CHOICE OVER CHALLENGE

The Trajectory of Cross-Border Journey of Indian Women to Avail Contraceptive Implant Services in Nepal

February 2023

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International Planned Parenthood Federation – South Asia Region

3rd Floor, Omega Tower, M3, Hauz Khas,
New Delhi-110016, India
Phone: + 91 011-6132-7900
Website: https://sar.ippf.org

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Arpita Das

Chetraj Joshi

Sreejit E M

Bina Shrestha

Sonal Indravadan Mehta

Naresh Pratap

Shweta Bastola

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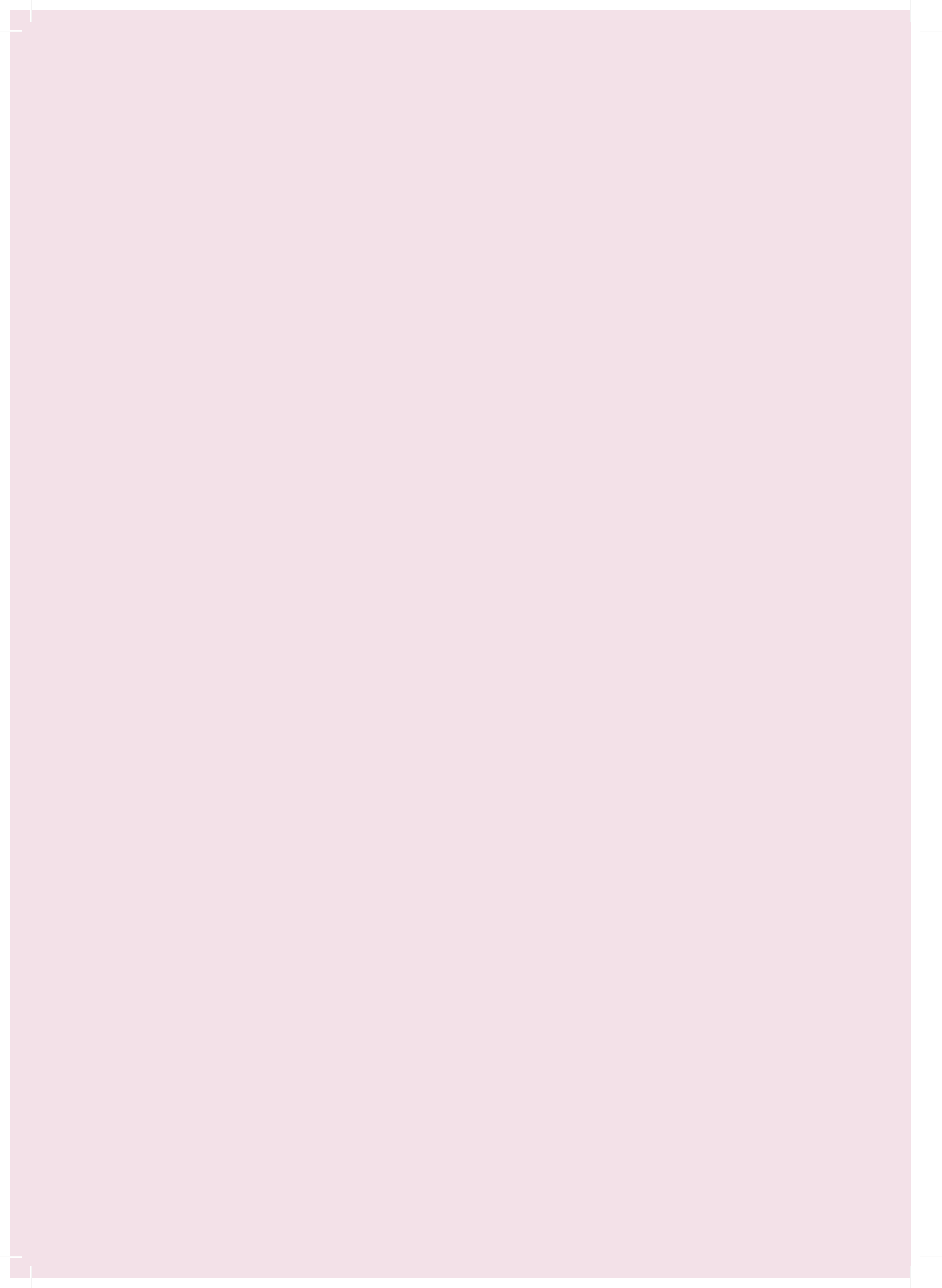
International Planned Parenthood Federation – South Asia Region
Family Planning Association of Nepal



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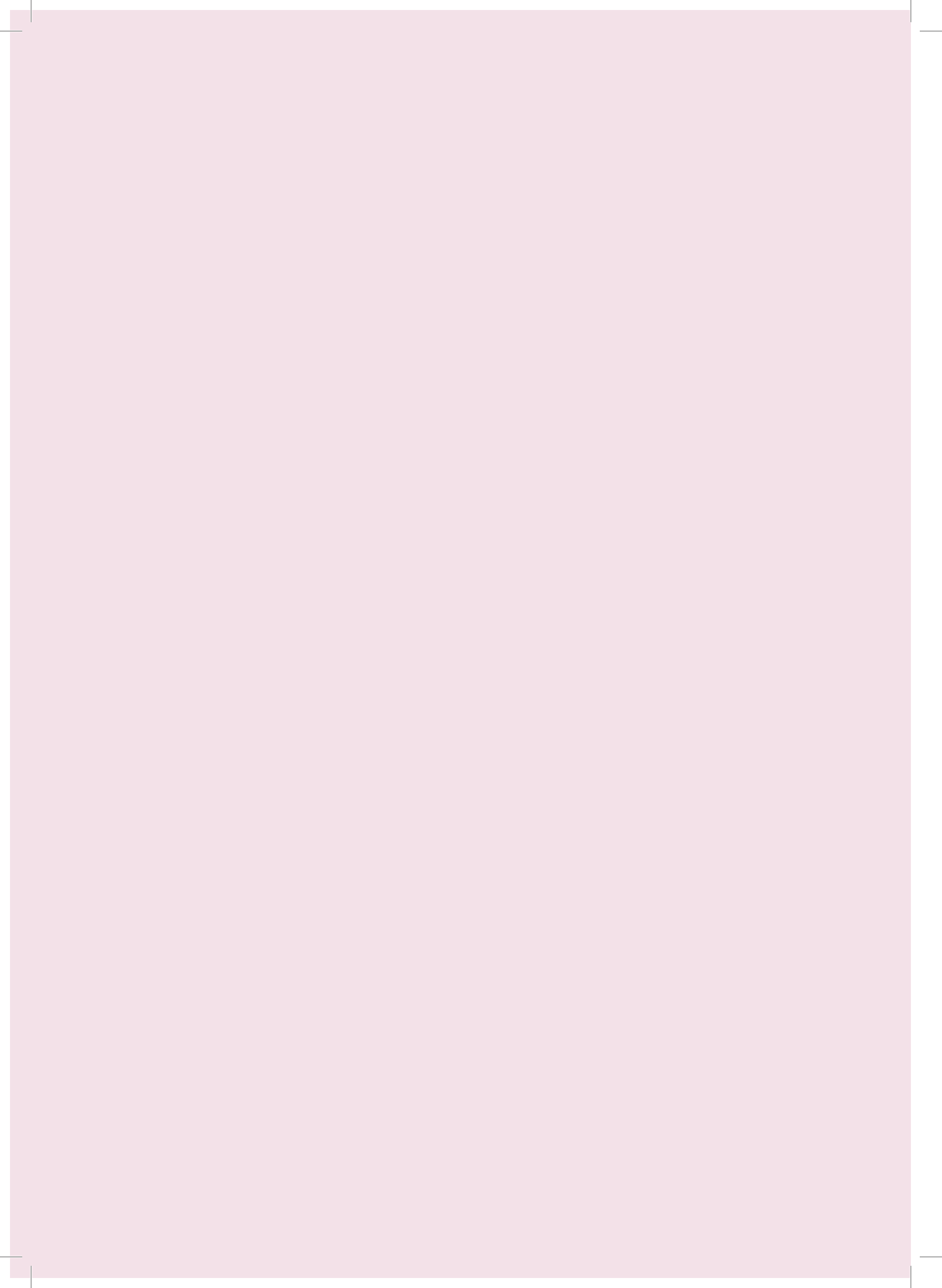
Acronyms

DMPA	Depot Medroxy progesterone acetate
FHC	Family Health Clinic
FP	Family Planning
FPAN	Family Planning Association Nepal
ICMR	Indian Council for Medical Research
IDI	In-depth Interview
IIPS	International Institute for Population Sciences
IPPF	International Planned Parenthood Federation
IUC	Intrauterine contraception
IUD	Intra Uterine Device
LARC	Long-acting reversible contraceptives
mCPR	Modern Contraceptive Prevalence Rate
NFHS	National Family Health Survey
NIRRH	National Institute for Research in Reproductive and Child Health
OCP	Oral Contraceptive Pill
QALY	Quality adjusted life year
SDG	Sustainable Development Goal
UN	United Nations
UNFPA	United Nations Fund for Population Activities/ United Nations Population Fund
USAID	United States Agency for International Development
WHO	World Health Organization



FOREWORD

Irrespective of policy restrictions or political boundaries, people – particularly women – always find ways of accessing what they need! With that predominant observation, I proudly present this study report entitled 'Choice over Challenge: The Trajectory of Cross-Border Journey of Indian Women to Avail Contraceptive Implant Services in Nepal'. This study aimed to demystify the pathways of cross-border journey of Indian women to Nepal, with no investment on education, awareness, or support for the same by any government, for availing contraceptive implant. Very recently, India announced the inclusion of contraceptive implants in its National Family Planning program. Despite it not being an available choice earlier, the demand for this long-acting reversible contraceptive method among women was always high. From the programme data we knew that women from India, mostly from Bihar and Uttar Pradesh, crossed the border to avail services for contraceptive implant from Nepal but except numbers not much was known. In this context, this study became important to understand the course of the cross-border journey implant clients took from India.

This study highlights the agency of women in overcoming all barriers to access their preferred choice of contraceptive method. As a result, forcing us to think from the perspective of rights and choice of women rather the socio-cultural and political contexts. Despite all challenges women exercised their reproductive autonomy and chose their preference.

This study paves ways for future research on women's experiences and acceptance of contraceptive implant. Inclusion of contraceptive implants in the family planning basket of choices in India would help in expanding their choices and access.

I wish to express my sincere gratitude to everyone who contributed to this study, particularly members of my team and members of the Family Planning Association of Nepal. I am confident that IPPF will remain committed to centre care on people by expanding choice and access in collaboration with different stakeholders in the field of SRH.

Sonal Indravadan Mehta
Regional Director
IPPF South Asia Region

Executive Summary

Evidence underlined that about 163 million women around the globe had unmet need for contraception, highest proportion of which was among the women from Sub-Saharan Africa and South Asia. To address this, inclusion of more methods in the contraceptive basket of choice needs to be ensured. This would increase tailor-made contraceptive supplies and choices for different age groups of women. This might reduce the unsatisfied demand and unmet need among the women of all age groups. Recently, India announced the inclusion of contraceptive implant in her public health system. Earlier it was not available, therefore, it's accessibility and affordability within the Indian territory was a major challenge for Indian women. The monitoring data from clinics of Family Planning Association of Nepal (Member Association of IPPF SAR), reflected a significant number of women from India, largely from the states of Bihar and Uttar Pradesh, cross the border to avail services for contraceptive implant. Although it was evident that FPAN clinics in the Terai Region of Nepal witness footfall from Indian women coming for contraceptive implant, however, except numbers nothing much was known. In this context, generating evidence by exploring their cross-border journey becomes critical.

The IPPF-SAR and FPAN jointly initiated a cross-sectional exploratory multi-centric study by adopting mixed-methods approach (both quantitative and qualitative) to unearth the trajectory of the cross-border journey of Indian women who visited Nepal to avail contraceptive implant services. The specific objectives of the study were as follows:

1. To demystify the 'journey course' of cross-border implant clients from India to Nepal
2. To unearth the pathways of decision-making, information seeking and pathways of access and barriers to accessing contraceptive implant services among cross-border clients.
3. To explore the experience and satisfaction of the cross-border clients
4. To understand the profile of cross-border implant clients
5. To understand the perspectives of service providers who provide contraceptive implant services to cross-border clients.

This study was conducted in three Family Planning Association Nepal (FPAN) facilities namely, FHC-Biratnagar, FHC-Saptari and FHC-Dhanusha situated in the Terai region of Nepal where the footfall of cross-border implant clients was maximum. Exit interviews were conducted with the eligible women who came from India for contraceptive implant services (either insertion or removal) from selected FPAN clinics situated in the Terai region during September – December 2022. Cross-border implant clients were interviewed after receiving their consent to participate in this study. A quantitative study was conducted using a structured questionnaire to demystify the journey course of cross-border implant clients from India to Nepal. A total of 218 cross-border implant clients were successfully interviewed from three study facilities. Additionally, to get in-depth insights from the cross-border clients 12 IDIs were conducted with cross-border clients and their service providers.

