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Commentary

Co-creating sexual and reproductive health interventions with adolescents: the experience from Rajasthan

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ABSTRACT

Despite a clear policy recognition of the need for special programmatic attention for adolescents to ensure access to sexual and reproductive health information and services, almost all existing programs in India face critical challenges in effectively delivering sexual and reproductive health information and services, which leads to early marriages and teenage pregnancies. Teenage pregnancies directly threaten women's sexual and reproductive health and well-being. States like Rajasthan with high adolescent pregnancy rates demand better solutions. IPE Global implemented project Udaan to reduce teenage pregnancies in the state, adopting a 360 degree approach. Improving Sexual and Reproductive Health was one of the critical components of the project, and a human-centred design method was adopted to co-create an effective sexual and reproductive health intervention relevant to the community. The human-centred design approach incorporated multiple steps, including formative research, iterations, prototyping and piloting. Five potential interventions emerged after a series of iterative explorations. The in-school SRH intervention has emerged as an excellent model of reaching adolescents effectively in culturally sensitive rural geographies in the evaluation of the pilot, which successfully covered over 10,800 adolescent boys and girls across 66 government high schools in the Bari block of Dholpur. An independent evaluation suggested a significant increase in the awareness of contraceptive methods in the intervention area from 24 per cent to 50 per cent. Contraceptive self-efficacy, a measure of girls' agency, increased by 18 per cent in the intervention area. Further, qualitative findings showed a significant improvement in SRH awareness and service utilization.

Keywords: Sexual and reproductive health, Teenage pregnancy, SRHR, Women's health, HCD

INTRODUCTION

The right to sexual and reproductive health is an integral part of the right to the highest attainable physical and mental health standards.[1] It demands both freedom and entitlements. Freedom includes the right of individuals to make free and responsible decisions and choices concerning their bodies and their sexual and reproductive health. The entitlements assure access to a range of health facilities, goods, services, and information that enable people to fulfil the right to sexual and reproductive health.[2] This also means that the governments have obligations to respect, protect, and fulfil adolescents' sexual and reproductive health rights.[3]

However, in an LMIC like India, with overstretched health system and culturally diverse societies, SRHR has been addressed as a discrete set of health issues, with little recognition of their centrality to overall health and well-being.[4] Access to scientific and age-appropriate sexual and reproductive health information among adolescents is

poor.[5] Early marriages exclude girls from deciding when and whom to marry, often leading to teenage pregnancy.[6,7]

Child marriages and teenage pregnancies continue to be a pressing public health issue in Rajasthan, with more than one-third (35.4%) of the girls aged 20-24 reported getting married before 18 years, and almost 7% of the girls aged 15-19 years are already mothers or are pregnant.[8] The government of India has taken significant federal commitments to uphold adolescent reproductive and sexual health (ARSH) as a development priority in its National Population Policy 2000. It launched an ARSH strategy in 2006 through the National rural health mission (NRHM).

The ARSH strategy endorsed a clinic-based approach and facilitated existing public health facilities as adolescent-friendly health centres (AFHCs), keeping demand generation out of focus. In 2014, adolescent health programming in India was further strengthened with the launch of the Rashtriya Kishor Swasthya Karyakram (RKSK, the national adolescent health programme) to ensure the holistic development of adolescents. It also expanded the scope of adolescent health programming from being limited to sexual and reproductive health by including within its ambit - nutrition, injuries, and violence (including gender-based violence), non-communicable diseases, mental health, and substance abuse.

Adolescent Friendly Health Clinics (AFHCs), also known as Ujala Clinics in Rajasthan, are one of the key components of the RKSK program that seeks to enable adolescents to adopt positive sexual and reproductive health-related behaviours by accessing information and services.[9] However, studies in Rajasthan reflect that the Ujala counsellors had limited knowledge and competencies in providing accurate information on the SRH topics.[10] In addition, the gaps in the availability and utilisation of IEC materials, referral linkages and the maintenance of privacy and confidentiality of the clients exacerbate the issue.[11] Overall, the RKSK programme in Rajasthan had crucial implementation issues, and the current Ayushman Bharat School Health Programme hardly covers SRH topics.

