

Role of Social and Behaviour Change in Promoting Healthy Diets in Odisha

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Abstract

Odisha continues to face significant nutritional challenges, particularly among women and children, despite improvements in healthcare access and poverty reduction. Social and cultural factors, as well as behavioural ones (food taboos, gender roles, lack of awareness of balanced diets) also tend to impact dietary practices in the state, resulting in a lack of dietary diversification and micronutrient deficiency. This review will consider how Social and Behaviour Change (SBC) can be used to support healthy diets in Odisha. An approach that was taken was a narrative review methodology, which relied on the recent literature, national reports and global evidence on nutrition and behaviour change interventions. The review points out that SBC methods including community engagement, interpersonal communication, and participatory methods are essential in enhancing dietary habits especially for mother and child in the first 1,000 days of life. Interventions through the frontline functionaries, community platforms, and local media-based engagement are identified as the most important avenues of providing SBC initiatives. The findings suggest that addressing social norms, enhancing awareness, and promoting locally available diverse foods can significantly improve nutrition outcomes. However, challenges such as cultural resistance, limited capacity, and resource constraints persist. Strengthening SBC frameworks, integrating them into government programs, and fostering community ownership are essential for sustainable impact. Overall, SBC serves as a crucial bridge between nutrition policies and improved household-level dietary practices in Odisha.

Keywords: Social and Behaviour Change (SBC); Healthy Diets; Dietary Diversity; Nutrition Communication; Frontline Workers

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1. Introduction

Malnutrition is one of the major worldwide societal health issues especially in the low- and middle-income nations where malnutrition and lack of micronutrients still pose a threat to the susceptible groups in society (women and young children). Although significant improvement was achieved during the last decades, the stunting, wasting, and anaemia burden continues in its complicated interplay with food systems, socio-economic status, and behavioural determinants. These issues are also aggravated by regional inequalities in India, as some states, such as Odisha, still face low nutrition outcomes despite the improvement in poverty reduction and access to healthcare.

The concept of diet diversity is acknowledged to be one of the most important measurements of nutritional sufficiency and the most important predictor of child growth and development. It has been indicated that undernutrition and poor developmental outcomes in children aged 6-23 months are closely linked to a low dietary diversity (Aboagye et al., 2021). The Indian population is frequently characterised by a high level of cereal-dependency in her/his diet, a low level of consumption of high-protein and high-micronutrient foods, including fruits, vegetables, and foods of animal origin (Agrawal et al., 2019). These tendencies are determined not only by the economic limitations but also by strongly established cultural habits, food taboos, and family decision-making processes, which limit the presence of various food types in the daily diets (Tariqujjaman et al., 2022).

The social and behavioural factors are important in determining the household and community level dietary practices. The selection of food is impacted by culture and gender roles and intergenerational knowledge systems that may not necessarily concur with the recommended nutritional practices (Elsayed et al., 2019). As an example, females and girls in most contexts are disproportionately impacted by the patterns of food allocation in the household, as they are frequently allocated less of nutrient-dense foods. Moreover, a lack of awareness concerning the best infant and young child feeding behaviours also increases the risk of malnutrition especially in the most critical period of life, the first 1,000 days (Meshram et al., 2019). These social and behavioural obstacles emphasise the necessity of strategies beyond the availability of food and evoking the issues behind the dietary habits.

Social and Behaviour Change (SBC) has come out in this regard as a very important strategy in enhancing nutrition outcomes. SBC involves a variety of participatory, communication-based and community-driven strategies that attempt to change knowledge, attitudes and practices associated with health and nutrition (Headey and Palloni, 2020). The latest data show that SBC interventions, especially those that are a part of nutrition-specific and nutrition-sensitive programmes, could have a profound positive effect on child feeding practices, dietary diversity, and nutritional status. Likewise, social and behaviour change communication, which is implemented through

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established governance systems, community platforms, mid and mass media has proven to increase maternal and family knowledge and make a positive impact on feeding behaviours.

