Hunger Makes a Thief of Any Man

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Indicorps '07

Table of Contents

Indicorps '07

Abstract

Despite considerable gains in health status since it gained independence, India remains plagued by many of the same conditions that have afflicted its population since long before 1947. Throughout the country malnutrition remains a major health threat, especially to child survival. In an attempt to improve the health status of children and their mothers, the Indian government instituted the Integrated Child Development Scheme (ICDS), currently being implemented in all Indian states. I conducted a research study around the nutritional component of the ICDS scheme. I aimed to investigate issues surrounding the use of government malnutrition treatment and prevention services by rural tribal women. I studied women's knowledge of causes, effects, treatment and prevention of malnutrition, and observed their views of available government services. I found that their beliefs and actions concerning malnutrition were governed primarily by two phenomena: a) community awareness of the disease and b) barriers to preventive practices. This report endeavors to explain these matters in greater detail.

1.0 Introduction

Malnutrition[2] persists as a major challenge to health and development in developing countries. Its primary targets and greatest sufferers are women and children under the age of five. Worldwide, more than fifty percent of deaths among children under five are linked to malnutrition.[3] The situation is worst in South Asia, where almost 50 percent of children are malnourished.[4]

Malnutrition is particularly problematic in India, contributing to almost 25 percent of nutritional deficiencies worldwide. Chronic malnutrition and anemia are common among Indian women, while moderate or severe malnutrition affect half of all children under five.[5] Globally, India has the highest prevalence of iron-deficiency anemia, a condition that poses greatest threat to the health of young women and their children.[6]

The situation is of grave concern because of the disease's long-lasting negative effects on one's health. Malnourished women are more likely to give birth to children of low birth weight, who are subsequently more likely to suffer from childhood malnutrition. An infant's birth weight is the best predictor of childhood malnutrition.[7] Malnourished children are also more susceptible to disease and ill health. Their physical and cognitive development are also affected, as indicated in their school dropout rates and poor classroom performance.[8] Among adults, malnutrition results in losses in physical and intellectual productivity, as well as creates higher risk for chronic disease and morbidity.[9]

Malnutrition poses a unique problem due to its intergenerational and cyclical nature. Malnourished babies, especially females, are likely to remain malnourished as they progress through adolescence and adulthood. As adult women, they are more likely to give birth to low birth weight babies, and, in doing so, restart the destructive cycle. Moreover, many women do not space their pregnancies by the recommended three years, thereby depriving their bodies of sufficient time needed to recover from the nutritional losses experienced during pregnancy and breastfeeding.

As evidenced above, Indian women are particularly vulnerable to suffering from ill health. Their low social status is the foremost contributing factor to their poor health status. Compared to Indian males, rates of disease and malnutrition are higher among women, while the likelihood of receiving an education is lower.[10] Scheduled tribes, castes, and other disadvantaged classes are other high-risk groups. They have higher rates of malnutrition, mortality, and fertility compared to the rest of the Indian

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[2] Malnutrition can refer to under-nutrition as well as over-nutrition. In this paper, the term malnutrition will refer exclusively to under-nutrition.
[3] Chaubey S. "Catch Them Young – The Tamil Nadu Integrated Nutrition Project: Taking Nutrition and Health Services to the Villages." Washington DC: World Bank Publications. 1999.
[4] Smith LC & Haddad L. "Explaining Child Malnutrition in Developing Countries: a Cross-Country Analysis." International Food Policy Research Institute. Washington DC. April 1999.
[5] Chaubey S. "Catch Them Young – The Tamil Nadu Integrated Nutrition Project: Taking Nutrition and Health Services to the Villages." Washington DC: World Bank Publications. 1999.
[6] Institute of Health Management. "Prevent Anemia Now: a Booklet of Iron & Vitamin C Recipes." August 2002.
[7] Smith LC & Haddad L. "Explaining Child Malnutrition in Developing Countries: a Cross-Country Analysis." International Food Policy Research Institute. Washington DC. April 1999.
[8] Bouis H & Hunt J. Linking Food and Nutrition Security: Past Lessons and Future Opportunities. *Asian Development Review,* 1999; 17(1,2):168-213.
[9] Smith LC & Haddad L. "Explaining Child Malnutrition in Developing Countries: a Cross-Country Analysis." International Food Policy Research Institute. Washington DC. April 1999.
[10] The World Bank. "Development in Practice: Improving Women's Health in India." Washington DC: World Bank Publications. May 1996.

population.[11] In order to target these vulnerable populations, the Indian government initiated the Integrated Child Development Services (ICDS) scheme in 1975.

