

ORIGINAL RESEARCH

Evaluating the Impact of a Community-Based Health Education Program on Knowledge, Attitudes, and Practices (KAP) regarding Family Planning among Rural Women of Dehradun

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ABSTRACT

Background: Family planning is a crucial component of reproductive healthcare, yet rural women in India face numerous barriers, including limited knowledge, cultural norms, and restricted access to contraceptive methods. This study evaluates the effectiveness of a community-based health education program in improving knowledge, attitudes, and practices (KAP) regarding family planning among rural women in Dehradun, India. **Objective:** To assess the impact of a structured health education intervention on KAP related to family planning among rural women, measuring pre- and post-intervention improvements. **Methods:** A quasi-experimental pre-post study design was employed, involving 200 married women aged 18-45 years from rural Dehradun. Participants were recruited through primary health centers (PHCs), self-help groups (SHGs), and Anganwadi centers. The intervention included interactive educational sessions, myth-busting activities, live demonstrations, and distribution of IEC materials. Data collection involved structured questionnaires administered at baseline and post-intervention. Paired t-tests and chi-square tests were used for statistical analysis. **Results:** Pre- and post-intervention assessments revealed substantial improvements in KAP. Baseline results indicated 58% of women had low awareness, 42% held negative perceptions, and 28% practiced modern contraception. Post-intervention, awareness increased to 83%, positive attitudes to 67%, and contraceptive use to 55%. Statistical analysis confirmed significant improvements ($p < 0.05$). **Conclusion:** The study demonstrates that community-based health education interventions significantly improve knowledge, attitudes, and contraceptive adoption among rural women. To sustain these improvements, future programs should emphasize male involvement, continuous support from community health workers, and the integration of digital tools for wider outreach.

Keywords: Family Planning, Community Health Education, Knowledge-Attitude-Practice (KAP), Rural Women, Contraceptive Awareness, Public Health Intervention

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INTRODUCTION

Family planning is an essential component of reproductive healthcare, directly impacting maternal mortality, child survival, and economic stability. According to the National Family Health Survey (NFHS-5), contraceptive use among rural Indian

women remains suboptimal due to misconceptions, lack of male involvement, and inadequate access to healthcare services [1]. Several studies have emphasized the need for targeted educational interventions to bridge knowledge gaps and encourage positive behavioral changes [2,3].

This study aims to evaluate the impact of a community-based health education program on KAP regarding family planning among rural women of Dehradun, emphasizing the effectiveness of structured interventions in improving awareness, changing perceptions, and promoting contraceptive uptake.

OBJECTIVES

1. To assess the baseline knowledge, attitudes, and practices of rural women regarding family planning.
2. To implement a structured health education intervention on contraceptive methods.
3. To measure post-intervention improvements in KAP.
4. To compare findings with existing literature on community-driven reproductive health programs.

METHODOLOGY

Study Design & Population

A quasi-experimental pre-post study was conducted among 200 married women aged 18-45 years in Rural(Jamanpur, Sahaspur) Dehradun. Participants were recruited from primary health centers (PHCs), self-help groups (SHGs), and Anganwadi centers through purposive sampling.

Intervention

A structured health education program was designed and delivered by community health workers (CHWs) and primary healthcare providers. The intervention included:

- Interactive sessions on contraceptive methods, reproductive rights, and the benefits of family planning.
- Myth-busting activities to counteract misconceptions.
- Live demonstrations on contraceptive use and counseling for informed decision-making.
- Distribution of IEC (Information, Education, and Communication) materials.
- Follow-up support and reinforcement sessions.

Data Collection & Analysis

- Baseline and post-intervention surveys using a structured questionnaire evaluating knowledge, attitudes, and practices.

- Focus group discussions (FGDs) to explore barriers and facilitators to family planning adoption.
- Paired t-tests and chi-square tests were used to analyze statistical significance.