The implementation of SBC interventions is further reinforced in case it is performed via the established community systems, as well as frontline functionaries or workers (Barik et al., 2025). The community based health and nutrition functionaries such as ANMs (Auxiliary Nurse Midwife), Anganwadi workers and ASHA (Accredited Social Health Activist) workers and local institutions such as *Anganwadi* (child care) Centres are vital in translating the nutrition knowledge into practice through offering culturally relevant counselling and community engagement (Scott et al., 2018). The self-help groups, schools and village-level health and nutrition events such as VHSN (Village Health, Sanitation,) Day organized twice every week in India are good opportunities to provide SBC interventions on a large scale. These strategies are especially applicable to such states as Odisha, where societal norms, cultural diversity, and geographical inequality demand context-based and community-oriented solutions.

With the continuing nutritional issues and the powerful role played by the behavioural determinants, there is an increasing necessity to do mining of the current evidence for planning the SBC interventions in promoting healthy diets. The purpose of the narrative review is to discuss how social and behavioural change strategies and approaches can be used to enhance dietary practices, and in Odisha, India, in particular. Using information about world and country literature, the review aims at identifying important determinants, interventions, and policy implications to enhance nutrition outcomes by using behaviour change strategies.

2. Nutritional Status and Dietary Practices in Odisha

Gradual progress on nutrition indicators has been observed in Odisha, but it is important to note that undernutrition is a severe problem among women and children (Hsueh et al., 2024). According to national statistics, stunting, wasting, and underweight are affecting quite a significant percentage of children, indicating that the implementation of optimal nutrition outcomes has still not been achieved (Victora et al., 2021). Differences in anthropometric results also

display disparities in the nutritional status between populations (Rodgers and Kim, 2020). The presence of intergenerational malnutrition and prevalent iron and micronutrient deficiencies causing anaemia among adolescent girls and women of reproductive age exacerbates these problems and harms the health of the mother and child (Jain et al., 2022).

The practices of dieting in Odisha just like the wider trends in India are characterised by low agricultural diversity and a high degree of dependence on cereal-based diets (Nie et al., 2019). Poor dietary habits of not consuming nutrient-rich foods (fruits, vegetables, pulses, and foods of animal origin) also result in poor consumption of the important micronutrients (Agrawal et al., 2019). It has been observed that inadequate dietary diversity is very much linked to negative child health outcomes, such as stunting and poor development (George et al., 2022).

Economic factors also affect eating patterns, especially in households with low incomes. The cost-effectiveness of balanced and healthy food is a significant obstacle and prevents access to various food categories and contributes to the maintenance of addiction to staple foods (Hirvonen et al., 2020). Moreover, socio-cultural and geographical diversity in Odisha (in particular, in tribal, rural and urban areas) also cause the variation in nutritional status because of the differences in access to different resources, health, and education (Jain et al., 2021).

The alteration in food consumption has also affected dietary habits in the state (Kim et al., 2019). Conventional diets based on locally sourced foods such as millets, pulses, and green leafy vegetables are losing its palatability sheen with time because of the shift in food preferences and growing dependence on the food systems offered by the market (Bene et al., 2019). Nevertheless, the traditional and wild foods still have a significant influence on boosting food diversity, especially in the rural and tribal population.

In general, the nutritional situation in Odisha is associated with a mixture of nutritional deficiencies, socio-economic limitations, and the changing food system. The solutions to these challenges cannot be limited to just enhancing food access and affordability, but also to increasing dietary and healthy eating practices and choices. Table 1 summarises the key factors in maternal and child health that are affected by nutrition and diet.