1.1 ICDS Scheme

The ICDS scheme primarily targets pregnant and nursing mothers, and children under six years of age. The scheme is carried out through existing community structures and workers, namely a*nganwadi* centers and *anganwadi* workers. *Anganwadi* centers are daycare units for children 0-6 years of age. They are staffed by one government-appointed, trained *anganwadi* worker (AWW) and one assistant. Children belonging to this age group can attend the center daily, allowing them to receive supervision while their parents are able to work outside the home.[12]

The *anganwadi* center also functions as a physical structure where the following services are offered:

- *Immunizations and health check-ups* – Monthly health service sessions are held at the centers and are attended by primary health center (PHC) staff. Services provided are immunizations, check-ups for pregnant women, and treatments for basic illnesses in children (e.g. cold).
- *Growth monitoring* – All village children are weighed monthly and their weights are recorded and monitored over time. Children who are underweight for their age are given separate pre-packaged fortified foods.
- *Supplementary nutrition* – Children receive one meal per day while attending the center. Meals are also provided to pregnant women, lactating mothers (for 6 months following delivery), and adolescent girls (11-18 years). Through the *Navsanjeevan Yojna* program, malnourished children receive separate nutritionally fortified food packets from the *anganwadi* school.
- *Non-formal preschool education*
- *Nutrition and health education* – Pregnant women and lactating mothers receive nutrition counseling at the monthly health service sessions.[13]

Navsanjeevan Yojna and *Matrutva Anudan Yojna* are two specific programs that benefit rural *Aadivasi* (scheduled tribe) women and children. The former allows malnourished children to regularly receive separate nutritionally fortified food packets from the *anganwadi* school. Through the *Matrutva Anudan Yojna,* pregnant women receive 100 rupees for antenatal care (ANC) registrations completed before the fourth month of pregnancy. They receive an additional 100 rupees each for ANC checkups done in the seventh and ninth months of pregnancy. Women are provided with another 100 rupees following delivery if the birth is registered with the local PHC or ANM within two days of delivery. In all, women are provided with 400 rupees, which is meant to cover expenditures on nutritional foods necessary during pregnancy.

The ICDS scheme has been implemented in all Indian states. It covers almost 5 million pregnant women and lactating mothers, and more than 23 million children. Overall, the scheme has been responsible for considerable gains in childhood survival.[14]

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[11] The World Bank. "India - Raising the Sights: Better Health Systems for India's Poor." Washington DC: World Bank Publications. 3 November 2001.
[12] "Child Development – Integrated Child Development Services." Accessed via http://www.children-strategies.org/English%20creports/India%20Final.pdf
[13] Ibid.

Indicorps '07

I conducted a research study to explore the factors surrounding *Aadivasi* women's use of government services intended to reduce malnutrition. I examined women's knowledge and views on causes, effects, prevention and treatment of malnutrition, as well as their views of government programs. I discovered that the main factors governing people's actions regarding malnutrition were community knowledge and barriers they faced when attempting to take preventive steps.

2.0 Methods

2.1 Setting and Study Objectives

I conducted a qualitative study focusing on malnutrition among *Aadivasi* women and children in Ambegaon Taluka of Pune District. As a scheduled caste/tribe, *Aadivasi* people are considered to be at high-risk of suffering from ill health. The target groups for the study were pregnant women, lactating mothers, and women with children under six years of age (*anganwadi* age group). These groups are the major targets of the government's ICDS scheme. I sought to explore women's knowledge, attitudes, and practices surrounding malnutrition, specifically their knowledge of government programs aimed at preventing and treating malnutrition among women and children. Upon examination of these topics, I expect to discuss the following:

- Women's level of knowledge about malnutrition and programs targeting it
- The extent to which women are currently using government services
- Their satisfaction with these services
- Any challenges they face utilizing these services

This study aimed to characterize knowledge, attitudes and practices regarding malnutrition, in the twenty villages designated as targets for Chaitanya's Reproductive and Child Health (RCH) program (Annex I). I worked with Chaitanya's RCH team in Ambegaon Taluka. The team consisted of three females and two males. Of these individuals, three were exclusive Marathi speakers, one was a bilingual Marathi (fluent) and English (proficient) speaker, and the other was a bilingual English (fluent) and Marathi (moderate proficiency) speaker.