The existing gaps in the government SRH programmes in Rajasthan, combined with the sociocultural dynamics of patriarchy, cultural taboos, and gender norms, negatively impact adolescents' involvement in sexual and reproductive decision-making, rendering them vulnerable and disadvantaged.[12] Therefore, it is imperative to design and contextualise adolescent SRH programmes for the underserved and marginalised. To co-create a sexual and reproductive health intervention in Rajasthan, project Udaan adopted a human-centred design approach (HCD) involving adolescents at each stage of the process to ensure their needs, choices, and voice in adolescent health programming. This commentary captures our experiences of co-creating an adolescent health intervention in Rajasthan using the HCD approach.

Using a human-centered design approach for co-creating adolescent SRH interventions

Human-Centred Design (HCD) is a process that advocates for giving a voice to end-users and key stakeholders. It is an iterative progression that regularly involves the primary audience and their influencers to ensure that the solution is relevant to them.

Observing and interviewing the beneficiaries and outliers compels us to re-examine the existing beliefs and to include the view of all genders, belief systems, social circumstances and family dynamics.[13] For example, engaging in the co-creating process with adolescents, especially the poor and vulnerable, reflect what they find as a problem and what kind of solutions engage them.[14] HCD approach emphasises the perspective and participation of the beneficiaries at every step, making the solutions inclusive, tailored, and empowering.[15] Considering the lacunae in the existing AH programmes in India, the human-centred design appears to be the perfect approach for creating adolescent-centric solutions.

We purposely selected Dholpur as the intervention district, considering its poor adolescent health indicators. Dholpur is infamous for impeding social and structural norms, negatively impacting development activities. The HCD exercise aimed to design an intervention that would build on the government-led SRH programme in Rajasthan, identify its shortcomings from an adolescent's perspective and offer solutions that would meet those needs while remaining acceptable to their community.

The HCD exercise was carried over five phases: formative research/inspiration, ideation, rapid prototyping, live prototyping, and piloting. We have formed a design team of twelve members, including three female adolescents from the age group of 12-19, three male adolescents from the age group of 12-19, and four adults who are the key influencers, including parents and community leaders. The team also had an HCD expert and a Researcher. The design team members were selected based on literacy, ability to analyse social issues, and communication skills. They were oriented on project Udaan and the stages of HCD.

Inspiration phase: understanding the issues and opportunities

We engaged with around 120 participants, such as adolescent boys and girls, parents, family members, Panchayati Raj Institution (PRI) members, teachers, Ujala counsellors, doctors, frontline health workers and chemists, in the inspiration phase.

The cross-disciplinary teams captured insights through focus group discussions, key informant interviews, and in-depth interviews. It explored the perspectives of multiple stakeholders, including the current needs and gaps in AH programmes and the community's perceptions of them.

Table 1: Profile of the participants.

Category	Male	Female	Total number of interviewees
Fathers	5	--	5
Mothers	--	10	10
Sister-in-laws/ Aunt	5		5
Boys (12-15)	16	--	16
Boys (15-19)	16	--	16
Girls (12-15)	--	14	14
Girls (15-19)	--	20	20
Frontline workers	1	4	5
Medical Stores	8	0	8
Teachers	5	5	10
Private Doctors	4	0	4
Panchayat members	5	0	5
Ujala Counsellors	1	1	2
Total	66	54	120

FINDINGS

We found a significant knowledge gap in SRH matters and existing adolescent SRH services. In the absence of proper communication channels, content shared by peers played a substantial role in shaping adolescents' knowledge and attitudes on SRHR issues.