Table 1. Key Nutritional and Dietary Factors Affecting Maternal and Child Health

Factor	Description	Impact	Supporting Evidence
Low dietary diversity	Limited food group consumption	Stunting and poor development	(Aboagye et al., 2021)
Vegetarian dietary patterns	Limited animal-source foods	Increased risk of undernutrition	(Headey and Palloni, 2020)
Animal-sourced food intake	Improves child growth	Reduced stunting	(Zaharia et al., 2021)
Dairy consumption	Improves child growth outcomes	Reduced anthropometric failure	(Pandey and Kashima, 2021)

Regional variation	Differences in nutrition across India	Unequal outcomes	(Jain et al., 2022)
Nutrition transition	Changing food systems	Poor dietary patterns	(Nie et al., 2019)

3. Social and Behavioural Determinants of Dietary Practices

3.1 Cultural Beliefs and Food Taboos

Food taboos and cultural beliefs have a great impact on the dietary patterns especially on pregnant women, infants and young children (Zaharia et al., 2021). Some foods like eggs, fish and some of the vegetables are frequently shunned because of the wrong perception about their perceived negative impacts. The limitations decrease the variety of the diet and restrict the consumption of vital nutrients. Mother's knowledge and reinforcement by traditional beliefs have been established to have a great influence on infant and young child feeding behaviour (Assefa et al., 2021). Cultural demands prevail over science-based dietary guidelines in most environments, which further supports the unacceptable feeding habits (Demilew, 2017).

3.2 Gender Norms and Intra-household Food Distribution

Gender is an imperative factor in the distribution of food within households. The women and girls tend to eat last and get less food that is rich in nutrients thus their nutrition is poor (Pandey and Kashima, 2021). These inequalities are an indication of larger-scale socio-cultural practices that values nutrition for male individuals in households. The unequal food distribution between men and women is strongly linked with poor nutrition results (Ameye and Swinnen, 2019). Other disparities are further escalated by socio-economic inequalities especially in low-resource

environments (Rahman et al., 2023). Poor dietary behaviours are caused by limited knowledge of balanced diets and proper feeding habits. Some of the caregivers lack knowledge of the significance of dietary diversity and the best infant and young child feeding practices. This ignorance usually causes a delay in the introduction of complementary foods and insufficient intake of nutrients. Research has revealed that maternal information has a vast impact on child feeding habits and nutritional performance (Randhawa et al., 2024). Also, children who have better dietary habits are linked to a greater level of maternal education.

3.3 Socio-economic and Accessibility Factors

Dietary practices are determined by socio-economic status and food availability. The low-income households usually rely on cheap and high-calorie foods as staples and this restricts them to a wide range of nutrient-based diets (Srivastava and Kumar, 2021). Financial limitations have a direct impact on food preferences and food quality. Intra-household dietary diversity is determined by household income and crop diversity (Singh et al., 2020b). The current research also shows a regional difference in the aspect of agriculture and socio-economic factors on dietary diversity in India (Singh et al., 2023). Moreover, economic disparities have a great impact on the accessibility to nutrition-related interventions and services (Li et al., 2021). Table 2 presents the key social and behavioural factors that drive dietary habits of the Odisha population.

Table 2. Social and Behavioural Determinants Influencing Dietary Practices in Odisha

Determinant	Description	Supporting Evidence
Cultural beliefs & food taboos	Avoidance of nutrient-rich foods during pregnancy and childhood due to myths	(Assefa et al., 2021)
Gender norms	Women eat last; unequal food distribution	(Ameye and Swinnen, 2019)
Knowledge gaps	Poor awareness of balanced diets and feeding practices	(Demilew, 2017)
Socio-economic inequality	Poverty limits access to diverse foods	(Li et al., 2021)
Geographic disparities	Regional differences in dietary diversity across Odisha	(Barik et al., 2025)
Micronutrient inequality	Unequal access to supplementation programs	(Srivastava and Kumar, 2021)

