Impact of Cash Transfer Schemes on Maternal Nutrition - A Case Study from RajPusht Program in Rajasthan, India.

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Introduction

In the southern districts of Rajasthan, specifically Baran, Banswara, Dungarpur, Pratapgarh, and Udaipur, where tribal communities constitute a significant proportion of the population, the RajPusht program has been initiated in 2019. RajPusht is a 360 degree initiative aimed at combating the issues of chronic low birth weight and wasting among children. It operates through a strategic blend of cash transfers and Social Behaviour Change Communication (SBCC) interventions. By enhancing the effectiveness of existing schemes like the Pradhan Mantri Matru Vandana Yojana (PMMVY) and the state-funded Indira Gandhi Matritva Poshan Yojana (IGMPY), RajPusht fosters behaviours such as improved dietary diversity and adequate weight gain during pregnancy, consequently leading to a reduction in the incidence of low birth weight (LBW) and the prevalence of wasting among children under three years old.

The mechanism of deployment of SBCC interventions among RajPusht beneficiaries has several channels leveraging various government programs/cadres like MCHN day and VHSNC and program cadres like Community volunteers (Poshan champions) who conducts home-based Interpersonal Counselling. These SBCC intervention plays a crucial role by educating beneficiaries about healthy dietary practices, and emphasizing the importance of adhering to these practices throughout pregnancy. Moreover, they facilitate knowledge sharing regarding cash incentive schemes and guide pregnant women on utilizing this financial support for their nutritional needs during pregnancy. Given the systemic nature of cash incentives, which may encounter disruptions and delays in

transfers, this study aims to investigate the factors that enable pregnant women to anticipate cash incentives and how this anticipation contributes to improved nutritional practices during pregnancy.

Review of Literature

Dietary Practices During Pregnancy

Maternal nutrition plays a crucial role in the outcomes of pregnancy and the overall development of the fetus. In developing countries annually approx. 20 million newborns suffer from low birth weight because of inadequate nutrition intake and infections during pregnancy(1). To support the importance of a diverse healthy diet during pregnancy various studies were conducted such as a study conducted in Riyadh, Saudi Arabia, which found that pregnant women often fail to meet recommended dietary allowances (RDAs) for essential nutrients, such as vitamin B1, calcium, iron, and energy, despite exceeding RDAs for protein and retinol. It focuses attention on the need for targeted nutrition interventions among pregnant women, highlighting the influence of cultural beliefs on dietary choices during pregnancy (2). To advocate optimal foetal growth, research conducted in China highlighted the importance of maintaining a healthy diet during pregnancy. This study identified associations between maternal dietary patterns and adverse effects on foetal growth, particularly head circumference(3). In addition, a study in Bahir Dar, Ethiopia, found that socioeconomic factors, including men's incomes, significantly affect pregnant women's diets, recommending that economic disparities need to be addressed to promote healthy diets during pregnancy(4). Furthermore, in low- and middle-income countries, interventions such as balanced energy protein (BEP) supplements and

food distribution programs (FDPs) have shown positive effects on maternal and child health outcomes, suggesting that targeted nutrition interventions can be useful during pregnancy (5). Additionally, a systematic review studying micronutrient intake status among women across different regions highlighted widespread deficiencies in micronutrient intake, especially folate intake, highlighting the need for comprehensive strategies to address inadequate nutrient intake among pregnant women(6).