For quantitative data, descriptive statistics and bivariate analysis were performed. Deductive thematic analysis was used in the first phase to identify the constructs and themes. In the second phase, inductive approach was used to identify the emerging sub-themes.

Among the 218 cross-border implant clients, 202 were implant insertion clients and 16 were removal clients. All the study respondents were from Bihar, India. The mean age of all the clients interviewed was 28 years. The average number of total living children was 3.1 and most (90%) of the clients were housewives and not in any form of employment. The main source of household income of these clients was agricultural wage labour.

Majority of women (68%) cited the non-availability of contraceptive implant in their native country as the main reason for their cross-border journeys to the neighbouring country-Nepal. Three different pathways, namely, decision-making pathways, information pathways and pathways of access and barriers were explored in this study. Findings underscored that husband/partner was the main support system for decision-making while opting for contraceptive implant. It is evident that cross-border implant clients had the agency to take decisions on their own, though their near and dear ones helped them in decision-making process. More than two-thirds of the women underscored that they took the final decision on whether to opt for implant or not by themselves. Mothers-in law also played an important role, not only helping in decision-making but also in accompanying women to Nepal. Around 15% of the women were accompanied by their mothers-in-law. Findings revealed that 36% of women started their contraceptive use journey with contraceptive implant. The modern methods that cross-border clients used before adopting implant were OCP, Condom, and Injectables (Antara). A noticeable fact is that more than one-tenth (12%) of users of traditional methods also moved to contraceptive implant, which portrayed the high level of acceptance of this new long-acting modern method. The quoted reasons for the shift were reflected in statements like 'easy to use' (90%), 'need not take it every day' (52%), 'no one comes to know' (36%). These were the perceived advantages for choosing to come to a foreign land by crossing the border.

A total of 16 cross-border removal clients were interviewed and it was found that they had used implant for 51 months on an average. The findings highlighted that desire for another child was one of the most important reasons for early removal of contraceptive implant. Almost one-third (31%) of the women wanted to get pregnant again and this was cited as the reason for their early removal. 'Disapproval by husband/partner or 'side effects (specifically menstrual disruption or allergy)' were other common reasons, cited for early removal of implant.

Nearly all (99%) clients said that they had faced challenges in accessing the implant services. They highlighted: traveling long distance including passing through multiple transit stops, fear of travelling to an unknown country, high out-off-pocket expenditure, travelling alone and locating FPAN clinic were the major challenges. They felt that the availability of contraceptive implant in Indian health facilities near their homes would have been beneficial. Almost three-fifths of (57%) of the women expressed their desire to see contraceptive implant services made available in their nearby health facilities in India.

All the clients who were interviewed felt happy relaxed, or relieved on receiving contraceptive implant services. They were very satisfied with the service and service providers. All of them said they would recommend implant and the clinic to others. They also said that the provider had explained to them about: the method; the possible side effects; steps to be taken if problems occur and the removal process, if and when required.

Additionally, the providers delivering implant services to cross-border clients stated that implant was the most preferred modern contraceptive method. They added that up to 50 clients from these bordering districts of India came to receive implant services in a month from the three clinics considered in the study. This study paves the way for future research on women's experience and acceptance of contraceptive implant.

It further portrayed the agency of women in overcoming all barriers to accessing their preferred choice of contraceptive method. No matter what the challenges were, women had the reproductive autonomy in decision making and initiate their journey to another country for their choice. Therefore, this study leads us to think more from the perspective of the rights and choices of women rather than socio-cultural and political contexts.

INTRODUCTION

Introduction

Context

Globally, the evidence suggests pregnancy and childbirth resulted in around 200,000 deaths among women in reproductive age group in 2019, (Vos, et.al., 2020). Most of these could have been avoided through contraceptive use, since it helps to avoid unintended pregnancies among older women along with adolescents. Contraceptive use also contributes to spacing, timing, and limiting pregnancies (Conde-Agudelo, et.al., 2012). Further, contraception is beneficial for women for their health and socio-economic empowerment (Haakenstad, *et al*., 2022). Though several varieties of contraceptives are available in family planning basket of choices, still the unmet need for contraception is quite high among the women. The recent article in the Lancet (Haakenstad, *et al* ,2022) portrayed that 162·9 million women had unmet need for contraception globally, highest among the women from sub-Saharan Africa and south Asia. To address this, inclusion of more methods in the contraceptive basket of choice needs to be ensured. This would increase the tailor-made contraceptive supplies and choices for different age group of women. This might reduce the unsatisfied demand and unmet need among the women of all age groups including the young cohort aged 15-24 years. Another literature highlighted that globally 1.1 billion, out of 1.9 billion women aged 15-49 years had unmet need of contraception in 2019 (Kantorová *et al*., 2020). Long-acting reversible contraceptives (LARCs) might be the response to this high unmet need, since it offers safe, highly effective, long-term pregnancy prevention (Jonas, et. al., 2021).

Long-acting reversible contraceptives include the intra-uterine copper device (IUCD), injectable and sub-dermal contraceptive implant. Among these, implant contraceptive is a highly effective Long-Acting Reversible Contraceptives (LARCs) — to delay, space, or limit pregnancies. This method is effective for five years and effectiveness is comparable with sterilization and injectable contraceptives (Chetri, et.al., 1996). Evidence underscored that contraceptive implant has immense potential to address the unmet need and unsatisfied demand for contraception. This method also well accepted by many countries and World Health Organization recommended it as a safe and suitable for nearly all women, including adolescents, pregnant, post-partum, breast-feeding women, women who never being pregnant, living with HIV or just had an abortion (WHO, 2022). This sub-dermal contraceptive is the size of a matchstick and inserted beneath the skin in the upper arm of the woman. It does not contain *estrogen*, so can be used throughout breastfeeding and by women who cannot use methods with *estrogen* (WHO, 2022). Around 100 countries registered for use in more than including the United States, Western European countries, as well as many middle- and low-income nations (WHO, 2015; Lince-Deroche, 2016). In 2019, United Nations estimated 23 million of women of reproductive age (15-49 years) are using implant contraceptive globally, of which 18 million married/in-union and 5 million unmarried/not-in-union. In Sierra Leone, the prevalence of implant increased from 18% to 34% during 2013 – 2019 (UNFPA, 2019) and around one-thirds of implant users are adolescents (USAID, 2018). Findings from a prospective cohort study conducted among Kenyan women aged 18-24 years show, 24% of the young women participants of the study found implants to be a reasonable alternative to short-acting methods (Hubacher, et. al. 2011). It was estimated that almost 2 million unintended pregnancies could be avoided over five years if 20% of women of sub-Saharan Africa who are using short-acting contraceptives switch to contraceptive implant (Hubacher, et.al., 2008).

Hence, over the past decade efforts made to promote LARC methods in sub-Saharan Africa, especially for implant and the IUD (Staveteig, Mallick & Winter, 2015; Ngo, et.al., 2016;). As a resulting implant contraceptive prevalence rapidly increased in sub-Saharan Africa (USAID, 2012; Hardee, et.al., 2014). Only within five years implant uptake multi-folded in Malawi, Tanzania, Rwanda, Zimbabwe, and Ethiopia (Hubacher & Dorflinger, 2012; Jacobstein & Stanley, 2013; ZIMSTAT & ICF International, 2016). Even, the American College of Obstetricians and Gynaecologists' Committee on Adolescent Health Care and the Long-Acting Reversible Contraception Work Group (2018) guided Obstetrician–gynaecologists to counsel all sexually active adolescents on LARCs, including implant contraceptive. LARC and should help make these contraceptives readily accessible to them.

The prevalence of implant contraceptive in Asia is much lower than sub-Saharan Africa. In Asian countries, implant contraceptive is highest in Indonesia (3.9%), followed by Sri Lanka (3.2%), Nepal (2.7%) and Bangladesh (1.5%) (UN, 2019). India initiated family planning programme in 1952 and is one of the signatories to the FP-2030 program, a partnership that encourages country-level progress on family planning goals. The latest NFHS-5 data showed that the contraceptive prevalence for any methods in India is 66.7% and modern contraceptive prevalence (mCPR) is 56.4%. The most common modern method is female sterilization (37.9%), followed by condom (9.5%) where female sterilization attributed 67% of the mCPR in India. The two LARCs methods included in the current family planning programme of India are IUCD and injectables (ICMR-NIRRH, 2019) but the prevalence of these two methods are only 2.1% and 0.6%, respectively among currently married women aged 15-49 years. Nevertheless, the prevalence of traditional methods increased 5.8 to 10.3 percent during 2015-16 and 2019-2021 (IIPS & ICF, 2021). To expand the contraceptive basket of choice, Government of India is initiating to add another LARC method which is Implant.

Rationale of the study

Recently, India announced the inclusion of contraceptive implant in her public health system. Earlier it was not available, therefore, it's accessibility and affordability within Indian territory was a major challenge for Indian women in reproductive age groups. However, concurrent monitoring data and field visit to Family Planning Association of Nepal's (FPAN) clinics in the Terai region of Nepal revealed that there is a high demand of contraceptive implant among Indian women living near border areas. A large proportion of Indian women cross the border and come to FPAN clinics to avail contraceptive implant services. Other than the information that a significant number of women from India visit FPAN clinics in the Terai Region of Nepal to avail contraceptive implant, nothing much was known. The monitoring data provided only the number of such cross-border clients, but no information on their preferences, demands, and other perspectives could be found. Against this backdrop, it becomes critical to explore their cross-border journey.

In this context, the IPPF-SARO and FPAN jointly initiated a cross-sectional exploratory multi-centric study by adopting a mixed-methods approach to unearth the trajectory of the cross-border journey of Indian women who visited Nepal to avail contraceptive implant services. The footfall of cross-border clients for contraceptive implant is the selection criteria of the study clinics. The outcomes of the study demystify the journey and help in building evidence-based strategies for expanding family planning (FP) basket-of-choices in India.

Objectives

The broad aim of this study is to explore and generate evidence-based information of the women's cross-border journey from India to Nepal to access contraceptive implant. The specific objectives are as follows:

1. To demystify the 'journey course' of cross-border implant clients from India to Nepal
2. To unearth the pathways of decision-making, information seeking and pathways of access and barriers of contraceptive implant among cross-border clients.
3. To explore experience and satisfaction of the cross-border clients
4. To understand the detail profile of cross-border implant clients
5. To understand the perspectives of service provider who provides implant contraceptive services to cross-border clients.