4. Role of Social and Behaviour Change in Influencing Dietary Practices

Social and Behaviour Change (SBC) is crucial in the development of dietary habits because they affect the underlying knowledge, attitudes, and socialisation practices that play a significant role in the selection of food. The SBC approaches aims at facilitating informed decision-making by using participatory communication, counselling and engaging communities (Bassat et al., 2020). There are evidences indicating that behaviour change communication interventions have a profound beneficial effect on infant and young child feeding and dietary diversity (Kennedy et al., 2018). Moreover, SBC-based nutrition programmes have also shown

significant changes in child nutritional status, especially in the initial 1000 days (Mahumud et al., 2022). A strategy involving engagement at a community level, such as mid-media interventions (puppet shows, street theatre, traditional dance, community radios), and group learning interventions through community platforms, have been effective in the improvement of maternal knowledge, as well as the promotion of healthy feeding behaviours. SBC can play a crucial role by connecting the policies of nutrition and enhancement of diet adherence in households by incorporating both personal and societal factors (Frates and Smith, 2022). Figure 1 shows the route by which SBC determines dietary practices and nutrition outcomes.

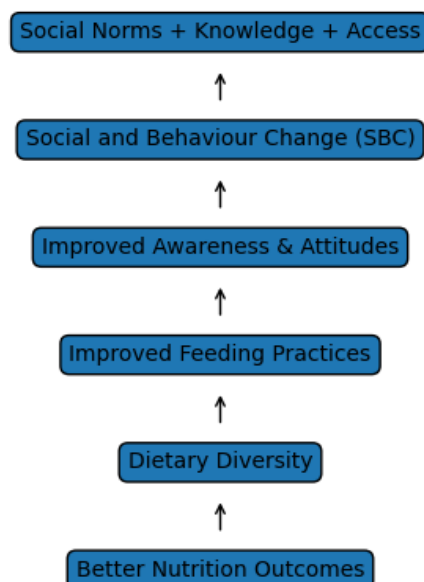


Figure 1. Pathway Linking Social and Behaviour Change to Improved Dietary Outcomes

5. Role of SBC in Improving Maternal and Child Nutrition

Social and Behaviour Change (SBC) interventions are pertinent for enhancing maternal and child nutrition especially in the crucial first 1,000 days of life. This is the phase where maximum physical and cognitive development takes place, and poor nourishment during this stage will have a life long impact on health (Victora et al., 2021). Initiation of breastfeeding in the first one hour of birth, sustaining exclusive breastfeeding for six months, and the introduction of complementary feeding along with breastfeeding after six months are major practices that are encouraged by SBC strategies. Proper complementary feeding should be practiced in the reduction of illness and enhancement of nutritional status of infants (Masare et al., 2017). It has been demonstrated that the right feeding behaviours in infants and young children are closely linked with a high nutritional status (Meshram et al., 2019). Moreover, the maternal nutritional variety has likewise been associated with improved birth and foetal health (Teng et al., 2023). Caregiver knowledge and the role of frontline workers in the provision of nutrition counselling are also reinforced through SBC interventions. SBC makes significant contributions to the achievement of better maternal and child nutrition outcomes by affecting behaviours at both individual and household levels.

6. Promoting Dietary Diversity through SBC

Social and Behaviour Change (SBC) is essential in enhancing dietary diversity by affecting food preferences and intake. SBC interventions promote incorporation of locally available nutritious food like millets, pulses, fruits, and food of animal origin in day-to-day meals. It has been shown that an increase in the diversity of the diet is related to better nutritional outcomes in children (Khamis et al., 2019). Perceptions

and preferences that result in monotonous diets are also taken care of through behaviour change strategies. Also, there is the possibility of promoting the consumption of traditional and wild foods, which will increase the diversity of the diet, especially in tribal and non-tribal rural areas (Cheek et al., 2023). SBC provides more balanced and healthy diets options through awareness and community participation.

7. SBC Interventions and Community-Based Delivery Platforms

7.1 Frontline Workers

Anganwadi Workers, ASHA, and ANMs are frontline functionaries who are at the centre of providing SBC interventions at the community level. They offer counselling services, visit household and counsel pregnant women, lactating mothers, and family members on proper feeding habits, maternal dieting and childcare (da Silva et al., 2020). Their frequent contact with the households would allow them to communicate with them personally and develop trust, which is essential in behaviour change. Enhanced effectiveness of SBC interventions can be attained through the development of their knowledge, inter-personal communication and counselling skills. It has been well-established that community health workers have ensured enhancement of health and nutrition outcomes.