Social behaviour communication change (SBCC) and Maternal Nutrition

In Developing countries like India adverse maternal, neonatal and child health outcomes are very prevalent. Micronutrient deficiency during pregnancy leads to inadequate weight gain which results in various neonatal and infant outcomes like preterm delivery, birth defects and low birthweight (LBW)(7). Social behaviour communication change (SBCC) is an integrated approach in which interaction is done at individual, group and community level via developing various communication channels to promote and encourage health-seeking behaviour. Evidence from various studies such as one conducted in China on maternal nutrition status and infant birthweight in which a comparison is done among pregnant women who received nutritional counselling and pregnant women who did not participate in the counselling process has found that women who received counselling had a lower prevalence of low-birth-weight infants and less incidence of maternal anaemia (8). This is supported by a study conducted among low and lower-middle-income pregnant women in Punjab which found that women, who were given supplementation (iron, folic acid and calcium) during pregnancy resulted in increased weight

during pregnancy and also a significant correlation to mid-upper arm circumference (MUA), birth weight (BW) and skinfold thickness of the new-born as compared to those who did not received the supplementation(9). This demonstrates how effective SBCC interventions impact maternal health during pregnancy. However, a randomized control trial conducted in Latin America found very little or no difference in low birth weight, preterm delivery outcome and psychosocial support intervention(10).

Cash Transfer Programs and Maternal Health

Cash transfer programs not only help women to fulfill their needs but also empower them in decision-making power in the household which overall improves the outcome of both women and their children(11). According to the World Bank , a cash transfer programme benefits about 800 million people in 150 countries(12). A study conducted in Nepal examined how community-based participatory learning and action (PLA) groups can influence birthweight and child growth outcomes, along with food and cash transfers. While this study demonstrated the positive effects of supplementing with balanced energy protein during pregnancy on birthweight, it also highlighted the challenges associated with resources not being distributed during monsoons and security concerns associated with cash transfers(13). Similarly, a study in Mexico examined the Oportunidades conditional cash transfer program's impact on birthweight outcomes, revealing significant improvements in birthweight and reductions in the incidence of low birthweight among participating pregnant women. These findings align with evidence from controlled trials of various interventions, emphasizing the potential of cash transfer programs in promoting investments in children's health(14).

Expanding the scope to include interventions within existing welfare programs, a study in the United States evaluated the health impact and cost-effectiveness of incorporating food incentives, disincentives, or restrictions within the Supplemental Nutrition Assistance Program (SNAP). The findings highlighted the potential of leveraging cash incentives to promote healthier food choices and mitigate diet-related health disparities among low-income populations. Particularly, the SNAP-plus intervention, incorporating both incentives for nutritious foods and disincentives for unhealthy items, emerged as a promising strategy to improve dietary behaviours and reduce healthcare expenditures.

However, challenges in achieving desired outcomes within cash transfer programs were also identified(15). A study conducted in Colombia examined potential barriers to the effectiveness of Conditional Cash Transfer (CCT) programs, such as Familias en Acción (FA). Factors such as administrative barriers, substitution effects with existing interventions, and allocation of resources away from children towards other household needs were highlighted as potential obstacles(16). Furthermore, findings from a study in Odisha, India, highlighted the positive effects of the Mamata scheme on nutrition interventions and household food security, underscoring the potential of cash transfer programs to improve maternal and child health outcomes(17).

Anticipation of Cash Transfers

Anticipation of cash is a phenomenon in which people expect cash flow in the near future. Anticipation of cash plays a crucial role in shaping the behaviour and spending patterns of consumers, Although there is limited literature specifically addressing the anticipation of cash transfers in the context of maternal health. However, relevant insights can be drawn from

a study conducted by Neil Thakral and Linh T., which sheds light on how anticipation duration influences consumer perceptions of windfall payments, transcending the binary classification of income as "future" or "current." In their study Longer anticipation periods were found to diminish anticipatory spending tendencies, thereby impacting the amount available for consumption upon receipt of the windfall income. This intricate relationship between anticipation duration and consumer behaviour underscores the need for nuanced understanding in designing financial interventions and policies to optimize consumer welfare and economic outcomes(18).