Contraceptive Implant in Nepal

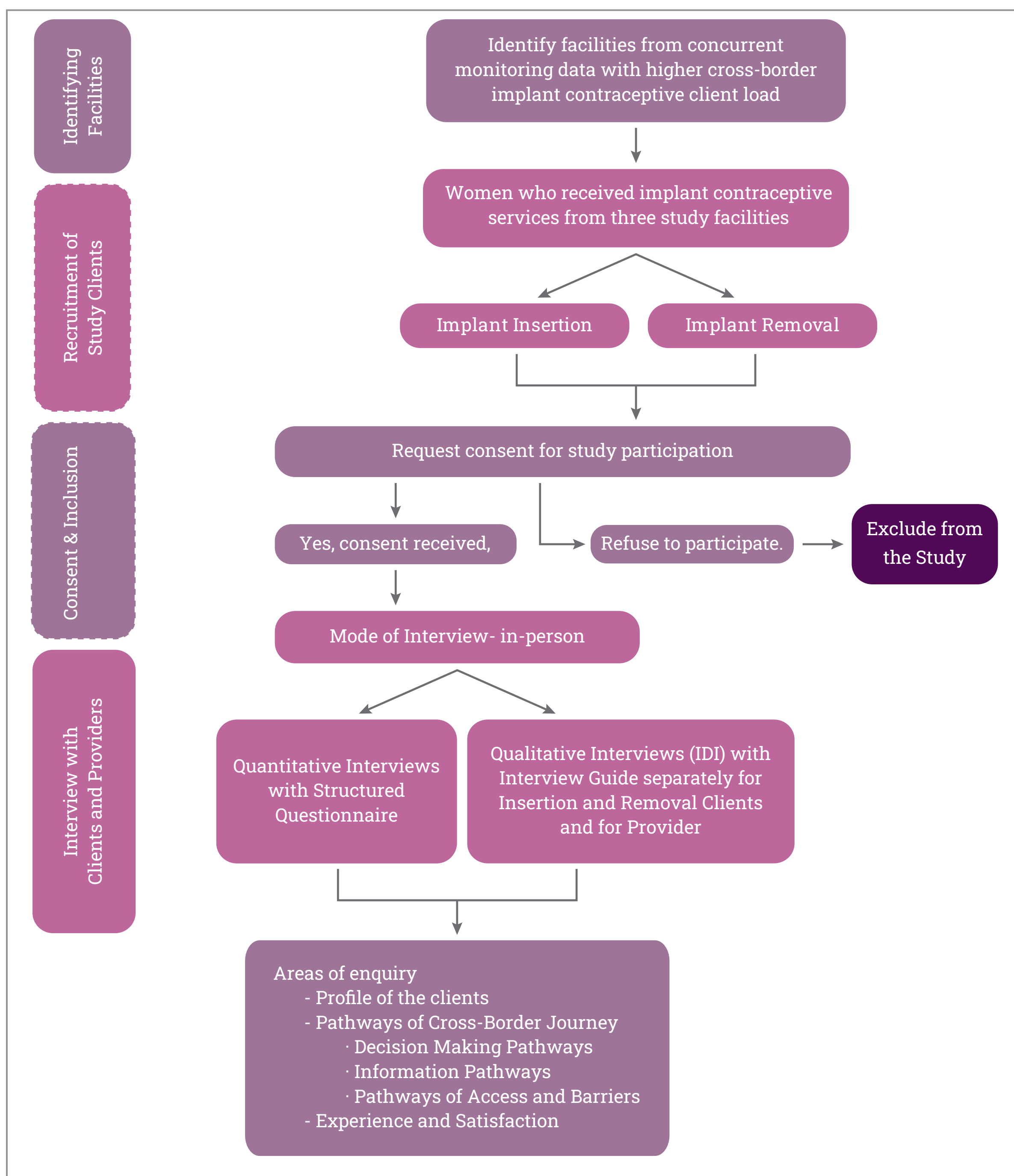
The journey of implant contraceptives started in Nepal during 1980s when a pre-introductory multi-centric clinical trial study for the Norplant contraceptive method was initiated in Nepal along with 30 other countries, by WHO in response to a technical evaluation called by The United Nations Population Fund (UNFPA) in 1984. The Ministry of Health, Nepal in November 1984 approved the study to be conducted in two centres of Patan and Kathmandu. The broad objective of this study was to evaluate safety, efficacy, and the overall acceptability of implant contraceptives. On completion of the study, Norplant contraceptives were made available through the family planning programme of Nepal during 1988-89. Further, Jadelle, a two-rod implant was introduced in Nepal in 2008 replacing the six-capsule Norplant. The product was launched initially in the Kathmandu Valley. An acceptability study was done for Jadelle by Nepal CRS Company. After this study, Jadelle was included in the Nepal FP Program. Today Jadelle is available across the country through the national FP programme and is administered by trained health workers (Rajbhandari, et.al., 2022).

DATA AND METHODS

Data and Methods

Study design

A cross-sectional multi-centric exploratory study was designed by adopting mixed method approach (both quantitative and qualitative) to understand pathways of Indian women's cross border journey to Nepal to avail contraceptive implant. The study implementation flow is mentioned below.



Study area

This study was conducted in three Family Planning Association Nepal (FPAN) facilities, where the footfall of cross-border implant clients was maximum. (Table 1). Selected study facilities were Family Health Clinic Biratnagar of Morang branch, Family Health Clinic Saptari of Saptari branch and Family Health Clinic Dhanusha of Dhanusha branch. Exit interviews were conducted with eligible women who had come from India for implant contraceptive services (either insertion or removal) at selected FPAN clinics in the Terai region from September – December 2022. Cross-border implant clients were interviewed upon receiving their consent to participate in this study. The monthly monitoring statistics of selected FPAN clinics situated in the bordering region are presented in table (Table 1) which was the basis for selecting these three facilities for study.

TABLE 1. Number of Indian women visiting in selected Family Planning Association Nepal (FPAN) Clinics to avail Implant Contraceptive services during January – December, 2022

Branch	Name of the facility	Number of cross border Implant Clients during Jan – Dec. 2022												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Kanchanpur	FHC Kanchanpur		4	3	2	3	3	0	0	3	0	0	2	20
Kapilvastu	CC Kapilvastu	2	1	2	2	2	2	0	0	1	0	0	0	12
Nawalparasi	CC Parasi (Nawalparasi)	2	3	1	2	4	2	1	3	2	1	3	1	25
Nawalparasi	CC Rampurwa	1	2	2	2	1	3	2	4	1	2	2	2	24
Morang	FHC Biratnagar	21	29	42	5	18	30	30	9	22	24	0	0	230
Banke	CC Ganapur	3	1	3	1	2	2	1	1	1	0	3	0	18
Banke	FHC Banke	1		11	4	7	1	3	1	2	0	3	2	35
Bardiya	CC Bardiya	3	12	21	5	17	3	10	10	16	3	14	12	126
Sarlahi	CC Sarlahi	0	7	5	3	3	3	4	1	3	1	2	0	32
Saptari	FHC Saptari	50	45	102	25	30	43	15	32	14	16	48	91	511
Dhanusha	FHC Dhanusha	22	44	34	0	10	16	19	25	16	17	18	26	247
Dhanusha	CC Khajuri	13	10	10	9	25	25	20	21	25	9	2	26	195
Total		118	158	236	60	122	133	105	107	106	73	95	162	1475

Note: All the above facilities are situated in the India-Nepal border areas.
FHC = Family Health Clinic; CC- Community Clinic

Sample size

The sample size was determined with the assumption of 40% expected prevalence (p), 90% confidence level (z) and 5% desired precision (d). Further, with the assumption of 15% of non-response rate, the final sample size calculated was 205 women using the equation = $\frac{z^2(p(1-p))}{d^2}$

However, the study was able to collect data from 218 cross-border implant clients (202 implant insertion clients and 16 removal clients) from the selected three facilities: FHC Biratnagar (n=70), FHC Saptari (n=106) and FHC Dhanusha (n=42). Apart from quantitative data, qualitative in-depth interviews were conducted with 11 women (cross-border clients) and one service provider to explore their experiences and perspectives on contraceptive implant.

Study tools

A structured questionnaire was designed and administered to collect quantitative data to understand the trajectories of the cross-border journey. In-person interviews were conducted with cross-border implant clients in three facilities of FPAN. The questionnaire was first developed in English and then translated into Hindi as the study investigators were well-versed with the Hindi language. However, a bi-lingual questionnaire had been canvassed. A total of 218 clients were successfully interviewed from three facilities.

TABLE 2. Areas of inquiry- cross-border implant client survey tool

	Questions
Background Characteristics	Country
	State
	Type of service availed
	Place of residence
	Age
	Education
	Marital status
	Religion
	Working status
	Number of children
	BPL[1] card status
	Main source of household income

1 BPL (Below Poverty Line) is a benchmark used by the Government of India to indicate economic disadvantage and to identify individuals and households in need of government assistance and aid. It is determined using various parameters which vary from state to state and within states.

Pathways	
Demand and supply of implant	Have you visited a nearby health facility in your native place for implant contraceptive?
	How many facilities/providers have you visited in your native place for implant contraceptive service?
Reasons for the cross-border journey	Main reason to come to this facility for implant contraceptive?
Decision making	Who helped you decide on availing implant contraceptive service?
	Who made the final decision about implant contraceptive?
Sources of information	From where did you come to know about implant contraceptive?
Accompanying support	Who accompanied you to come for implant contraceptive service?
Switching of method	What was/were the contraceptive method(s) you or your husband/partner were using prior to adopting implant contraceptive?
	Reasons for implant contraceptive adoption?
Information provided by service provider.	Did you (clients) receive the following information from the provider a. Explain the method b. Talk about possible side effects c. Explain what is to be done if you face any problems d. Explain the implant removal process if required e. Explain about the method switch in future, if required
Barriers and challenges	Challenges faced by you (clients) in availing implant contraceptive service
Recommendation	Do you think any steps would be helpful to mitigate barriers or difficulties of getting an implant at your native place?
Experience and Satisfaction	Feeling after receiving the implant contraceptive services
	Rate your overall experience of availing implant contraceptive service
	Advice to friends or relatives to use implant contraceptives
	Would you refer your relative or friend to this facility?
	Would you return to this facility?
	How much amount did you spend in the overall journey to avail implant contraceptive service?
For clients coming for the removal of implant	
Timing of insertion	When was the implant, you have come to get it removed today, inserted in your arm?
Information about the scheduled time of removal	At the time of insertion did the provider tell you when to get it removed?
	At the time of insertion did the provider tell you to come back to the same place for removal?
Perceived effectiveness	Did you believe that your implant was effective at preventing pregnancy?
Reasons for implant removal	What is the reason for implant removal?
Side effects	What type of side effects you experienced?
Removal behaviour	Did you ever try to have your implant removed before today?
	Has anyone influenced you to remove this implant contraceptive?
Satisfaction	Were you satisfied with your removal experience today?
Adoption of method	Did you adopt another contraceptive method today?

Apart from the quantitative questionnaire, three types of in-depth-interview (IDI) guides were developed to conduct (a) interviews with cross-border implant clients who visited study clinics for implant insertion; and (b) cross-border implant clients who visited study clinics for implant removal and (c) with the service provider. In the case of service provider, one such interview was conducted with a provider in one of the FPAN clinics situated in the Terai region. Her perspective based on her interaction with cross-border clients was captured in this study. . Guides were first developed in English and then translated into Hindi.

TABLE 3. Domains of in-depth interview guides

Target participant	Domains
Insertion client	Socio-demographic characteristics
	Contraceptive use dynamics
	Decision making pathways
	Information pathways
	Pathways of access and barriers
	Experience and satisfaction
Removal client	Socio-demographic characteristics
	Contraceptive use dynamics
	Decision making pathways
	Pathway of access and barriers
	Aspects on implant removal
	Reasons for removal
	Perceived experience
Service provider	Background characteristics
	Perspective of the provider about the demand for implant
	Profile of the cross-border clients from the lens of provider
	Perceived challenges and barriers of availing implant among cross-border client
	Reasons and motivating factors to avail contraceptive implant from other country

Implementation approach

The data collection was conducted for the quantitative survey and qualitative in-depth interviews in September-December 2022. Data was captured through paper-based questionnaire for each client under a quantitative survey whereas, all the IDIs were audio-recorded after receiving consent from the participants. The IDIs were later transcribed and translated from Hindi to English by independent consultant. The lead researcher trained the interviewers on the study tools and guides (both quantitative and qualitative) along with ethical aspects. Written consent was obtained from all the respondents before the interview.

Data analysis

For quantitative data, analysis was carried out in IBM SPSS Statistics 21.0 software (IBM Corp. 2012). Following completeness and consistency checks, the main analysis focused on trajectory of cross border clients to avail contraceptive implant services. Descriptive statistics were presented for both categorical and continuous variables. Categorical variables were further analysed using frequencies and percentages, while for continuous variables, means, and standard deviations were performed.

For qualitative data, all the responses from IDIs were first transcribed verbatim from the recordings into Hindi. After validation of all the responses, transcripts were translated into English to preserve the original meaning, context, and for archiving purposes. The coding and management of transcripts was done using ATLAS.ti 22.2.5 and MS-office 2010. Deductive and inductive approach was used for developing the analysis matrix. Deductive thematic analysis was used in the first phase to identify the constructs and themes of barriers. In the second phase, inductive approach was used to identify the emerging sub-themes. The thematic codes were reviewed, refined through multiple discussions among researchers, until universal consensus was reached. Verbatims from cross border clients and service provider are presented in italics to highlight nuances emerged from the data. The case studies using *pseudonymization* of participant's name.

FINDINGS FROM THE QUANTITATIVE STUDY

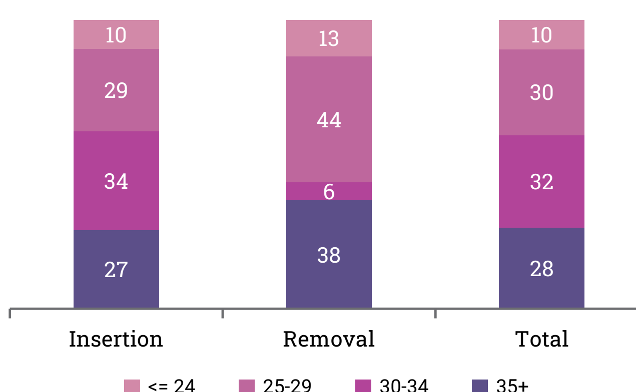
Findings from the Quantitative Study

Profile of the respondents

To understand the pathways of cross-border journey of women from India to Nepal to access contraceptive implant services, the cross-border clients were interviewed. The study captured the perspectives of a total of 218 cross-border Indian clients who visited FPAN clinics for contraceptive implant services. The FPAN study clinics were - FHC Biratnagar, Morang Branch (total clients-70), FHC Saptari, Saptari Branch (total clients 106) and FHC Dhanusha, Dhanusha Branch (total clients-42). We interviewed all the cross-border implant clients who gave their consent to participate in the study in the above-mentioned selected FPAN facilities in Nepal.