7.2 Community Platforms (SHGs, VHSND)

Self-Help Groups (SHGs) and Village Health, Sanitation and Nutrition Days (VHSND) are community-based initiatives that can be used for an effective SBC intervention. A combination of SBC interventions in the framework of community-based self-help groups has also yielded favourable results in maternal and child nutrition practices (Verma et al., 2024). Through these platforms, learning as a group, peer support and collective action become possible and

as a result the dissemination of nutrition messages takes a participatory approach. The inclusion of nutrition education in SHG activities has presented favourable effects on maternal and child feeding habits. These platforms also provide the chance to discuss health and nutrition with women and communities (Flax et al., 2019).

7.3 Schools and Adolescents

With the help of SBC, schools and adolescent platforms provide valuable opportunities to promote healthy dietary behaviours. Adolescents and young people, especially girls, represent a high-priority group because their nutrition determines future health outcomes of the mother and child. Nutrition knowledge and healthy eating habits can be enhanced, and the threat of being anaemic can be minimised via school-based interventions. The behaviour change engagement with adolescents is imperative their food preferences are

also influenced by increasing autonomy and exposure to food settings (Neufeld et al., 2022).

7.4 Media and Digital Interventions

SBC interventions have risen to the mass media and digital platforms as effective tools of scale. On-air campaigns, mobile messaging, and digital campaigns may be effective in targeting key audiences and reinforcing important nutrition messages (Rai et al., 2022). These interventions come in handy in enhancing knowledge and altering behaviour especially in low-resource settings. It has been demonstrated that nutrition communication through media could be very effective at enhancing maternal knowledge and child feeding behaviours (Saaka et al., 2021). Moreover, digital health interventions are also being implemented to foster healthy eating behaviours among various populations (Ronteltap et al., 2022). Table 3 shows the key Social and Behaviour Change interventions and their effect on the dietary practices.

Table 3. SBC Interventions and Their Impact on Dietary Practices

Intervention Type	Description	Outcome	Supporting Evidence
Behaviour change communication	Counselling and awareness campaigns	Improved feeding practices	(Kennedy et al., 2018)
Community-based engagement	SHGs and group learning	Increased maternal knowledge	(Flax et al., 2019)
Mid-Media, Mass Media and digital interventions	Community Radio, puppet shows, street theatres and digital messaging	Improved child feeding behaviour	(Saaka et al., 2021)
Integrated SBC programs	Nutrition-sensitive interventions	Improved child nutrition outcomes	(Mahumud et al., 2022)
Dietary diversity programs	Addressing food consumption gaps	Reduced dietary diversity failure	(Rai et al., 2022)
Food system interventions	Improving access to diverse foods	Sustainable dietary improvements	(von Braun et al., 2023)

8. Addressing Social Norms, Community Influences, and Policy Integration

Social and Behaviour Change (SBC) is the key to resolving the problem of social norms and community impacts and improving the dietary practices (von Braun et al., 2023). The involvement of the male members (father, husband, father-in-law, brothers) of the family is significantly important since they are usually the ones who make decisions concerning food in the household and how resources are used and their inclusion will ensure equal nutrition consumption practices. Local individuals with influence and influencers of faith are involved in defining the behaviours of the groups and supporting the favourable eating culture (Scott et al., 2018). Intra-household inequalities should be dealt with by using gender-sensitive strategies that could secure sufficient access for women and girls to nutritious foods. Culturally sensitive interventions by communities that are appropriate for the tribals are significant in

honouring the tradition of the local people and encouraging healthy eating (Singh et al., 2020a). On the policy level, the inclusion of SBC in the national and state policies like POSHAN 2.0, ICDS, and the National Health Mission has the power to increase the power and coverage of nutrition programs. Such programmes focus on community-related engagement, behaviour change communication, and service delivery enhancement. These efforts can be further improved in line with the Viksit Odisha 2036 vision to improve the long-term nutrition outcomes. SBC institutionalisation in government system and multi-sectoral convergence between health, nutrition, education, and agriculture sectors are the key to the realisation of the sustainable and large-scale effects (Shafique et al., 2025). Figure 2 shows a multi-level framework that indicates the SBC intervention pathways at the individual, community, and policy levels.