2.2 Data Collection & Recruitment

We conducted focus group discussions (FGDs) in 5 of the 20 RCH villages. Participants included pregnant women, lactating mothers, and mothers with young children (under age 10). In order to recruit participants, we contacted female village leaders [e.g. self-help group (SHG) president, auxiliary nurse midwife (ANM)] and informed them about our study and our desired audiences. These women subsequently informed others and ensured participation of women in the village. FGDs were held either in homes of the participants or in a central meeting room located in the village. Four FGDs were held at night and one was held during the day. Participation was higher at night meetings because the women were less likely to be occupied by work within or outside the house.

All FGDs were structured and lasted approximately one hour. Prior to conducting the first FGD, I wrote open-ended and closed-ended questions on the causes and treatments for malnutrition, and the effectiveness of government programs designed to address malnutrition. I found that women were

[14] UNICEF. India – Integrated Child Development Services (ICDS)."

comfortable responding to closed-ended questions but did not respond well to open-ended questions. I revised the questions to include mostly closed-ended questions and probed their responses when I needed more detailed information.
Focus groups were conducted by one fluent Marathi speaker and one bilingual (Marathi- intermediate proficiency, English- fluent) speaker. All sessions were tape-recorded and subsequently transcribed in Marathi and English. Transcription and translation were done by a fluent Marathi/English speaker and a bilingual English, moderate Marathi speaker.

2.3 Consent

Prior to conducting the focus groups, I explained who I was, why I was conducting the study, the purpose of the study, what would be done with the results, and the intended audience of the study report. All women who agreed to participate did so knowing that their views and identities would remain confidential. No personal identifying information was transcribed. All of the interviewees were told that their participation in the study was voluntary, and I gave no financial incentives or rewards for participation.

2.4 Data Analysis

The data analysis followed the coding guidelines presented by Strauss & Corbin.[15] *I performed open coding for each of the focus group transcripts. The transcripts were viewed line by line and any idea, concept or phenomenon that was identified was labeled at the margin of the transcript. For example, sections where women mentioned not being able to afford sufficient food at the weekly bazaar were labeled "weekly bazaar" as well as "financial constraints".*

Next, I performed axial coding. I examined all labels I had noted for similarities, differences, and patterns or relationships to place them into categories. I created a log where I noted the repeat incidences of concepts and grouped the labels into broader, more overarching and structurally sound categories. I then brought all these ideas together and attempted to identify and test relationships between the concepts. For example, I decided that financial status was actually a sub-group of the villagers' geographical remoteness. The final and third step was selective coding, in which I looked at the big picture and identified central categories around the results.

3.0 Findings

People's views regarding malnutrition were largely similar throughout the different villages. I identified two concepts that governed people's ability to take actions concerning malnutrition: a) community knowledge about malnutrition and b) factors influencing preventive behaviors.

3.1 Community Knowledge

[15] Strauss A & Corbin J. "Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory." Thousand Oaks, CA: Sage Publications. 1998.

Indicorps '07

I identified four concepts, around which community awareness of malnutrition revolved. These concepts included: 1) the communities inability to diagnose the disease 2) their conceptions of the causes and effects of the disease, 3) the presence of children acknowledged to be malnourished within the village, and 4) presence of a well-established female leader located within the society.