All the study respondents were from the Bihar state of India. Among them, 202 were implant insertion clients and 16 were removal clients. Table-4 below portrays the background characteristics of the study respondents. Most (about 90%) belonged to rural areas of Bihar. The mean age of all the clients interviewed was 27.7(±4.8) years, and there is no difference in the mean age of clients who came for insertion and removal clients (insertion clients 27.6 (±4.8) and removal clients 27.9(±5.8) years). Of the total clients who came for insertion, over one-third (34%) of the clients were in the age group 25-29 years, 29% were aged 30-34 years and 27% were up to 24 years old. Only one-tenth of the implant

FIG. 1: Distribution of age among the cross-border Implant clients (%)



insertion clients were in the elder age group (35 and above). On contrary, majority of the removal clients were aged 30-34 years (44%), followed by ≤ 24 years (38%) (Fig. 1).

More than one-third (38%) of the clients reported completing middle school, followed by 28% who completed either secondary education or above. Whereas about one-fourth (26%) of the clients had never attended school, and eight percent completed primary education, (Table 4). A majority (90%) of the clients were housewives and not working for cash. A noticeable fact is that among the clients who came for insertion, more than two-fifths (42%) had at least three living

FIG. 2: Average number of children by type of clients

children and 27% had four or more living children. While among removal clients, nearly two-thirds (63%) had one-two children. Overall, the average number of total living children was 3.1(±1.1). The average number of male and female children was 1.8(±0.8) and 1.3(±0.8) (Fig. 2). The main source of household income of these clients was agricultural wage labour (43%), followed by cultivation/family farm (23%), small business (21%) and around 12% were engaged either on non-agricultural labour or service. Almost all the respondents (95%) reported having below poverty line (BPL) card, which indicates that cross-border implant clients belonged to poor economic strata.

TABLE 4. Socio-demographic and economic characteristic of cross-border clients

Characteristic:	Implant Insertion		Implant Removal		Overall	
	n	%	n	%	n	%
Country/State						
India, Bihar	202	100.0	16	100.0	218	100.0
Current age of client (year)						
Up to 24	55	27.2	6	37.5	61	28.0
25-29	69	34.2	1	6.3	70	32.1
30-34	58	28.7	7	43.8	65	29.8
35 & above	20	9.9	2	12.5	22	10.1
Average age of clients (Year) (±SD)	202	27.6(4.8)	16	27.9(5.8)	218	27.7(4.8)
Place of Residence						
Village	176	87.1	13	81.3	189	86.7
Town	26	12.9	3	18.8	29	13.3
Education						
Primary (1-4)	17	8.4	0	0.0	17	7.8
Middle (5-9)	76	37.6	7	43.8	83	38.1
Secondary & above	56	27.7	6	37.5	62	28.4
Never attended school	53	26.2	3	18.8	56	25.7
Marital Status						
Married	202	100.0	16	100.0	218	100.0
Unmarried	0	0.0	0	0.0	0	0.0
Religion						
Hindu	119	58.9	10	62.5	129	59.2
Muslim	83	41.1	6	37.5	89	40.8
Working Status						
Working	21	10.4	0	0.0	21	9.6
Not Working/Housewife	181	89.6	16	100.0	197	90.4

Number of Children						
1-2 children	63	31.2	10	62.5	73	33.5
3 children	84	41.6	3	18.8	87	39.9
4 & above	55	27.2	3	18.8	58	26.6
Average Number of Children						
Total (± SD)	202	3.1(1.1)	16	2.4(1.0)	218	3.1(1.1)
Sons (± SD)	202	1.8(0.8)	16	1.5(0.8)	218	1.8(0.8)
Daughters (± SD)	202	1.3(0.8)	16	0.9(0.9)	218	1.3(0.8)
Have BPL Card						
Yes	192	95.0	16	100.0	208	95.4
No	10	5.0	0	0.0	10	4.6
Source of Household Income						
Cultivation/Family Farm	48	23.8	3	18.8	51	23.4
Agricultural Wage labour	88	43.6	6	37.5	94	43.1
Non-Agricultural Wage labour	15	7.4	0	0.0	15	6.9
Small business	42	20.8	3	18.8	45	20.6
Salaried	9	4.5	4	25.0	13	6.0

Reasons for cross-border journey

This study tried to unearth the reasons behind the cross-border journey for contraceptive implant in Nepal. Study findings (Table 5) underscored that two-thirds (66%) of the women visited facilities in their vicinities in India to avail contraceptive implant, indicating that a significant majority of women tried to access implant in their native places before deciding to go to Nepal. More than one-fourth (26%) of women visited at least two facilities in and around their native places for contraceptive implant services. Five women visited more than two facilities hoping to get implant contraceptive services in their native place of Bihar, India, whereas 40% visited one facility before their cross-border journey. Findings revealed that 68% of the respondents cited non-availability of implant contraceptive in Bihar, India, as the main reason for visiting FPAN clinics. On the other hand, social influence by their friends and relatives (32%) who had already availed implant contraceptives from FPAN clinics in Nepal also played a part in encouraging them to come to Nepal for Implant contraceptive.

TABLE 5. Women who tried to avail implant before cross-border journey		
	Overall (N=218)	
	n	%
Visited nearby facility in the native place in India		
Yes	143	65.6
No	75	34.4
Number of facilities/providers visited in the native place in India		
Only one facility	87	39.9
Two facilities	51	23.4
More than two facilities	5	2.3
None of the facilities visited	75	34.4
Reasons to visit FPAN clinics for implant contraceptive from India		
Not available at native place in India	148	67.9
Friend/relative adopted implant from this facility	69	31.7
Too costly at my native place	1	0.5

Pathways of cross-border journey for contraceptive implant

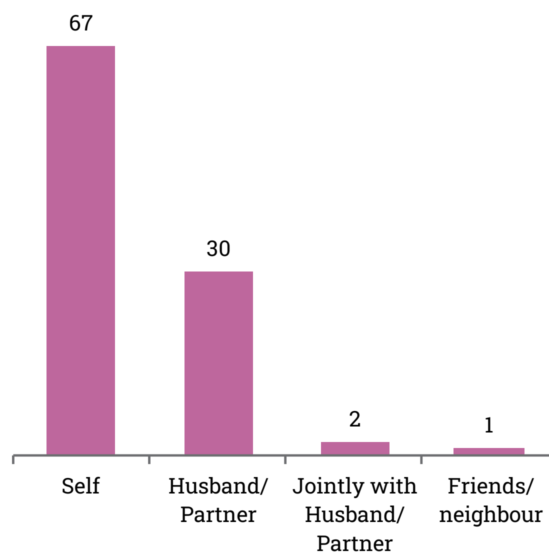
This study aimed to explore the pathways of the cross-border journey for contraceptive implant. Three different pathways, namely, decision-making pathways, information pathways, and pathways of access and barriers were explored. Findings of decision-making pathways and information pathways are presented in Table 6. Findings underscored that husband/partner was the main support system who helped in decision making for implant contraceptive. More than half (52%) of the women highlighted that they consulted their husband/partner and in the complex pathways of decision-making, their husband/partner supported them to opt for implant contraceptive. Social influence was also an important aspect that played a part in decision making. Relatives, and neighbours (14%) who had availed implant contraceptive, helped these women to decide on opting implant from the neighbouring country-Nepal. More than one-tenth of the women (12%) added that their mother-in-law had helped them in decision-making. Other than them, mother, sister, sisters-in-law, and friends also helped 22% of the women in decision making for contraceptive implant.

It is evident that women from cross-border who came to FPAN clinics for implant had the agency to a take final decision on their own, though their near and dear ones helped them in the decision-making process, more than two-thirds of the women mentioned that they took the final decision on whether to opt for implants or not by themselves. Rest of the women (30%) revealed that husband was the final decision maker when

it came to deciding on opting for implant. If husband did not give permission, they could not take the decision on their own, as cited by some women. Less than two percent of women said the final decision was taken jointly with husband/ partner (Fig. 3).

This study also enquired on whether the clients were accompanied by someone on their journey to Nepal for contraceptive implant. Majority of them (54%) mentioned that their husband/ partner had come along with them as the facility was quite far from their native place. Mothers-in law have also played an important role not only in decision making (12%) but also in accompanying them to Nepal. Around 15% of the women were accompanied by their mothers-in-law. Due to the distance and unknown place, women preferred to come in a group for implant contraceptive services, as 16% women underscored that their friends, or neighbours, or other relatives were the accompanying support during their visit.

FIG. 3: Decision making pathways towards implant contraceptive (%)



On contrary, some women did not have any accompanying support for their visit. Two percent of them mentioned that they crossed border all alone (Fig-4).

FIG. 4: Person accompanying during cross-border journey (%)

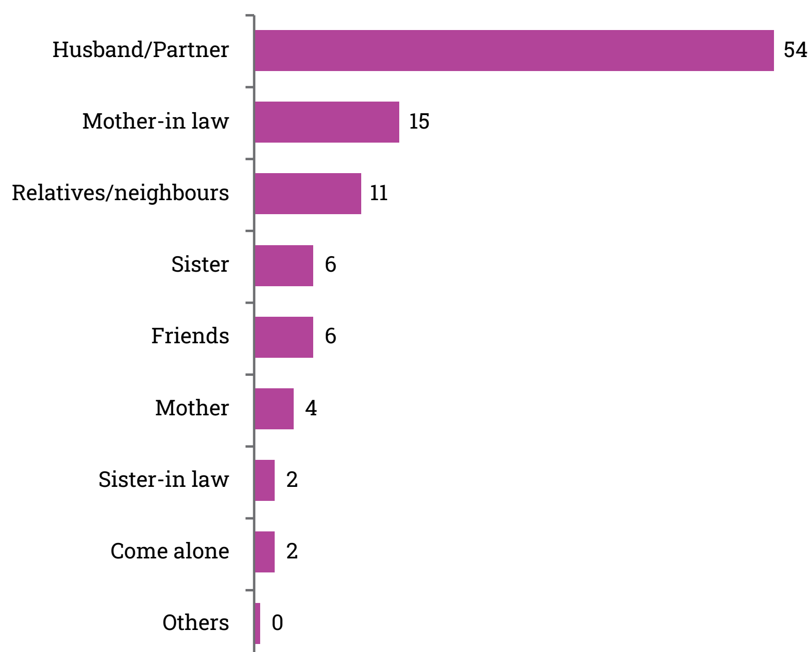


TABLE 6. Decision-making and information pathways of cross-border journey to access implant contraceptive services

Pathways:	Overall (N=218)	
Decision-making	n	%
Helped in decision making for implant		
Husband/Partner	113	51.8
Mother	11	5.0
Mother-in law	26	11.9
Sister	18	8.3
Sister-in law	6	2.8
Friends	14	6.4
Relatives/neighbours	30	13.8
Final decision for contraceptive implant		
Self	146	67.0
Husband/Partner	66	30.3
Jointly with Husband/Partner	4	1.8
Friends/neighbour	2	0.9
Information		
Source of information on implant1		
Husband/Partner	172	78.9
Mother	35	16.1
Mother-in law	84	38.5
Sister	54	24.8
Sister-in law	33	15.1
Friends	100	45.9
Relatives/neighbours	95	43.6
Media (TV, Radio, Newspaper)	2	0.9
Accompanying person during cross-border journey		
Come alone	5	2.3
Husband/Partner	117	53.7
Mother	9	4.1
Mother-in law	32	14.7
Sister	14	6.4
Sister-in law	5	2.3
Friends	12	5.5
Relatives/neighbours	23	10.6
Others	1	0.5
Note: 1 Multiple responses, do not add to total N & 100%		

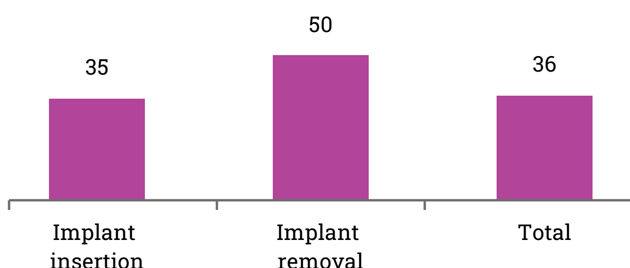
Table 6 also depicts information pathways among cross-border clients. More than three-fourths (79%) of the women highlighted that they came to know about implant contraception from their husbands/partners, followed by friends (46%), other relatives/neighbours (44%), mother-in-law (39%), sister (25%), mother (16%) and sisters-in-law (15%).

Contraceptive use behaviour

a. Beginning of contraceptive journey by using implant (first-time contraceptive user)

This study further enquired whether implant was the first contraceptive method used by the cross-border clients. Findings revealed that more than one-third (36%) of women started their contraceptive use journey with implant contraceptive which is noticeable among both – insertion and removal cross-border clients. Those who came for implant insertion, 35% had never used any contraceptive methods before, whereas, among the clients who came for removal, half of them (50%) were first-time contraceptive users (Fig-5).