The boys depend on college seniors and young uncles as sources of information on SRH. "*I get information about sexual and reproductive matters from my senior in college, and we have a boys group on WhatsApp to discuss these things*", quoted a boy from Bari block. However, discussions on puberty, sex and reproduction between mothers and children remained taboo. Mothers do not perceive discussing menstruation with their daughters as a responsibility. Besides, myths and misconceptions often bias their knowledge of the same.

"*Even if I want to discuss these things with my daughter, she denies it due to embarrassment*," said Lata, mother of two adolescent girls.

The sisters-in-law are likely to become confidantes for younger girls as they help them with confusing SRH experiences. "*Girls will feel shame on discussing these things with their mothers. My younger sister-in-law discusses these things with me, and I try to help them*," a married woman from Dholpur quoted. Any change sought in the lives of adolescents cannot exclude influential community gatekeepers and caregivers whose sanction is essential. Adolescents didn't use the government's Adolescent Friendly Health Clinics (AFHC), known as Ujala Clinics in Rajasthan, for privacy concerns. "*I am not comfortable going to the centre. If I tell something to them, they will communicate that to my family. She knows my aunty, so I do not go*," quoted Radha, a 9th-standard student from Dholpur.

Further, the AFHC counsellors were not adept at handling the counselling sessions effectively.

"*They do not know how to conduct sessions with adolescents of the opposite gender on sensitive SRH matters; they are not properly trained*", opined the frontline health worker. The tools and collaterals provided to them were prescriptive and insufficient to discuss topics that are difficult to broach in a relatable manner. While counsellors were mindful of privacy, their small room was often used for drug storage and saw constant staff activity.

Designing interventions: ideation, prototyping and finalising solutions

Following the insights gathered during the inspiration phase, the design team conducted ideation workshops to synthesise the findings from the field and brainstorm solutions for the issues identified. Each team member, including the adolescent boys (3) and girls (3), participated in the collective brainstorming session facilitated by the HCD expert.

All participants came up with a wide range of solutions and voted for the best ideas based on their perception of what works best in the community. The ideation exercise also facilitated the development of ideas into rough prototypes, starting with sketches and paper models.

A shortlist of intervention ideas around three broad themes, including youth +, Ujala 2.0, and collective action, was prepared, and rapid prototypes with varying fidelity were created for each potential idea. These were then tested with the adolescents and relevant stakeholders and finalised after several rounds of iterations.

After rapid prototyping, we executed four-week-long live prototyping to test high-fidelity prototypes to assess their effectiveness.