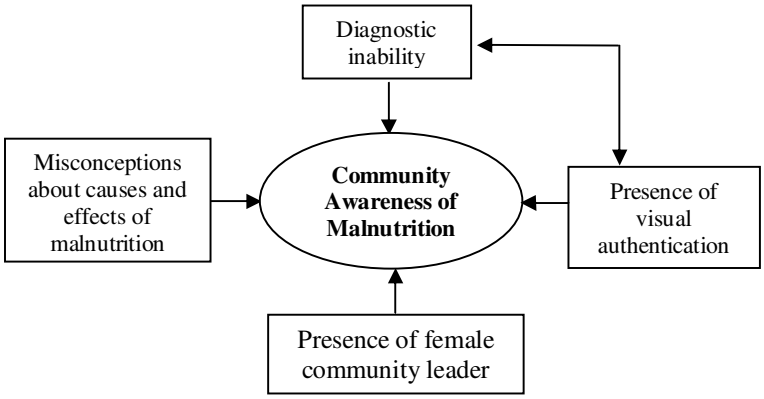

Figure 1: Factors affecting community awareness

3.1.1 Inability to Diagnose Malnutrition

General awareness of malnutrition was strong in all villages visited. Overall, women understood the concept of malnutrition as a result of poor nutritional intake, resulting in physical symptoms. Most villagers were aware of at least one of the disease's symptoms, most notably the state of being underweight. Their perceptions of malnutrition revolved primarily around this, especially when discussing the disease in children. Women relied mainly on visual diagnostic indicators. Even the adolescent girls interviewed only mentioned being underweight and having thin hands and feet as characteristics of a malnourished person. Many women would use the terms "malnourished" and "underweight" interchangeably, as they are viewed as the same phenomenon. The visual indicators commonly mentioned by women are listed in the following table.

Commonly Cited Visual Indicators Of Malnutrition	
➢ Brittle bones	➢ Sickly
➢ Paleness	➢ Stunted growth
➢ Progressive decline in weight	➢ Thin hands and legs
➢ Protruding Stomach	➢ Underweight
➢ Repeated illnesses	➢ Weakness

3.1.2 Visual Authentication

This concept of being able to visually determine one's nutritional status was reiterated to us through each interview and each FGD. Without these indicators, women stated they were unable to diagnose

malnutrition. Women had greater confidence in their ability to diagnose malnutrition visually if they lived in a village in which a malnourished child was or had been treated. In instances where such visual evidence was not present, women had less knowledge of signs and symptoms of the disease. As indicated in the following quote, they were also less likely to know that malnutrition could occur in women and that people in their village could be malnourished:

> "We haven't even seen a malnourished person. It only happens in children. There are not malnourished women in our village. We don't know if we are malnourished."

In this case, the absence of visual indicators (the woman had not seen a malnourished person) led her to believe that she could not accurately evaluate her nutritional status.

3.1.3 Views About the Causes and Implications of Malnutrition

Overall, women were aware of factors leading to malnutrition. They cited inadequate food intake as the foremost cause of malnutrition. In each FGD, women emphasized their lack of specialized knowledge as a major barrier to their understanding of the broader causes and implications of malnutrition in their villages. Although an advanced level of knowledge about the disease was uncommon, some women were aware of the role of hemoglobin in determining nutritional status. Not eating healthy foods, especially during pregnancy, was mentioned frequently as a cause of malnutrition in women and children. Time constraints arising from a burdensome workload, were mentioned as reasons for poor nutritional practices among women. Some women also mentioned the need to take "pills and injections" during pregnancy to prevent malnutrition. These views are indicated in the following quote.

> "She keeps doing work [during pregnancy]. She doesn't eat on time. Her work is continuous"

> "Women who don't eat proper foods during pregnancy will have malnourished children. If they don't take pills or medicines, they will be malnourished."

While many interviewees knew that malnutrition could occur in women, some thought the disease happened only in children. No women mentioned diseases, such as diarrheal diseases, as having an effect on a child's nutritional status. Instead, the presence of any short-term illnesses was discussed as a possible mode of diagnosis. These concepts are illustrated in the following quote.

> "Malnutrition happens more in small children. Children's weight is less. That's one way of identifying malnutrition. And children who always fall sick."

No women cited severe life-threatening illnesses or disability as a possible result of malnutrition. Long-term effects, other than stunted growth among children, were also not mentioned. While knowledge of immediate causes and symptoms (low nutritional intake and low weight, respectively) was high, women also lacked an understanding of the underlying determinants of malnutrition.

3.1.4 Presence of Female Community Leaders

Awareness of malnutrition, its causes and preventive behaviors was higher in villages containing a well-regarded female community leader such as an ANM. ANMs were present in three villages and a prominent female community leader was present in one village. In these villages, women could receive consultations with the ANM at their convenience, rather than attempting to schedule a consultation during working hours or having to travel to another village. Such community leaders invested their time

to promote the welfare of village women, hence benefiting the women's families, especially their children.

ANMs played an active role in providing villagers with services and in monitoring the health status of children in their villages.