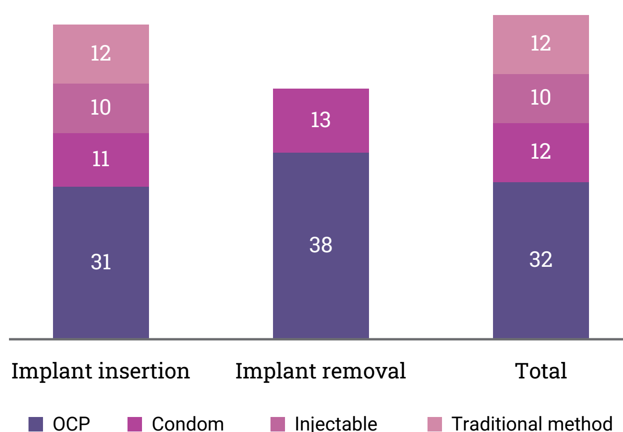
FIG. 5: First-time contraceptive users by type of clients (%)



b. Switching from other contraceptive methods to Implant

Almost two-thirds of implant acceptors in the study had switched from other methods to contraceptive implant (Figure 6). Most clients switched from daily oral contraceptive pills (32%) followed by condom (12%). On the other hand, 10% of women also switched from short-acting method- injectables to long-acting implant contraceptive. It is evident from the findings that more than one-tenth (12%) users of traditional methods also moved to implant contraceptive, which portrayed the high level of acceptance of this new long-acting modern method.

FIG. 6 Switched from other methods to Implant (%)



c. Reasons for adopting contraceptive implant as perceived by cross-border clients

Women highlighted various reasons for adopting contraceptive implant. Most of them (90%) cited 'easy to use' as the prime reason for opting implant. Little over half of the respondents also highlighted that 'need not to take every day' as

the major relief for them, they also added that they often forgot to take pills every day, which caused unintended pregnancy and abortion incidence in their life. As indicated in Fig 7, the third important reason for choosing to implant as a preferred method of contraception was 'no one would come to know'- with reference to the location and visibility of the contraceptive implant to others. They underscored that the implant is placed under the skin in the arm, and usually covered by cloth, thereby concealing it from others. Based on the information they received from their friends, relatives and neighbours who were (current or in the past) users of implant contraceptive, many respondents cited 'no side effects', 'regain fertility when needed' and 'normal ('not disruptive') menstrual cycle' as other reasons for adopting implant.

FIG. 7: Reasons for adopting implant contraceptive (%)

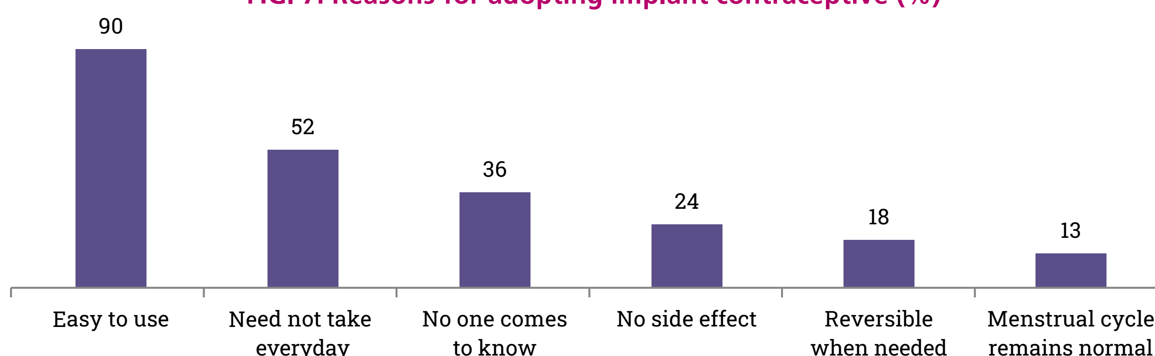


TABLE 7. Method switched for opting contraceptive implant

	Overall (N=218)	
	n	%
Contraceptive method previously used before Implant 1		
OCP	69	31.7
Condom	25	11.5
Injectable	21	9.6
Traditional Method	25	11.5
Not using	78	35.8
First time user of any contraceptive method		
Yes	78	35.8
No	140	64.2
Reasons for Adopting Contraceptive Implant 1		
Easy to use	196	89.9
Need not to take everyday	113	51.8
Menstrual cycle remains normal	28	12.8
No side effect	52	23.9
Reversible when needed	39	17.9
No one comes know	78	35.8
Note: 1Multiple responses, do not add to total N & 100%.		

Contraceptive use behaviour by parity

The study tried to understand contraceptive use behaviour before adopting contraceptive implant and its relation to parity (Table 8). Findings revealed that women having three to four children were mostly using modern contraceptive methods indicating that completion of family size was the criteria for them to adopt modern contraceptive method. Therefore, in the dynamics of modern contraceptive use behaviour, limiting the family size dominated over spacing. On the other hand, women with lower parity (having 1-2 children), preferred, traditional methods of contraception over modern methods of contraception.

TABLE 8. Parity and contraceptive use behaviour before adopting implant

Parity	Any method	Any modern	Any traditional	Not using
1-2 children	67.1	49.3	17.8	32.9
3 children	67.8	57.5	10.3	32.2
4 Children	66.7	61.1	5.6	33.3
5 and above	36.4	31.8	4.5	63.6
Total (N)	140	115	25	78

Challenges and barriers faced to access contraceptive implant and perceived solutions

Almost all women (99%) revealed that they faced challenges and barriers to accessing contraceptive implant as they had to come from India to Nepal for this. They added various challenges that they faced in their whole cross-border journey. Majority of women (95%) highlighted that travelling long distance was the major challenge for them. They felt it was the non-availability of implant in their country which forced them to travel to another country to avail their contraceptive method of choice. Half of the women revealed that '*traveling to another country*' was seen as a challenge to them. More than two-fifths of women (41%) said the high travel-related costs were the prime challenge. As most of the respondents were from below socio-economic strata, bearing the cost of this journey was a huge burden on them. Some of them (5%) who travelled unaccompanied felt travelling alone was one of the major challenges. On an average they had to spend Rs. 1169.5 (±490.0)/- to avail contraceptive implant while travelling from their native place in India.

This study also enquired about the perceived solutions to mitigate those challenges from the lens of cross-border clients (Table 9). In response to those challenges, women underscored few mitigations plan to overcome those, about three-fifths (57%) of women suggested about the availability of contraceptive implant in their nearby facilities, so that other women who want to avail this contraceptive but are unable to travel cross border can avail the method. Whereas 43% of women felt '*if the ANM can provide implant services like other contraceptives*', it would solve the problem of long-distance travel and associated costs for this travel.

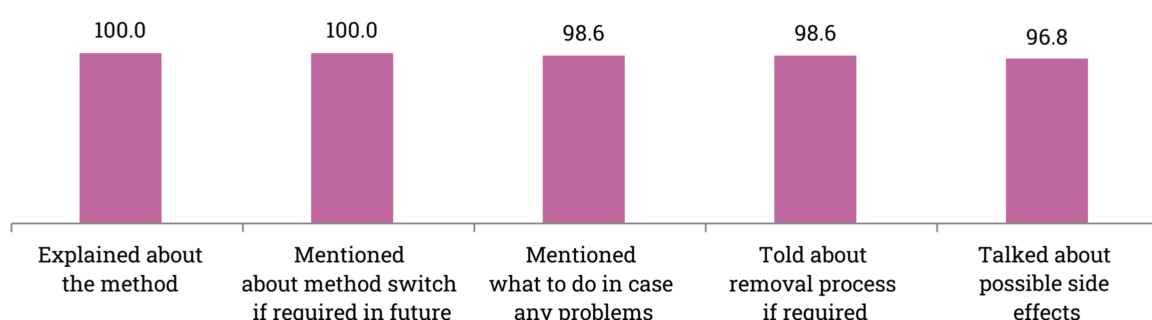
TABLE 9. Challenges faced by the women and perceived solutions towards mitigating barriers

Challenges and barriers:	Overall (N=218)	
	n	%
Challenges and barriers faced		
Yes	216	99.1
No	2	0.9
Challenges related to1		
Long distance to travel	206	95.4
Travel to other country	109	50.5
spend lots	89	41.2
came alone	10	4.6
Out of pocket expenditure		
Average cost of cross-border journey to avail implant contraceptive (±SD)	218	1169.5 (490.0)
Perceived steps to mitigate challenges		
If available in nearby facilities	124	56.9
If ANM can provide implant service like other contraceptive	94	43.1
1 Multiple Responses, do not add to 100%. And calculated based on women who faced challenges and barriers		

Experience of receiving information

All women said that they had received information about the method and about switching to other methods if required in the future. Almost all the women said that they were informed about possible side effects (97%), and steps to be taken if they had any problems (97%) after insertion and about the removal process (98%). Only around three per cent of the women said that they were not informed about possible side effects.

FIG. 8: Experience of receiving information at the time of accessing implant contraceptive



Overall feelings, experience, and satisfaction after receiving contraceptive implant

In the study, an effort was made to assess the client's feelings and satisfaction with this new contraceptive method (Table 10). Overall, 46% of the client said they were 'happy', 32% were 'relaxed' and 22% 'relieved'. Similar trends were observed for both implant insertion and removal clients. However, only one implant insertion client reported anxiety. Among insertion clients, 55% were 'very satisfied' and 43% 'satisfied'. Almost all the insertion clients highlighted that they would recommend implant to others (99%), refer this facility (98%) to relatives/friends and 98% would return to this facility in future. While 81% of the removal clients would recommend implant, 87% would refer this facility to relatives/friends and 81% would return to this facility in future.

TABLE 10. Women's overall feelings, experience, and satisfaction after receiving implant contraceptive services by type of client

	Implant Insertion (N=202)		Implant Removal (N=16)		Overall (N=218)	
	n	%	n	%	n	%
Overall Feelings						
Relieved	41	20.3	6	37.5	47	21.6
Relaxed	66	32.7	4	25.0	70	32.1
Happy	94	46.5	6	37.5	100	45.9
Anxious	1	0.5	0	0.0	1	0.5
Overall Experience						
Very satisfied	111	55.0	6	37.5	117	53.7
Satisfied	87	43.1	10	62.5	97	44.5
Neither satisfied nor dissatisfied	3	1.5	0	0.0	3	1.4
Dissatisfied	1	0.5	0	0.0	1	0.5
Would recommend to others to take Implant contraceptive						
Yes, I will recommend	200	99.0	13	81.3	213	97.7
No, I will not recommend	1	0.5	1	6.3	2	0.9
Don't know	1	0.5	2	12.5	3	1.4
Would refer this facility to relatives and friends						
Yes	198	98.0	14	87.5	212	97.2
No	0	0.0	0	0.0	0	0.0
Don't know	4	2.0	2	12.5	6	2.8

Would return to this facility in future						
Yes	198	98.0	13	81.3	211	96.8
No	1	0.5	0	0.0	1	0.5
Don't know	3	1.5	3	18.8	6	2.8
Note: Among all women						

Perspectives of removal clients

Table 11 reflects the perspectives of removal clients. The average duration of contraceptive implant use was 50.8 (±18.0) months. Further enquiry of all the clients who came for removal of implant contraceptive before the tenure of five years about whether they received information regarding the tenure, place for removal etc. findings revealed that all clients who came for removal were aware of the place where they could come for removal and of the duration the implant would remain effective. All the removal clients underscored that provider had mentioned the right time to remove ('*removal time*)', and advised them to '*come back at the same place for removal*' at the time of insertion. All removal clients believed that contraceptive implant is an effective method to prevent pregnancies, although some of them came for early removal due to other reasons.

TABLE 11. Perspectives of Removal Clients		
	Implant Removal (N=16)	
	n	%
Total month of uses		
Mean (±SD)	16	50.8(18.0)
Range	16	54.0
Information received at the time of insertion		
Provider told about removal time		
Yes, in five years	16	100.0
Told to come back to the same place for removal		
Yes	16	100.0
Client's perspectives on using implant as an effective method for preventing pregnancies		
Yes	16	100.0
Note: Among women who visit the clinic to remove implant contraceptive only.		

Reasons for removal of implant contraceptive

We further enquired about the reasons for removal of the contraceptive implant. The findings revealed that (Table 12) the desire for another child was one of the important reasons for the early removal of contraceptive implant, with nearly one-third (31%) of women wanting to get pregnant again. Disapproval of their husbands/partners was a reason in 12% of respondents; and side effects (menstrual disruption or allergy) (12%) were other reasons, mentioned for early removal of contraceptive implant. Among all the cross-border removal clients, three of them tried to get the implant removal services at their native place to avoid cross-border journey but as they highlighted that they were either refused by the provider in India or non-availability of the removal services at the native place forced them to come to FPAN clinics in Nepal for getting the service of removal.