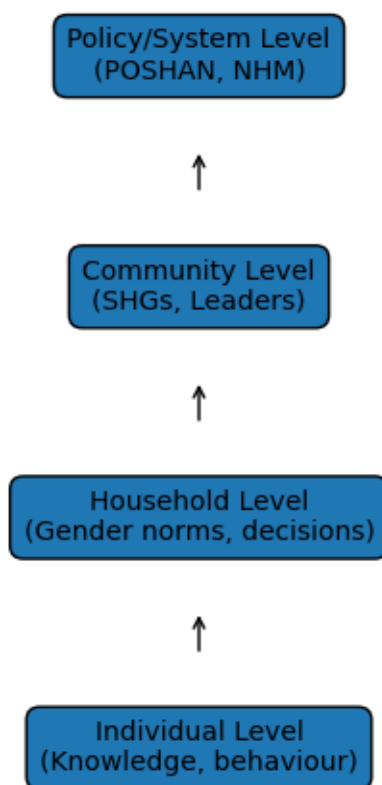


Figure 2. Multi-level SBC Intervention Framework in Odisha

9. Challenges, Gaps, and Future Directions

Although Social and Behaviour Change (SBC) interventions have potential, but there are number of challenges that are hinder successful implementation. Certain cultural beliefs and societal pillars that oppose change still curtails the integration of better feeding habits notably in the traditional and rural population. Also, the effectiveness of interpersonal communication and counselling skills of frontline workers are compromised if they are not supported by the community leaders. The resources and infrastructure limitations such as insufficient funding and logistical assistance also limit the magnitude and scope of SBC initiatives. Systems for monitoring and evaluation of SBC interventions are inadequate and it is hard to determine the impact and provide accountability. Furthermore, maintaining behaviour change is the a long-term intervention, hence the absence of constant involvement and reinforcement can significantly affect the outcome.

To help address these gaps, SBC strategies require upgrading by using evidence-based and context-specific strategies. The development of capacity and frequent training of frontline functionaries are the key to the enhancement of programme delivery. Utilisation of digital platforms , mid media and mass media can be used to increase the reach and support important nutrition messages. Cultivation of community ownership and active participation may improve the levels of intervention acceptance and sustainability. Moreover, the culturally responsive and sustainable nutrition outcomes can be assisted by the incorporation

of the local food systems and conventional eating habits into the SBC activities.

10. Conclusion

The Social and Behaviour Change (SBC) is a key component in the development of healthy eating behaviour in Odisha where the social, cultural, and economic conditions interact in a complicated way to determine nutrition outcomes . Although there have been some improvement in food availability and health service provision, however, issues like low dietary diversity, gender disparities and lack of awareness still pose serious challenges that have led to poor nutrition among mothers and children. To ensure such challenges are met, SBC gives a holistic approach in terms of influencing knowledge, attitudes, and behaviours both the individual and community levels. SBC interventions can help fill policy-practice gaps by mobilizing community involvement, participatory communication and frontline functionaries involvement. These approaches can be greatly improved through strengthening and integrating them in the government programmes and making them culturally sensitive during its implementation. For the sustained influence, there is a need to focus on the systemic issues, such as capacity shortage, resource constraints, and the necessity to monitor intervention on a continuous basis. In the future, SBC should be implemented in collaboration with local food systems, digital solutions, and community-based approaches for the realisation of long-term positive changes in the diet. Finally, an adequately designed and context-specific

SBC strategy can play an important role in enhancing nutrition outcomes and the overall objective of a healthier and more equitable Odisha.

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