> "[The ANM] take weights every fifteen days. She enquires [about the children's health]. She gives us pills and medicines."

> "[The ANM] brings us to Ghodegaon, Dimba (large villages) for health checkups, camps. She calls us to each camp."

In areas with prominent female community leaders, the leader was often present in the focus group conducted in her village. Her level of knowledge about the underlying causes of malnutrition was significantly greater than that encountered in other villages, as demonstrated by this quote.

> "[Malnutrition happens] because of marriage at a young age. If her marriage is done before 18 years of age, she will have children quickly. Because of that, her body's development will not be complete. And after marriage, after having children, she will feel weak. She can become malnourished."

The other women present at the focus group acknowledged this lady's active role in promoting village welfare. This lady also commented on the current method of nutrition-related information dissemination, and suggested an additional strategy.

> "On immunization days, pregnant women and lactating mothers gather. If you give information, it will reach those women. If it reaches them, they will tell their neighborhood. Those with big children don't go. The women will give those women the information, 'I heard this information.' If this is done, development can happen. It can reach women. [You can] take an SHG meeting, and in it tell a little bit of information about health. Those women can receive that much benefit. From then onwards, they can tell their neighbors. 'We heard this information in our SHG. You should do these things.'"

Such associations created by village women allow knowledge to trickle down and reach women that are not directly targeted to receive such information.

I have just described the main factors affecting community perceptions regarding malnutrition. Women's reliance on visual indicators affects their ability to accurately diagnose the disease. Additionally, while general awareness is sound, detailed disease information is uniformly lacking. Women belonging to villages containing formally- or informally-designated female community leaders, profit from both, the leader's higher level of knowledge as well as her commitment to ensure the welfare of other women in the village.

3.2 Barriers to Prevention

Most villagers did not take actions to prevent malnutrition, although most were aware of at least one of the disease's symptoms. The main factor governing their decision not to practice preventive behaviors was a lack of empowerment. Within this, I identified four related constructs that posed barriers to their feeling empowered to take actions to prevent malnutrition. These are 1) lack of information about preventive services, 2) cultural ideologies, 3) absence of services and infrastructure and 4) geographical isolation. These are illustrated and discussed in detail below.

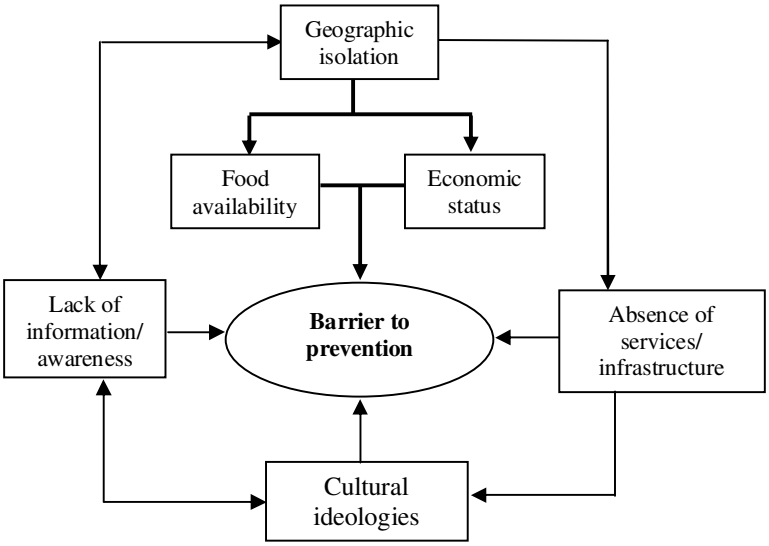

Figure 2: Barriers to preventive practices

3.2.1 Lack of Information and Awareness of Preventive Services

Pills as a cure, not as prevention

Consuming healthy foods was the most commonly cited method of preventing malnutrition among women and children. In only one village, did women mention the use of pills and medications as effective in prevention (see A.3). Even then, these interventions were talked about as being necessary only during pregnancy. No women mentioned their use on a regular basis throughout the course of a woman's life. In the focus group conducted with adolescent girls, none knew about the necessity of taking iron pills.