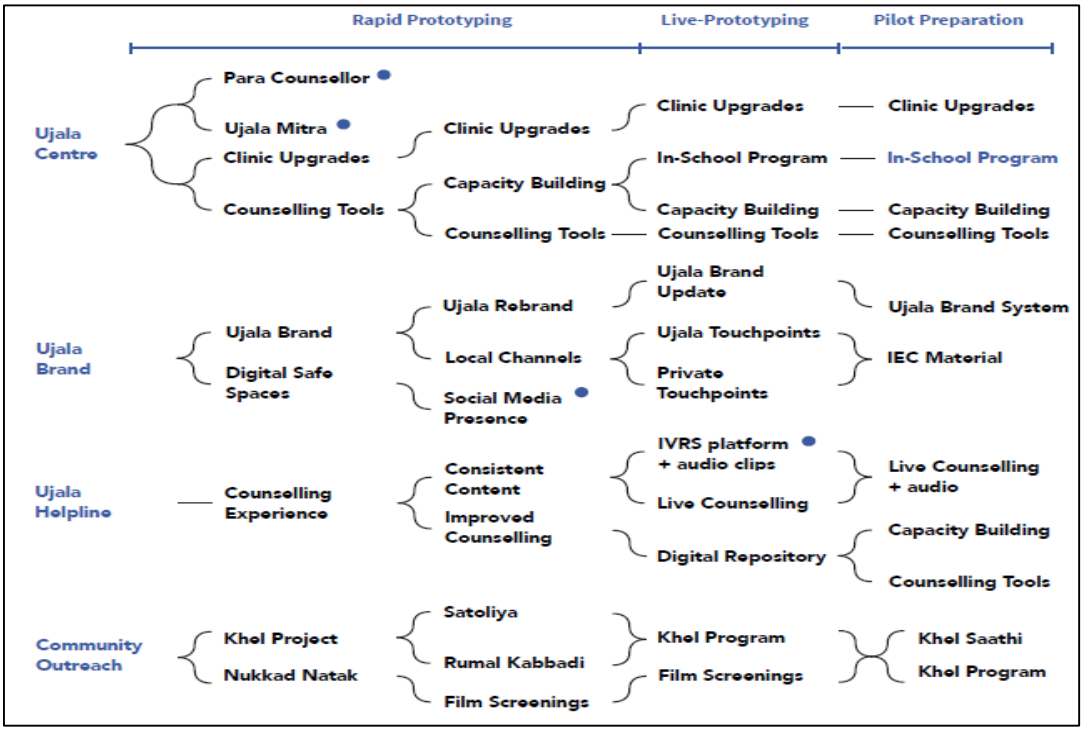

Figure 1: Overview of prototypes.

LIVE PROTOTYPING

We tested the prototypes in the field, which were improved by many iterations incorporating the feedback from the adolescents and other stakeholders. For example, the adolescents welcomed the in-school sessions and expressed interest in attending the same in future. "*I liked the sessions, and they were informative and interesting. The topics discussed were new to me*," A student from Bari Block quoted. In contrast, the students and teachers didn't prefer the In-school game-based programme. *"It is challenging to find time to conduct games and is confined to entertainment instead of influencing attitudes students towards SRH*". The principal opined. Further, based on the interventions' acceptability, relevance, and scalability, we shortlisted five potential interventions for piloting.

Piloting: what worked and what did not?

The five solutions that emerged were piloted for over 18 to 20 months in the Bari block of Dholpur in 2019-20. Subsequently, in 2020-21, considering the results, scalability, sustainability, and cost-effectiveness parameters, we continued only with in-school SRH sessions and dropped the remaining four solutions.

Strengthening AFHCs (Ujala Clinics)

We upgraded the physical space in Ujala Clinic (UC) to make them more welcoming to adolescents and improve their experience. We also developed counselling tools and interactive collaterals for counsellors, such as card decks on myths and misconceptions, comics, flipbooks, handouts, and manuals, to improve the quality of counselling. Despite the capacity building of Counsellors through in-person and online sessions, we observed a sense of apprehension for counselling on SRH issues due to fear of community backlash. The overall footfall at these Clinics did not improve significantly, hence we discontinued the piloting.

Table 2: Footfall at the Ujala clinics before and after Udaan.

Description	Intervention Block-Bari	
	Girls	Boys
Pre-Udaan (April to December 18)	235	302
During Udaan (April to December 19)	253	289

Adolescent helpline

This phone-based solution aimed to improve the counselling experience for adolescents to address their problems or concerns remotely. The health department's toll-free emergency helpline number-104, was used to provide counselling services.

Two trained Counsellors (male and female) were placed at the Helpline, supported with a knowledge bank (text and audio) and standard operating protocols. However, only 285 calls were received in 5 months; 248 were males, and 37 were female callers.[16]

Considering the low uptake, we discontinued the service.

Ujala branding and promotion

To create a trustworthy and appealing brand for adolescents' engagement and to bring various Ujala services under one umbrella, we rebranded 'Ujala Clinic' as 'Ujala Centre'. The branding was reinforced through materials placed at local chemists, cosmetic shops, tuition centres, bookstores, and e-Mitra centres. Despite all efforts, we observed no significant change in the uptake of services at Ujala Centres and communication products at market touchpoints were resource-intensive for government to absorb.[17] Further, we observed that the market touchpoints lacked the motivation to support without any incentives. Additionally, considering the difficulty of tracking the outcome of touch point-based referrals, it was difficult to assess the impact of the intervention.