RESULTS

The results of this study demonstrate a substantial improvement in knowledge, attitudes, and practices regarding family planning following the intervention. The increase in knowledge from 58% to 83% suggests that the structured educational approach effectively addressed misinformation and knowledge gaps, empowering women to make informed reproductive choices. This significant enhancement in awareness is critical, as lack of knowledge often serves as the primary barrier to contraceptive adoption in rural areas.

Similarly, the shift in attitudes from 42% to 67% indicates that the intervention played a crucial role in reshaping perceptions and reducing stigma associated with family planning. The discussions and myth-busting sessions likely contributed to changing deep-rooted cultural misconceptions, which often deter women from considering contraceptive options. This transformation suggests that community-driven education fosters an open dialogue, leading to greater acceptance of contraceptive methods.

Perhaps the most impactful finding is the increase in contraceptive use from 28% to 55%. This nearly twofold increase underscores the effectiveness of hands-on demonstrations and personalized counseling in overcoming practical barriers to contraceptive adoption. The role of community health workers in providing continued guidance and follow-up support cannot be overstated. Despite these improvements, the results also highlight the ongoing challenges, such as family resistance and concerns about side effects, that continue to hinder contraceptive uptake. Addressing these issues through targeted male involvement and long-term community engagement could further enhance outcomes.

Statistical analysis confirms that the observed improvements in KAP are significant ($p < 0.05$), reinforcing the effectiveness of the intervention. This study underscores the need for sustainable, community-based reproductive health programs that are culturally sensitive and tailored to the needs of rural women.

Pre-Intervention Findings (Baseline Values)

Category	Percentage (%)	Mean	Standard Deviation
Knowledge (Low Awareness)	58%	4.2	1.3
Attitudes (Negative Perception)	42%	3.8	1.5
Practices (Used Modern Contraceptives)	28%	2.9	1.1

Post-Intervention Findings

Category	Percentage (%)	Mean	Standard Deviation
Knowledge (Improved Awareness)	83%	7.8	1.2
Attitudes (Positive Perception)	67%	6.5	1.4
Practices (Used Modern Contraceptives)	55%	5.4	1.3

Statistical analysis showed significant improvement ($p < 0.05$) in KAP scores post-intervention.

DISCUSSION

The intervention led to a significant improvement in knowledge, attitudes, and practices regarding family planning. The increase in knowledge from 58% to 83% demonstrates that structured educational programs can bridge the awareness gap and counteract misinformation. This aligns with findings from Huda et al. (2020) [4], who observed a similar increase in contraceptive awareness following community-based interventions in Bangladesh.

The positive shift in attitudes (42% to 67%) suggests that social and cultural barriers can be addressed through targeted counseling and myth-busting sessions. This is consistent with Ravindran & Fathima (2021) [5], who reported that village health workers played a key role in changing perceptions about contraceptive use in Bihar, India.

The increase in contraceptive practice from 28% to 55% highlights the effectiveness of community health workers in encouraging behavior change and contraceptive adoption. Similar results were found in Mutumba et al. (2018) [6], where community-based programs significantly improved contraceptive use in Kenyan rural populations.

While the intervention was successful in improving KAP, certain challenges remain. Some women continued to face family resistance and fear of side effects, highlighting the need for male involvement and follow-up support. Adanikin et al. (2019) [7] emphasized that educational programs targeting both women and their male partners result in higher contraceptive acceptance rates.

Overall, this study confirms that community-based interventions are a sustainable approach to enhancing reproductive health awareness and should be integrated into national health programs to maximize their impact.

CONCLUSION & RECOMMENDATIONS

The findings reinforce that community-driven interventions are essential in enhancing family planning awareness and adoption among rural women. Future programs should:

- Strengthen male involvement in contraceptive decision-making.
- Enhance CHW networks for continued reproductive health counseling.
- Integrate digital tools for wider accessibility.
- Develop culturally sensitive strategies to overcome societal barriers.

Investing in community-based reproductive health programs can significantly contribute to reducing maternal and infant mortality rates in rural India.

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