TABLE 12. Reasons for Implant removal

	Implant Removal (N=16)	
Reasons for implant removal	**n**	**%**
Want to get pregnant again	5	31.3
Removal time come	7	43.8
Husband/Partner disapproved	2	12.5
Experienced side effects (Menstrual Disruption or Allergy)	2	12.5
Type of side effects faced	n=2	
Menstrual Disruption	1	50.0
Other (Allergy)	1	50.0
Person who influenced for removal of implant		
Husband influenced	4	25.0
No one influenced	12	75.0
Ever Faced Challenges to get the removal service done		
Never tried	13	81.3
Tried in the native place, but did not get the service	2	12.5
Provider refused	1	6.3
Adoption of the contraceptive method after removal	n	%
Yes (OCP)	1	6.3
No	15	93.8

Note: Calculated based on women who visit FPAN clinics to remove implant contraceptive.

FINDINGS FROM THE QUALITATIVE STUDY

Findings from the Qualitative Study

TABLE 13. Profile of the Respondents (IDIs)-Summary Table

Client's Serial Number	Resident of State & Country	Place of residence	Age	Education	Religion	Occupation	Living children			BPL Card holder	Source of household income	Implant service availed from FPAN facility
							T	M	F			
C1	Sitamarhi, Bihar, India	Village	27	03 standard	Hindu	Housewife	3	2	1	Yes	Salaried	Insertion
C2	Madhubani, Bihar, India	Village	25	No schooling	Hindu	Housewife	2	2	0	Yes	Salaried	Insertion
C3	Sitamarhi, Bihar, India	Village	26	05 standard	Hindu	Working	3	2	1	Yes	Non-Agri wage labor	Insertion
C4	Madhubani, Bihar, India	Village	26	12 standards	Hindu	Housewife	2	1	1	Yes	Small Business	Insertion
C5	Sitamarhi, Bihar, India	Village	24	12 standards	Hindu	Housewife	2	2	0	Yes	Small Business	Insertion
C6	Sitamarhi, Bihar, India	Village	31	04 standard	Hindu	Housewife	3	2	1	Yes	Agricultural wage labor	Insertion
C7	Sitamarhi, Bihar, India	Village	24	10 standards	Hindu	Housewife	3	1	2	Yes	Small Business	Insertion
C8	Madhubani, Bihar, India	Village	25	No schooling	Hindu	Housewife	2	2	0	No	Non-Agri wage labor	Insertion
C9	Madhubani, Bihar, India	Village	30	No schooling	Hindu	Housewife	3	2	1	Yes	Salaried	Insertion
C10	Sitamarhi, Bihar, India	Village	20	10 standards	Hindu	Housewife	3	1	2	Yes	Small Business	Insertion
C11	Supaul, Bihar, India	Village	26	10 standards	Hindu	Housewife	2	1	1	Yes	Salaried	Removal

A qualitative study design was adopted to gather more insight into the study objectives through in-depth interview (IDI) techniques. The IDIs aimed to understand the perspective from the cross-border implant contraceptive acceptors and health care provider's perceptions and experiences. This section explores the overall journey of implant cross-border clients which includes the pathways of decision-making, information seeking and pathways of access and barriers. Additionally, the detailed perspective of service provider who provides contraceptive implant services to the clients was also explored through IDI. Most critically, these interviews offered anecdotal evidence on the overall journey of cross-border implant clients regarding their choice, access, and barriers. This qualitative study covered 12 in-depth interviews, ten implant contraceptive insertion clients, one removal client, who came for removal before completing the tenure of five years, and one service provider of implant contraceptive. Detailed profile of the respondents is mentioned below in Table 13.

Profile of the respondents

A total of 12 in-depth interviews were conducted, of which 11 were conducted with women who availed implant contraceptive services and one with the service provider. All women who availed implant contraceptive services visited FPAN facilities from different districts of Bihar, India. Majority of them were from Madhubani and Sitamarhi districts and one from Supaul district of Bihar, adjoining to Nepal border.

All women mainly belonged to rural areas and lived in joint family structures. Three women never attended school, while three completed primary level education and other five completed secondary or higher secondary level of education.

TABLE 14. Socio-Demographic and Economic Profile of IDI Respondents

Characteristics:	(N =11)
Place of residence	
Madhubani	4
Sitamarhi	6
Supaul	1
Main source of income	
Agricultural wage labour	1
Non-Agri wage labour	2
Salaried	4
Small Business	4
Education	
No formal education	3
Primary	3
Secondary/ Higher Secondary	5
Age	
20-24 years	3
25-29 years	6
30 & above years	2
Mean age (±SD)	25.8 (2.8)
Working status	
Housewife	10
Working	1
Number of living children	
2 children	
1 son +1 daughter	2
2 son + 0 daughter	3
3 children	
1 son + 2 daughter	2
2 son + 1 Daughter	4
Mean living children – total (±SD)	2.5(0.5)
Mean living children – boy (±SD)	1.6 (0.5)
Mean living children – girl (±SD)	0.9 (0.7)
Household own BPL card	
No	1
yes	10

Majority of the respondents were in the age group of 25-29 years; However, the mean age was 26 (±2.8) years and the mean number of living children was 2.5(±0.5).

Mean number of male living children was much higher than the mean number of female living children to these women. All women followed the Hindu religion. All but one woman belonged to poor socio-economic status, as indicated by their possession of the BPL card.

Contraceptive use behaviour and dynamics

To understand the contraceptive use behaviour and dynamics of the study participants, questions on contraceptive use, sources of information, and name of the preferred contraceptive methods were asked during the interviews. At the beginning of the interviews, majority of the participants highlighted that they were unaware of the contraceptive methods, women generally used to prevent pregnancy in their community. However, they gradually opened-up and named few of the methods that were in use in their areas of residence. The method most cited was 'Antara (an injectable contraceptive which offers three-months of contraceptive cover), followed by Oral Contraceptive Pills (OCPs)- specifically, Mala-D. Two participants mentioned the most common method as sterilization in their area, while some underscored condom and implant contraceptive as the most common methods.

All the participants reported that social interaction and networking among women was the main source of information on contraceptive methods. Women spoke about contraceptives with their friends, neighbours, and close relatives including mothers and month-in-laws. Surprisingly, none of the women mentioned about receiving information on contraception from the front-line health workers or *Anganwadi* workers, while one of the participants mentioned receiving OCP from an *Anganwadi* worker.

> "10 days back two of our neighbours came to avail this method from this facility. We were all talking about it. Then I came to know that the other two women were also using this method for the last three years".
>
> **– Woman, 24 years, mother of 3 children, Bihar, India**

Pathways- Decision Making, Information Seeking, Access, and Barriers

Preference for contraceptive implant

The findings revealed a strong preference for small family sizes among women who participated in the study. More than half of the participants reported that they used at least one method earlier to limit family size. However, perceived '*lack of satisfaction*', '*unwanted pregnancy*', '*fear of unwanted pregnancy*', '*fear of missing dose*', '*side effects*', and '*reluctant for multiple visits to avail contraceptive service*' were among the most reported causes for stopping or switching of previously used contraceptive methods. The most common contraceptive method they ever used was injectable (*Antara*), followed by oral pill (Mala-D). A couple of women also reported that with the method used earlier, sometimes when they missed the dose or did not follow the method properly, they got pregnant and had to go for induced abortion. Thus, they lost trust in the modern contraceptive methods that they

were using earlier. On the other hand, study respondents underscored the benefits of implant contraceptive which they have heard about from their neighbours, relatives, and friends, through their social interaction and networking and learn about the effectiveness of implant contraceptive as it protects for long-term and they believed that this method will also positively help them to retain desired family size. As a result, they were switching to implant contraceptive.

"I was using Mala-D pills earlier that Anganwadi centre Didi provides us. I consumed it for two months and then my cycle become irregular. There were few times when I was having my cycle twice a month. Hence, I stopped consuming Mala-D. Now I came to know about five years method (implant contraceptive) and want to use this".

– Woman 27 years, mother of 3 children, Bihar, India

"Earlier I was using three-month injection (Antara). But I had to visit health facility every three months to avail the injection. If I use this five years method (implant contraceptive) then I will be relaxed for the whole five years. There is no fear of pregnancy and abortion for whole five years".

– Woman 25 years, mother of 2 children, Bihar, India

"I faced some problems related to conceiving and after eight years I got pregnant and delivered my first child. At that time, I was not using any contraceptive method. After having my second son and daughter, we decided to use contraceptives and my husband started using condom. I was also consuming Mala-D. Still, I become pregnant twice. I opted for induced abortion for both the cases since we were not intended to have more than three children. Remembering consumption of Mala-D every day is a real problem. Hence, I want to switch to five years method (implant contraceptive)".

– Woman 30 years, mother of 3 children, Bihar, India

"I was using three months injection (Antara). The problem was I had to visit health facility every third month to avail injection. I did not like it. We were thinking about operation (female sterilization), but then realized that operation (female sterilization) is problematic. Then I came to know about this five-year method (implant contraceptive) and its benefits. We decided to switch to this method".

– Woman, 25 years, mother of 2 children, Bihar, India

Perspectives on Choice and Decision about Implant Contraceptive

Preferred contraceptive methods

The cross-border clients who participated in this study were sure that they did not want more than two or three children and that they had already achieved the desired family size. Moreover, all the women had at least one living son. The mean number of living sons of study participants was 1.6 (±0.5) which was much higher than the mean number of living daughters 0.9 (±0.7). Ideally, they were wishing to limit their family size and not spacing the births. On the other hand, they were not sure about not having any more children, and thus did not want to opt for sterilization.

> "I have two sons and my other two brothers-in-law also have sons. Thus, I was reluctant to use any contraceptive and wanted to have a girl child. But my husband and mother-in-law said that there is no guarantee that I will get a girl. What if I deliver a boy again? Raising too many children is expensive".
>
> **– Woman 27 years, mother 3 children, Bihar, India**

The study findings revealed that the cost of rearing children and peer pressure are the enabling factors that motivated towards small family size and adoption of long-acting contraceptive methods. They perceived that the contraceptive implant was a better option, than sterilization or other modern spacing methods. Nevertheless, few of the participants had unintended pregnancies due to contraceptive failure during using pills and condoms and they went for induced abortion. To maintain the desired family size the study participants considered abortion as a process of birth limiting. Sometimes they went for multiple abortions rather than using any contraceptives. The change in family size among implant contraceptive seekers from India was also observed by the implant service provider at FPAN clinic. The service provider of Janakpur FPAN clinic said, "*Earlier Indian women who had 5-6 living children were coming to Nepal to avail implant contraceptive. However, the situation is changing. Now a day's, a woman with 5-6 children is rare. All the women who are coming to avail implant are having a maximum of three children*". These conversations indicate an increasing desire for small family norms in the community, resulting in increased use of long-acting reversable contraceptive- implant among Indian women living near the India-Nepal border.

Sources of information

To understand the pathways of decision-making towards implant contraceptive it is important to know the sources of information about the said method. Hence, during IDIs, women were asked how they came to know, who told them about implant contraceptive etc. Participants highlighted that they came to know about implant contraceptive from their close relatives, like mothers, sisters, sisters-in-law, and from friends and neighbours as well. Sometimes, women discussed this issue with multiple people either for verification or to accumulate more information. In this regard neighbours and sisters-in-law played a

key role. The source of information for majority of women were neighbours, followed by sisters-in-law, and sisters whereas, it was friends for some women and few of them mentioned mothers and other relatives as a source of their information regarding contraceptive implant.

"My sister-in-law first told me about five years method (implant contraceptive). Then, I heard other women also talking about it. Then I came to know that many women in my neighbourhood opted this method. Even my own sister is also using this method".

– Woman 27 years, mother of 3 children, Bihar, India

"My natal home is in Nepal. Thus, I have lots of relatives staying in Nepal. After my second child, my mother told me about this five years method (implant contraceptive). My mother and sisters-in-law are also using this method. They told me it is a good method to prevent pregnancy without pain".

– Woman 24 years, mother of 2 children, Bihar, India

All study participants highlighted that women from their community who were using implant contraceptive, availed it from FPAN clinics in Nepal. Thus, the participants had first-hand information about side effects, safety, and efficacy from those who were users of implants. Those who have already opted implant contraceptive from FPAN clinics in Nepal were provided directions to reach FPAN clinics as well. Sometimes, these women accompanied other women at FPAN clinic to avail implant contraceptive services.

"I came to know about this method from my neighbours. Four of my neighbours are using this method. Among them two women are using this method for the last three years, while the other two availed it during last 10 days. They said that this is a good method and there is no problem at all. Hence, I am here to avail five years injection (implant)".

– Woman 30 years, mother of 3 children, Bihar, India

"I came to know about this method from my relative who is staying in Nepal. Then my mother and sister-in-law told me that they are also using this method for a long time and have not faced any problems till now. They also encourage me to use this method".