Creating co-gendered community spaces

To normalise open discussion around SRH outside the school, we organised sports and movie screenings to encourage the adoption of co-gendered community spaces to start conversations around gender, violence, and consent. However, the sports sessions failed to initiate open discussions around SRH. Unwanted individuals would congregate during such events, limiting the participation of adolescents. In addition, there was resistance from community members, which created difficulty in transacting SRH information leading to the discontinuation of the interventions. "*It is not a good practice to allow both girls and boys to play together; that is against the culture"*, a parent from the community responded during the feedback session-school sexual and reproductive health (SRH) sessions.

In-school sexual and reproductive health (SRH) sessions

In-school SRH sessions were highly successful. The insights from the inspiration phase revealed that schools were accepted as credible spaces with stakeholder buy-in where genders co-exist, making them the best places to have an open discussion on challenging topics. Therefore, the in-school SRH sessions reinforced adolescents' foundational knowledge and awareness of SRH topics.[18] Initially, eight modules were developed following an intensive field-testing process with the school students and reviewed by experts in the area.

The sessions focused on gender and decision-making; normalising SRH; conception and contraception; STIs/RTIs/HIV; demystifying basic SRH concepts; healthy and unhealthy relationships; agency and assertive communication; and violence in relationships and consent. Trained facilitators conducted the sessions in the schools, with boys and girls in separate groups. The pilot intervention successfully covered over 10,800 adolescent boys and girls across 66 government high schools in the Bari block of Dholpur.

Independent evaluation showed that girls in-depth awareness of contraceptive methods increased significantly in the intervention area, from 24 per cent to 50 per cent, while the comparison area reported no change. For boys, it was 25 per cent higher than the comparison area.[18] Contraceptive self-efficacy increased for both boys and girls. However, for boys, it was significantly higher in the intervention area by 2.9 units.[18] Further, qualitative findings also showed a significant improvement in SRH awareness.[18]

Discussion and the way forward

Each adolescent is different, and so are their needs. The human-centred design approach ensures adolescents' participation and ownership in designing interventions, thus ideal for AH programming. Our HCD exercise positioned the in-school SRH intervention as an excellent model of reaching adolescents effectively in culturally sensitive rural geographies. Global evidence also indicates that schools serve as an ideal platform for health education, and school health programmes offer a high cost-benefit ratio.[19] Our learnings from the HCD approach also found that the community consider schools the safest place to access SRH information. In addition, school-based programmes can reach a majority of adolescents, as 91.6 per cent of adolescents aged 11 to 13 and 73.4 per cent aged 14 to 15 in India are enrolled in schools (UDISE 2021).[20] Besides, the secondary-grade enrolment of SC and ST adolescent girls is also significant at 85.4 per cent and 79.3 per cent, respectively.

Integrating SRH with the existing school curriculum will ensure sustainability without spending much on additional resources. Global literature indicates that school-based health education can effectively improve adolescent SRH behaviours and prevent teenage pregnancies, violence, and bullying.[21] A study from Nepal shows that schools are best positioned as centres for overall development in rural settings, and any intervention through schools is accepted widely among the people.[22] As observed from our findings and emphasised by existing literature, schools are the safest place for adolescent-related interventions in terms of reach, acceptability, and positive outcomes.[23] Further, it is essential to note that SRH education is an integral component of adolescent health programming. It must be grounded in human rights; it should be age-specific, scientifically accurate and culturally appropriate, which is synonymous with our findings.[24] Investing in school-based health education will enhance reach and acceptability, reduce costs, and improve adolescent health outcomes.

CONCLUSION

Our sexual and reproductive health programming in Rajasthan suggests that in-school SRH intervention is an excellent model for reaching adolescents effectively in culturally sensitive rural geographies. Our experience from the state strongly favours adopting in-school SRH programming in other rural geographies.

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