Furthermore, studies conducted in Kenya and Malawi provide insights into the impact of cash transfer programs on food demand, food security, and child health outcomes, shedding light on the role of anticipation in shaping program effectiveness. In Kenya, beneficiaries of a cash transfer program experienced a significant decrease in real food consumption amidst a price shock, highlighting the vulnerability of cash transfer recipients to market fluctuations. The anticipation of cash transfers, coupled with shifts in food demand, exacerbated consumption losses, emphasizing the importance of adjusting consumption expenditures in response to price inflation(19). Similarly, in another study conducted in Malawi found that the Social* Cash Transfer Scheme (SCTS) positively influenced food security and child health outcomes among recipient households. However, the declining availability of certain foods over time indicated potential challenges in sustaining program effectiveness, underscoring the need to monitor and address such issues(20).

In a study conducted to explore the impacts of the Healthy Baby Prenatal Benefit (HBPB), an unconditional cash transfer program for low-income

pregnant women in Manitoba, Canada, a key informant stated that she does not believe she will receive any benefits from the scheme. She expressed concerns about privacy issues and anticipated that she would not derive any benefits(21).

A study conducted in 2020 by the Tanzania Adolescent Cash Plus evaluation team found that there was a negative impact of anticipation of cash benefits which promoted school-going girls to drop out in anticipation of business grants(22,23).

Research Question

Is anticipation of cash among pregnant women linked to better dietary practices?

To answer this research question this study have following research objectives-

Research Objectives

1. To study the anticipation of cash among women who are aware/ registered in cash transfer schemes.
2. To explore the key enablers and disablers of anticipation of cash among pregnant women (AAA, Community meetings, peer groups, PC).
3. To understand the processes through which anticipation of cash enables the consumption of nutritious food during pregnancy. (reallocation of existing household resources, improved consumption of particular food groups etc.)
4. To identify the major challenges and barriers faced by pregnant women in receiving cash transfers under the RajPusht program.

Hypothesis:

In instances with delay in receipt of cash incentives the effective implementation of SBCC interventions lead to anticipation of cash. Due to this anticipation, beneficiaries may reallocate household savings/other resources towards more nutritious food consumption.

Materials and Methods

This study will employ a mixed-method approach, integrating qualitative data collected through in-depth interviews and Focus Group Discussions and quantitative data will be utilized from concurrent monitoring data sets of RajPusht which is collected biannually. The study will be conducted across the 5 districts of southern Rajasthan. Inclusion criteria will encompass all pregnant women at their second parity who are duly registered for IGMPY cash transfer scheme. Target Population will be the beneficiaries, their family members (mother in law, husband) along with frontline health workers (AAA, lady supervisors) and Poshan champions. Qualitative research will utilize a comprehensive array of instruments including Focus Group Discussion (FGD) guides, In-depth Interviews checklists, and Key Informant Interviews checklists. In-depth interviews will be conducted with a stratified purposive sample of women who have participated in the RajPusht program, exploring their perceptions of cash transfers, understanding of SBCC messages, changes in behaviour regarding savings and investment in nutrition, and perceived impacts on maternal and child health. Quantitative concurrent monitoring data will be analysed using statistical software to assess correlations between anticipation of cash, savings behaviour, and investment in nutrition. Tentative period of this study will be three months (March-June).

Ethical considerations:

Ethical considerations for this study will be paramount to ensure the protection of participants rights and confidentiality. Informed consent will be taken from all participants, emphasizing voluntary participation, the purpose of the study, and the potential risks and benefits involved. Confidentiality will be strictly maintained throughout the research process, with all data anonymized and stored securely. Participants will be assured of their right to withdraw from the study at any time without consequence. Furthermore, measures will be implemented to minimize any potential harm or discomfort to participants during data collection, particularly during sensitive discussions related to pregnancy and maternal health. Any conflicts of interest or biases will be transparently disclosed.

Implications of the research:

This study aims to provide insights into women's behaviour regarding savings and investment on nutritious food during pregnancy in anticipation of cash transfers. Findings will contribute to understanding around how anticipation of cash plays vital role in terms of better nutritious food allocation in the absence or delay of cash transfer schemes.

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