Unfamiliarity with government services

Women's knowledge of government services targeting malnutrition was low. Surprisingly, awareness of services provided at the health services sessions and in the village a*nganwadi* school was lowest. While most women knew it was the *anganwadi*'s duty to provide food to pregnant women and children under-six years of age, few knew that adolescent girls were supposed to receive similar services. The following two quotes demonstrate the villagers' lack of knowledge about these services:

> "No one even knows that adolescent girls are supposed to get food from the *anganwadi*"

> "*Aadivasi* people don't get different schemes. They don't know about the programs."

The adolescent girls interviewed echoed these same sentiments regarding lack of awareness about such programs.

> "We have not known about a single service regarding malnutrition in our village. None of us has ever received food from the AWW. No girls in the village have gotten food. No one tells us about these programs."

Villagers felt that this gap in knowledge was a result of their not receiving awareness information from organizations or the government. This was partly due to their geographic location, since the villages were in extremely rural areas. Women felt their needs did not receive adequate attention from governmental and non-governmental institutions. Women in one group stated that our team was the first group of people to share knowledge of government services with them.

> "Now that you have come, we have this information. Otherwise, we wouldn't know anything."

When another group was asked about how they would rate their knowledge of malnutrition, one participant voiced her lack of confidence in their abilities.

> "We don't know a lot about malnutrition. No one came here to tell us. We don't know anything."

Awareness of *Navsanjeevan Yojna* and *Matrutva Anudan Yojna* was largely nonexistent. Once the purpose and details of these programs were explained, a few women cited familiarity with them and stated that they had received the benefits of these programs. However, the vast majority claimed they had either never heard of the programs or had received no benefit from them. While some of the women interviewed had given birth or raised children before these programs were instated, even recent mothers did not have markedly greater knowledge of either program. Without this basic knowledge, women and adolescent girls could not demand these services from the *anganwadi* or from health workers at the health service session. Only in the village containing a malnourished child who was currently receiving curative services did women know that they were able to admit children to the PHC for treatment.

3.2.2 Prevalence of Cultural Ideologies

Misunderstandings about the causes and symptoms of malnutrition exerted a strong influence on women's ability to practice preventive behaviors, particularly healthy eating habits. During pregnancy, reluctance to eat certain foods such as fruits (notably jackfruit and papaya), dairy products (milk and butter milk) and meat products (egg, chicken, and mutton) indicated that women were avoiding many potential nutritional sources. Some women cited frustration with cultural practices, such as the one mentioned below, that severely restricted a women's post-delivery diet.

> "After delivery, a woman eats only rice and dal for six months. How will she feel strong?"

Such practices do not allow women's bodies to recover from the nutritional stresses placed on it during and following pregnancy. The quote below illustrates that despite women's knowledge of the harmful nature of that practice, their inability to overcome this custom, translated into their inability to eat healthy foods and repair their nutritional status as well as that of their child.

> "If [a breastfeeding mother's] stomach is empty, the child will be hungry. Children fill their stomachs by breastfeeding from us, and we eat less. That's why we become [weak]."

In this case, knowledge was not what limited women's capability to engage in healthy practices. Instead, the pervasiveness of cultural beliefs regarding eating practices rendered them incapable of consuming a balanced diet.

3.2.3 Absence of Services

Information gathered through the FGDs indicated that each village was lacking at least one of the designated government services provided to prevent malnutrition. While almost all women stated that meals were provided to children under six, provision of meals for adolescent girls was uniformly lacking. In some villages, women disagreed about whether such services were available for pregnant women and lactating mothers. While many women stated that they received services during pregnancy, some did not. Many stated that their *anganwadi* did not provide food to lactating mothers. In some areas, the *anganwadi* school was located in a neighboring village, forcing villagers to travel a distance to access services. In these cases, villagers were less likely to know about the services provided or to access them. Therefore, they could not take advantage of the programs offered because they were not provided within the villages. The absence of these services prevented women from receiving the nutritional supplementation necessary during adolescence, pregnancy and post-delivery.

Even when present, women voiced their dissatisfaction with the quality of services provided. In one village, women stated that the food provided in the *anganwadi* school was insufficient for even the children, and therefore pregnant women and lactating mothers could not be expected to be fed.

> "I take food for my two children. [In the a*nganwadi*], if there is not enough food for the children, then where will we take food from? There isn't enough for the children. Once we went to get food. The pot was empty. Should we bring back the empty pot?"