– Woman 24 years, mother of 2 children, Bihar, India

Couple of the participants also spoke about relatives who live in Nepal and who would talk about contraceptives including implants when they visited them in India or when they went to Nepal to meet them. Thus, the knowledge about implant contraceptive diffused from Nepal to India. The acceptability of implant contraceptive seemed to increase when they heard close relatives and friends shared their first-hand experience of using this method.

"My sister who is using this method told me to opt this method. She told me about bringing too many children is problematic and expensive. I must opt contraception and use five years injection (implant contraceptive). Since, it is not painful, and I will not be in fear of unplanned pregnancy".

– Woman 26 years, mother of 3 children, Bihar, India

Decision-Making Process towards Implant Contraceptive

Decision towards adopting contraceptive implant over other modern methods

To understand the decision-making pathways for cross-border implant clients, several questions were asked during the IDIs to explore the reasons for availing implant contraceptive from Nepal and the decision-making process regarding their selection of implant contraceptive. The most common reason for switching to implant contraceptive from other methods were '*fear of side effects*', '*knowledge and awareness about implant through their social interaction and networks*', '*negative experiences and myths with other modern methods*'. Women who achieved desired family size were not likely to opt for permanent method, *per se* female sterilization. Most of these women reported that women should '*rest for at least six months after sterilization*', '*need nutritious food*', and '*cannot engage in strenuous physical activity*'. They think it is impossible for them to rest for six months because they have young children to take care of. Moreover, it would cause pain in their body. Those who were consuming OCP 'mentioned about *irregular menstruation cycle*', '*increase anxiety of missing dose*', '*causes unwanted pregnancy*' followed by '*induced abortion*'. Alternatively, they revealed that women have to visit health facility every three months if they use *Antara* injectables.

"I do not like operation, because after operation you have to take rest for at least six months, need good food, and can't do laborious physical activities. How can a woman rest for six months? I have small kids who need to be cared for. Other than this, I have to do household chores also. I can't opt for operation".

– Woman 27 years, mother of 3 children, Bihar, India

On the other hand, the beneficial effect of implant contraceptive diffused through social interaction and network of women from Nepal to India. Thus, women who were not satisfied with available contraceptive methods favoured this new method. The benefits of the implant contraceptive listed by the participants were 1) by opting this method they will be tension free regarding unintended pregnancy *for entire five years*', so women do not have to visit health facility at regular intervals, and that will reduce travel costs and related expenditure. Thus, the implant contraceptive is a cost-effective way to limit family size. 2) The insertion process of the implant contraceptive does not cause pain; 3) the insertion area requires minimal care, and the arm could be fully used within a week; 4) no restrictions for physical activities. Most importantly, women would be free from the anxiety of missing doses or becoming pregnant.

"Earlier I used Antara. But that method required going to the health centre for injections every three months. So, I stopped using it. Today I got insertion of this five-year method (implant contraceptive). I am free for at least five years. Moreover, it will not cause any harm and not affect my body negatively".

– Woman 25 years, mother of 2 children, Bihar, India

Reasons and initiatives to avail implant contraceptive from cross-border -India to Nepal

All the participants were aware that implant contraceptive is not available in India. Before visiting FPAN clinics in Nepal, most of the participants enquired about implant contraceptive in the health facilities and pharmacies in their vicinity. However, all of them knew about the non-availability of contraceptive implant in Indian public health facilities- the reason for their travel to Nepal.

Women emphasized that contraceptive implant should be made available in India near the place where they live. They also mentioned that they know many women who want contraceptive implant are not able to go to Nepal, so it would be very beneficial for them if implant is available in their area in India. They felt that the availability of implant contraceptive in India would help save on the out-of-pocket expenditure and remove the need to travel to Nepal.

"I have visited few Government facilities in our area to avail this method. They said that they have only three months injection (Antara). I can choose contraceptive, which is available to them only, but I decided to come here to get five- year method (implant contraceptive)".

– Woman 27 years, mother of 3 children, Bihar, India

"Knowing the benefits of five years method (implant contraceptive) I visited health facilities in our area in Bihar to avail this method. But they provided me three months injection (Antara). Then I visited private facilities also, but all of them said that five year's injection (implant contraceptive) is not available to them. Hence, I am here and avail this method".

– Woman 25 years, mother of 2 children, Bihar, India

"In India, copper-T is available. This five-year method (implant contraceptive) is not available in India. Hence, we have come here to avail five-year method (implant)".

– Women 24 years, mother of 3 children, Bihar, India

"I wish this method is available in India. Then we do not have to travel so far and spent lots of money If this method is available in India, then couples with poor economic families would also be able to avail this method. Why do not you open this facility in India?"

– Woman 31 years, mother of 3 children, Bihar, India

Decision of crossing borders for implant contraceptive and support mechanisms

Making the final decision to avail contraceptive implant by crossing the border is a complex process. Many said permission of husbands and other family members was necessary before taking the decision to travel to Nepal or use implant. All the participants underscored that they discussed this with their close family members and relatives, specifically with mothers-in-law, husbands, sisters-in-law, and mothers. Majority of the women interviewed mentioned either their husbands (5) and mothers-in-law (6) were supportive of their decision to adopt implant contraceptive. In few instances, mothers-in-law accompanied the respondent to FPAN clinics in Nepal. Hence, the mother-in-law's role was not limited to only support in decision-making rather accompanied support as well. A couple of women also reported that they were counselled by their mother-in-law when to use implant contraceptive Therefore in the complex pathways of decision-making, mother-in-law and husband play an important role.

"My sister availed this method five years back. That time I also wanted to use it. But my mother-in-law said that time, let's have another child and then opt for this method. So, that time I did not and availing it now".

– Woman 25 years, mother of 2 children, Bihar, India

However, the final decision-making scenario was a little different. One out of ten participants only reported that the final decision towards contraceptive implant was taken jointly, whereas some of the women made the final decision of opting contraceptive implant by their own.

"At that time, I was accompanying my sister to get this five-year method (implant contraceptive). My sister asked me if I would like to adopt it too. At first, I was hesitant. Then I decided to use it. I have decided on my own. Now after five years I have come to replace it with a new one".

– Woman 31 years, mother of 3 children, Bihar, India

On contrary, there were a few of the respondents mentioned that they completely depended on their husbands to decide on implant use. When asked for the reasons, women replied '*husbands are breadwinners*', '*I am depended on him*', '*I don't have opinion*', '*I never differ with my husband*'. One participant highlighted that it was her husband who decided on family size and that she had very little role to play in decision making on contraception or which method to adopt.

"I didn't want to use any contraception, as I was hoping for a girl. But my husband says we already have three boys and there is no guarantee that their fourth will be a girl. Raising too many children is difficult. So, let's go and avail this contraceptive method. My sister and husband accompanied me here".

– Woman 27 years, mother of 3 children, Bihar, India

More than half of the participants said that they knew about implant for a long time. However, the final decision about adopting implant contraceptive was made only few days efore the journey. The reasons they reported were '*child was too small*', '*mother-in-law suggested to opt it later*', '*wanted more children*', and '*other issues in the family*'.

"I was wishing to avail five years method (implant contraceptive) since my second child was two months. But my mother-in-law told to wait till the child become little older. Now my son is one year old and today I availed this method".

– Woman 24 years, mother of 2 children, Bihar, India

Barriers to access Implant contraceptive

All the participants revealed that non-availability of contraceptive implant at their home country-India is a major barrier. They believed that if contraceptive implant were made available in health facilities in India, women regardless of their socio-economic status would adopt this method as it would be cost-effective as well suitable for them. Apart from this, transit time and associated cost are two prominent barriers that restrict many women from availing this method from FPAN clinic in Nepal. India-Nepal-India average transit timing on an average is almost 5 hours, if they come directly without any diversion. However, more than one-third of respondents underscored they had lost their way to the clinic because of not knowing the location well. For some, this also resulted in them reaching the clinic late after the closing time, causing them to stay an extra day to visit the clinic the second time. This had increased incidental costs incurred by these women. As most of the women, belonged to poor economic strata, this out-of-pocket expenditure perceived a major barrier for them.

"I forgot the exact location of this facility. So, after reaching Janakpur we were roaming here and there. Then when finally reached here observed the facility had closed for the day. Hence, we stayed here at night then again come today. This incidence increased our expenditure. If this method is available in our area in India, then we need not to spend so much money for this".

– Woman 26 years, mother of 3 children, Bihar, India

The women, on an average spent Rs. 500/- as travel costs. They also felt the costs for food items in Nepal was higher than their native place. Hence, they were reluctant to buy food items for the whole day. Language and poor road condition were also listed as some of the other barriers to accessing implants services in Nepal.

"We came here yesterday but could not locate the clinic. So, we stay whole day in Janakpur. Then we reached a big hospital. They told us the exact location of this clinic. When we finally came here, the guard told the clinic was closed for that day. So, we decided to stay here and come again in the next day. I have already spent Rs. 1500-2000/-. Everything here is very expensive. A small packet of biscuit which is costing Rs. 5/- in India price of that is Rs. 10/- here".

– Woman 25 years, mother of 2 children, Bihar, India

Experience, satisfaction, and recommendation

All the participants were asked about their experience and satisfaction after availing implant contraceptive. All the participants underscored that they were very satisfied and happy. They felt that it was worth enduring long journey, bad road condition, problems in locating the clinic and huge expenses for the contraceptive implants services they received in Nepal. They said they were happy and relieved that they did not have to worry about missed doses of contraceptive pills, unintended pregnancy, or induced abortion for 5 years. They appreciated the service providers of FPAN clinics for smooth and painless insertion of implant; providing information on contraceptive implant and taking care of the area of skin where the implant was inserted. They also gained knowledge about the side effects associated with this method and steps to be taken when faced with these side effects.

"At first, I was really worried about the process or I will feel pain. But the sister did it too quickly while we were talking. I did not feel any pain. She told me to take care of this insertion area for 7 days and not to lift heavy weight for few days. She also asked me to come back if I feel any problem. I am really happy".

– Woman 24 years, mother of 2 children, Bihar, India

Few of the participants asked if the provider could come to India and provide implant contraceptive.

"Sister, why do not you come to our village and provide this method. Large number of women in our area wants to adopt this method. But they do not much money to visit Nepal".

– Woman 22 years, mother of two children, Bihar, India

Perspective of a Removal Client

This study also attempted to explore the factors behind the decision to remove implant contraceptive before the completing tenure of five years. One of the study participants -interviewed to get a perspective on this was a 26-year-old mother of two children, who visited the clinic to avail contraceptive implant removal service. The participant studied till intermediate and was visiting the FPAN clinic from Supaul district of Bihar, India. Her sister-in-law had accompanied her to the clinic in this visit. Women in her native place, she said, usually opted for sterilization, Injectable and

OCP to limit their family size. However, she decided to adopt the contraceptive implant based on what they heard about it through social interaction and networks of their close friends, neighbours, and relatives.

After marriage, she did not use any contraceptive methods at first, but after having two children, she decided to use family planning and used injectable contraceptive to begin with. This is aligned with available global literature, which mentioned the contraceptive use dynamics, where women do not prefer to use any contraception up to one parity. After having one child women generally go for contraceptives. Here, she availed implant contraceptive in March 2021. She was then counselled for other contraceptive methods from the contraceptive basket of choices. She opted for implant contraceptive. Since, this method will protect her for five years and she felt best suited for her. She was totally relaxed and happy.

"After marriage for two years, I had not used any methods. After having two children I decided to use contraceptive. I availed five years injection (implant contraceptive) and I was too happy".

– Woman 26 years, mother of 2 children, Bihar, India

As a reason for removal of contraceptive implant, she highlighted the problem of menstrual disruption She underscored that she really did not want to remove contraceptive implant, but if the problems continue, then multiple visits would be difficult as it has travel and cost implications. Consequently, she decided to remove implant.

She was also asked why she did not remove it in India. She replied that she did not know any place in India where implant contraceptive could be removed. Also, she inserted implant contraceptive from this clinic, so she came here to remove. She talked to her mother-in-law and husband. They said if she thinks the implant contraceptive is causing problems than she should get it removed. "*I thought that this method of contraception would be suitable for me, so at that the time I availed it*". She thought she would opt for sterilization if the implant contraceptive had to be removed. In this cross-border journey her sister-in-law had accompanied her.

She also mentioned that had contraceptive implant removal services been available in India, she would have considered it as it would have avoided the need to undertake long journey.

Trajectory of cross-border journey of Neha to avail implant contraceptive

I am Neha, 27 years old and I am a mother of three children. I have come from Sitamarhi district of Bihar to avail implant. I live in a joint family, along with my mother-in-law, father-in-law, two brothers-in-law and two sisters-in-law and their children. I am a house wife and I have studied till class-III.

