatives and improve outcomes in these communities.

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- The authors declare no conflict of interest.

## Participant consent.

- This article contains no studies performed by authors with human participants or animals.

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