> "[The a*nganwadi*'s] rice is better than the rice in the house, but it is not enough for the children. Then where will I get it from?"

These types of occurrences discouraged women from both accessing services initially, and from attempting to continue to obtain services from the *anganwadi*.

3.2.4 Geographic Isolation

Throughout India, *Aadivasi* people originate from extremely rural areas. These locations may be difficult to access from urban and semi-urban areas, resulting in the seclusion of these peoples. In many cases, they lack sufficient transportation to connect them to non-rural areas. Therefore, travel to less rural areas is expensive and rare. All the villages in which FGDs were conducted were in rural areas of Ambegaon Taluka located along the Bhimashankar road. While some villages were farther away from the main road than others, the farthest villages were three kilometers from the road.

Although this road provided them with consistent access to bus transportation, villagers consistently voiced frustrations about the degree of geographic isolation they experienced. I identified two major effects of this phenomenon that affected people's ability to engage in preventive behaviors with respect to malnutrition. These were i) effect on food availability and ii) effect on economic status.

Food Availability

The primary occupations of people in the villages included in this study were related to agriculture. Some were landowners while others were landless, yet worked on harvesting seasonal foods. A weekly bazaar in Taleghar, one of the villages in this study, was cited as the main source of fruits and vegetables for the villagers. Although bazaars also take place during different days of the week in other villages, these locations were too far for the villagers to access regularly. Not only did travel to these villages require time, they also required money for transportation by bus or jeep. For these reasons, travel to these locations was not an option for the women.

Women repeatedly expressed their dissatisfaction with the difficulties faced when trying to obtain healthy foods, which they stated would not be a problem in less rural towns or cities. Many declared that vegetables would not grow on their land; therefore, they had little control over what foods they ate. Women took advantage of the weekly bazaar, but could only store foods for short periods of time. Once these supplies were exhausted, they had no option but to wait until the next week's bazaar. These views are demonstrated in the following quote obtained from a woman in one of the villages located three kilometers from the main road.

> "Vegetables do not grow in our fields. The bazaar happened today on Thursday. Today and tomorrow morning, there will be vegetables in each house. After that, it is finished."

Women in another village affirmed this sentiment.

> "After 15 days or after 8 days, we get vegetables. [We get to the] bazaar once every 8 days. We don't get any vegetables [within the village]."

Consequently, although these women were aware of the role that consuming fruits and vegetables plays in preventing malnutrition, their separation from a consistent source of such food rendered them unable to take actions intended to improve their nutritional status.

Economic Status

Even when able to attend the bazaar, villagers faced barriers when attempting to procure food. As the following quote indicates, villagers could not buy sufficient amounts of fruits and vegetables due to financial constraints.

> In one week there is only one bazaar. And to buy vegetables, we need money. Because of poverty, who is going to buy that many vegetables. We don't get all types of foods. Here, we get vegetables, but we don't have any money, so who is going to eat vegetables?"

As further illustrated below, the lack of money was repeatedly mentioned and was related to villagers' caste and their geographical location.

> "In *Aadivasi* area, money is less. Food is expensive so we don't get it."

As *Aadivasi* people, the villagers' socioeconomic status was compromised. Their ability to overcome this and seek out employment opportunities was further complicated by their division from less rural areas with better prospects for employment. Therefore villagers' socioeconomic level remained the same for most or all of their lives, and as a result, so did their nutritional status. One woman directly linked the ability to acquire foods to one's socioeconomic class.

> "Due to our low economic class, we cannot get vegetables."

Economic status was the foremost concern of the women interviewed. They frequently stated that despite their desire to consume healthy foods and their knowledge about the positive health effects of a balanced diet, they were unable to afford these foods.

I have outlined the key issues affecting villagers' decisions to engage in practices to prevent the occurrence of malnutrition. Lack of awareness about what services were available in the village, as well as the actual lack of these services, prevented women from taking advantage of or demanding the implementation of these services. Their practice of negative cultural beliefs also hindered their ability to protect their nutritional status. Additionally, the degree of physical isolation experienced by the communities, and its effects on their financial status and general food availability, hindered their empowerment over their nutritional intake.

4.0 Discussion

This study was aimed to characterize malnutrition-related knowledge, attitudes and practices among rural *Aadivasi* women, specifically women's knowledge and opinions of government programs aimed at curbing disease prevalence. I investigated women's level of awareness and use of these programs, their satisfaction with services provided, and any obstacles hindering them from service utilization. By taking into consideration the factors affecting women's decisions to take advantage of these services, policy makers and implementers can create programs and strategies that are better employed, and are thus more effective at reducing malnutrition in high-risk populations.

Villagers' decisions about what preventive and curative actions they undertook were primarily governed by two factors. These were their community's awareness of issues related to the disease, and barriers they faced when attempting to engage in preventive practices.

Although women were aware of the effect of nutritional intake on health status, most relied on visual indicators to diagnose the disease. As malnutrition can exist without being manifested visually, women were unaware of its possible presence. They would not seek proper curative services when needed, thus allowing the disease to persist. Within the villages, the presence of children who were acknowledged to be malnourished and were receiving curative services, translated into a higher level of knowledge among women about the disease. There is a strong social network among village women, thus facilitating the spread of knowledge. In villages lacking evidence of malnutrition, women were less likely to believe that the disease was a threat to their health. Overall, women lacked a mature understanding of the disease's causes and effects, especially long-term implications. Their inability to describe long-term negative effects associated with the disease could result in lower levels of concern about the seriousness of malnutrition.

The presence of female community leaders appeared to benefit women belonging to their community. This benefit was marked with the presence of an ANM within the village. ANMs played an active role in both making health services accessible to their communities, as well as ensuring that the women took advantage of available services. This reinforces the importance of the strength of female social networks within villages.

Even when women were aware of the necessity of preventive practices, such as consuming a balanced diet and obtaining services provided through the *anganwadi* school, they were confronted with additional challenges while attempting to practice prevention. Pervasiveness of negative cultural eating

practices also affected women's ability to practice healthy eating habits. The strength of their beliefs outweighed that of their knowledge.

Moreover, women did not necessarily know about different modes of prevention, such as taking iron pills during pregnancy to prevent fetal malnourishment. They were also unfamiliar with the variety of services provided through the *anganwadi* institutions and the primary health care centers. Without this knowledge, they were unable to take advantage of the services. Many women cited dissatisfaction with the services being provided. In many instances, services were either non-existent or insufficient to meet demand.

Perhaps the greatest source of unhappiness voiced by the women was their physical isolation from less rural areas. All women mentioned access to only one weekly bazaar, which was their main source of fruits and vegetables. Their remoteness also affected their ability to obtain a non-agricultural source of employment and thus raise their economic status. Thus, even when they could attend the bazaar, they were unable to purchase the variety of foods in the quantities they desired.

In all focus groups, women expressed the desire to receive more information about malnutrition and related government services. It is the responsibility of the government and non-governmental organizations to meet this demand in a responsible and comprehensive manner. The current methods of information dissemination should be expanded to educate women about underlying causes of malnutrition (e.g. diarrheal diseases), its short- and long-term effects (e.g. disability), and appropriate diagnosis and treatment strategies.

Women also wanted more information about what government services are to be provided in each village, and how they can demand the implementation of such services. Organizations should take advantage of established female networks as one possible mode of information dissemination. While the existing *anganwadi* structure is a good site for the distribution of services, women's use of these services can be increased by the placement of an ANM in more villages. ANMs or other village leaders can also be involved in monitoring service provision through the a*nganwadi*.

Most importantly, actions should be taken to reduce the effects of geographical isolation experienced by villagers. Organizations may be able to stimulate interest in alternate sources of livelihood generation, such as women-run businesses, especially since SHGs can mobilize the financial resources necessary for investment in such ventures. Elevating the financial status of villagers will lessen the financial burden the experience when obtaining food. Currently, their decisions regarding such expenditures are heavily influenced by this burden. Easing the burden can allow them to buy foods with less emphasis about their financial loss and greater emphasis on their nutritional gains.

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Appendix I : Target Villages for Chaitanya's Reproductive & Child Health (RCH) Program

VILLAGES

Bolded names indicate where FGDs were conducted.

Bhimashankar	Nigdale
Chickli	Pathan
Dighad	Pimpri
Falode	Pokhri
Kondwal	Rajpur
Kushire Budhrukh	Sakeri
Kushire Kurdh	Savarli
Mahalunge	Taleghar
Matarbachiwadi	Terunghan & Dhagewadi
Megholi	Zambori

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