I came to know about this method from one of my sisters-in-law. Usually women in my area undergo sterilisation after having the desired number of children or when they have completed their family size. However, I was very scared about 'operation' involved in sterilisation and I decided to opt out of it. It was my sister-in-law who told me about this method (Implant Contraceptive). She said this method would prevent unintended pregnancies and cause no pain. Other than my sister-in-law, few other women from our village had also opted for contraceptive implant from Nepal. They mentioned that this method is effective for five years; one need not worry about unintended pregnancies. I just had to take care of the insertion area for few days after the procedure as a precaution. With this knowledge, I discussed with my mother-in-law and husband. Both agreed and suggested that I adopt this method. However, it was my husband who took the final decision. I never differ from my husband and if he asks me not to go somewhere, I never go there.

Earlier, I was not very eager to adopt any contraceptives. I wished to have a girl, since all my three children are boys. My mother-in-law and husband made me understand that there was no gurantee that my fourth child would be a girl child. Bringing up many children is difficult for us, since we have to spend money on their education and other needs. Then, I realized it is better not to have any more children. Earlier, I was using Mala-D from *Anganwadi* center. But within two months of use, my menstrual cycle become irregular. There were incidences when I got my cycle twice a month. Consequently, I stopped using those pills. Moreover, I also do not like to take pills every day as I forget sometimes to take them on time due to the many household chores I have to perform being a part of a large joint family'.

Earlier, I didn't know whether this method was available in India. But my neighbours and friends told me that this method was not available in India. I also cross-checked with the facilities near my home and found out the same. So, I came here with my mother-in-law and sister-in-law to avail this method. We started from our home around 5 o'clock in the morning and traveled for almost two-three hours. We spent about 1,000 INR on transport, food and other expenses. Despite assurances, I was worried about the pain the procedure would cause and the overall procedure of insertion . However, the sister (staff nurse) was very good, she completed her task while we were talking. I did not even realise when of the insertion got over. I am very happy. At least for the coming five years I do not have to worry about any unintended pregnancies or abortions. I will definitly recommend this method to my friends and relatives. However, if this method could be made available in our vicinity, it will be very helpful for other women who might not be able to travel till here.

Trajectory of cross-border journey of Pooja to avail implant contraceptive

My name is Pooja. I am 26 years old and a mother of three children – two boys and a girl. I have come from Pupri in Sitamarhi district, Bihar, India to avail five-year method (implant contraceptive). I live in a joint family.

I heard about this method for the first time from my sister. She had used this method for a long time. Once, she had asked me to accompany her to this clinic for the removal of her implant. She had also enquired if I wanted to use this method. At that time I had given a thought and then of course the thought of expenses involved in bringing up more children especially when I already have three children occurred to me. That was the time I took the decision to on my own to adopt this method. That was five years ago and now I am here to remove the older implant and avail a new one.

I am very satisfied with this method. I have not faced any such difficulties with it. When I looked back, in hindsight I think I had taken the right decision at the right time which relieved me from the worries of unintended pregnancies and repeated abortions. Before adopting implant I was using pills, but I was always anxious about missing a dose which could lead to unintended pregnancies. Other than my sister, a relative of my sister-in-law is also using this method. We all are very happy with this method. The best thing about this method is that it works for five years and one does not have to visit health facility multiple times. Moreover, if you want another child then removal of the implant is easy. But the most challenging part is that I had to come here to avail implant contraceptive travelling a long way, which is one of the barrier for us along with the cost involved in travel. One needs to think twice about the money before coming. It is also scary to come to to a new country especially unaccompanied so we have to wait till someone agrees to come with us. If this method was available near my hometown then it would have been of great help. I had visited few medical shops in our village, they told me this method was not available in India. So, I did not have any other options other than coming here to avail the implant service. This time my whole family (mother-in-law, brothers-in-law, sisters-in-law and husband) is accompnying me, since we want to pay a visit to the Janaki temple situated here. Till now we have spent over 1,000 INR on travel. The biggest problem we faced this time was forgotting the location of this clinic', because it has been a long time since I visited this clinic.

IDI with Staff Nurse who is the provider of contraceptive implant services

We also conducted interview with the staff nurse, who provides implant services in FPAN clinic of Dhanusha branch. Given that she interacts with the cross-boder clients in her facility, it was imperative to get her perspective for this study. She has been working in the current position of staff nurse in the clinic for the last 12 years. She is 41 years old and has a bachelor's degree in nursing.

She informed that the Dhanusha facility primarily provides family planning services, along with other SRH services, like induced abortion, ANC and PNC services, vaccination, and general check-ups. She conducts both insertion and removal services for implant.

Country	Nepal
Province/State	Province 2
District	Dhanusha
Block	Ward 4
Facility	FHC Dhanusha
Age of the respondent (approximate years)	4 1 Years
Education (highest degree attended)	Bachelor of Nursing
Respondent type	Provider
IF Provider, Ask, Provider Type	Staff Nurse
How long you have been working in this facility	12 years

Provider's perspective on demand and use of Implant contraceptive among cross-border clients

Usually, women from nearby city and villages come to this facility. Other than them a significant number of women come from border regions of India, mainly from Sitamarhi, Madhubani and Supaul districts of Bihar for contraceptive implant services. She mentioned that among all clients who attend for family planning, those from Nepal usually prefer injectables - which is a three-monthly injection, followed by preference for implant. Whereas cross-border clients from India come for implant contraceptive. This facility started providing implant contraceptive since 2016. She mentioned that there are more Indian women opting for implant from this clinic more than Nepali women. Even after providing information about all other modern methods of contraceptives, cross-border clients from India preferred contraceptive implant. She also stated that in a month up to 30-35 women come from India to her clinic to avail implant services and usually, they come in groups of 8-10 Indian women. This facility is particularly crowded with contraceptive clients during winter, i.e., November – January every year. According to her, it is rare to find a a first-time contraceptive user opting for implant. Most of the women would have tried Antara or OCP before switching to implant.

Preference for implant contraceptive from provider's lens

The provider mentioned that women coming from India preferred to opt implant contraceptive as they felt more convenient than other methods. She also added that insertion of an IUCD required exposer of private body part. Women do not like that. Whereas pill needs to be taken daily and the chances of missing doses are high. The Depo (injectables) is a good option but it requires multiple visits to clinic at regular interval. On the other hand, the implant contraceptive is effective for five years, so clients feel relaxed. Thus, they do not have to visit health facility multiple times. Furthermore, in case of implant they can remove and opt for sterilization at any time.

The provider underscored that generally women who adopt implant contraceptive had already achieved their desired family size. If in future they do not want to keep implant then they switch to sterilization, because removal of implant is also very easy and not painful for women.

> "Most of the clients who come to our facility, already have two/three children. Thus, they do not want to have more children. But they do not want to go for sterilization also. In that situation implant is a very good option for them to limit number of children, that is why women prefer implant contraceptive."

Reasons for cross-border journey-from provider's lens

Indian women travel to Nepal to avail Implant contraceptive because it is not available in India as highlighted by the provider. Clients prefer this method because if they adopt this, they would be relaxed for five years. Thus, the clients are keen to opt implant which is effective for five years than other contraceptive methods. According to her, some clients think injectables and implant are same method with different time of effectiveness. Hence, they want to use implant contraceptive for its 5-year duration. As implant contraceptive is not available in India, women come to Nepal to avail implant. Majority of the women came to know about implant contraceptive through their social interaction and networks. They are aware about the benefits of Implant contraceptives from their friends, neighbours, and relatives. She felt the diffusion of knowledge pathway might be through these relatives, friends, and neighbours.

Profile of cross-border implant client from provider's lens

She underscored that previously, the women came for contraceptive were having 5-7 children, but now women with 3-4 children come to the clinic. The decreasing trend of family size is visible. The age of the cross-border clients, who come to this clinic for contraceptive ranges from 22 to 35 years. Unmarried women also opt implant contraceptive. She also revealed that majority of the women belongs to poor socio-economic strata. "Majority of them are daily wage labours and *most of the women come here from the poor families.*" She added that "*clients hesitate to spend money*".

On an average the cross-border implant clients need to spend 700- 2000 rupees for their overall journey. She also emphasized that irrespective of religion, women come from bordering region to avail implant contraceptive from her facility.

Family support

She highlighted, most of the time women generally inform their families first about using implant contraceptives and then they come to the clinic. These cross-border clients generally are accompanied by any of their family members, mothers-in-law, mothers, or husbands in most of the cases. She also added that earlier husbands were very reluctant about women's health and contraceptive use but nowadays husband asks lots of question about taking care, side effects, dos, and don'ts etc. She also added that the support to the women from husband's side has increased now a days. However, there is one in ten women who hide it from her family. She felt that if women do not inform husbands and mothers-in-law then the situation for women at home will be problematic.

Side effects and reasons of removal

The provider underlined that heavy bleeding and prolonged spotting were the side effects that most women complained about, followed by headache and amenorrhea among the clients who opted implant contraceptive. She mentioned that providers and counsellors counselled the clients and asked them to return to the clinic if they experience any problems. Women with these problems are often prescribed medicines. According to her, those women faced any side effects mainly the bleeding related problem they come for early removal other than this when implant contraceptive removal due date came, or in case of menopausal women, they come for removal of implant contraceptive. On the other hand, she highlighted that women also come for reinsertion of implant contraceptive after completion of five years duration.

> "Some clients come to us with heavy bleeding or prolonged spotting, amenorrhea and headache complains. But major problem what I observed is bleeding problem. At the time of insertion, we ask them to take medicine if they face these problems. Few of these clients returned with medicines and few decided to remove implant contraceptive in case they face any problems".

Perspective on barriers and challenges among cross-border implant clients

The provider spoke about various challenges faced by cross border women from India during their journey. First, they had to travel long distance, make multiple transit change, leave young children at home, locating FPAN clinic and bear the overall cost for their journey. She also added none of women ever said they had a happy and comfortable journey. She also mentioned there were clients who did not know the exact location of the FPAN clinic thus they had to roam around for long time to come to the facility. Most of these clients were in hurry to avail services since they had to travel long distance and they left young kids at home. Initially, all the clients felt worried about the process and fear of pain but she highlighted that all women were happy after getting implant

contraception services. Clients felt that their journey was successful after receiving the services they want. However, she felt that Indian women would be happier if implant contraceptive is available in their vicinity. Thus, they would not travel long distance or spend extra money for travel, food, and other expenditure. Nevertheless, it would improve the accessibility and affordability of implant contraceptive to them.

DISCUSSIONS AND WAY FORWARD

Discussions & Way Forward

This study explored the trajectory of cross-border journey of Indian women for availing contraceptive implant services in Nepal. This study portrayed the agency of women in overcoming all barriers to accessing their preferred choice of contraceptive method. Therefore, this study led us to think from the perspective of the rights and choices of women rather than the socio-cultural and political contexts.

Findings revealed that the availability and accessibility of contraceptive implant was the main reasons for the cross-border journey of Indian women. Women initially visited health facilities in their vicinity to avail this preferred method. Some women even visited multiple health facilities and pharmacies. However, the unavailability of contraceptive implant in their country forced them to travel to another country-Nepal for implant contraceptive. Further social influence by their friends and relatives who had already availed implant contraceptives from FPAN clinics in Nepal encouraged them to initiate their journey. Recently, India has announced the rolling of implant contraceptives in the national Family Planning program, which will further expand the choice for women seeking contraception.

In this study, the pathways of decision-making, information seeking & access and barriers of contraceptive implant journey among cross-border clients were unearthed to capture the trajectory of their journey. The study identified reproductive autonomy as a key factor with majority of cross-border clients stating that they consulted their husbands/partners before opting this method. The noticeable fact is that cross-border clients who came to FPAN clinic for contraceptive implant had the agency to take the final decision on their own. More than two-thirds of the women underscored that they took the final decision on opting implant by themselves.

Findings also underlined that more than one-third of the women started their contraceptive use journey with contraceptive implant. This reflects the preference and choice of women towards implant. Additionally, evidence underscored that more than one-tenth of the traditional method users also switched to implant contraceptive, which portrayed the high demand and acceptance of this new long-acting modern method. The providers delivering implant services to cross-border clients stated that the most preferred modern contraceptive method was implant and most cited reasons by the clients were “easy to use”; “no need to take it every day”; “no one comes to know”; “not needed to go the facility regularly”, despite of challenges to come to a foreign land by crossing the border.

Almost all women mentioned that they faced challenges in their cross-border journeys; long distance to travel (95%), travel to another unknown country (51%), out of pocket expenditure (41%) and travelling alone (5%) were the major challenges highlighted by the cross-border clients. Given the challenges, almost three-fifths of women urged for making implant contraceptive services available in their nearby health facilities in India.

All women underscored about their knowledge and awareness on implant as the providers of FPAN clinics explained the method in detail including switching options for future if required. The hindsight thoughts among the cross-border clients were happy, relax and relieved after getting the services and over 95 percent women shared their satisfaction and mentioned to recommend this method to others.

Among the 16 cross-border removal clients, desire for another child is one of the most important reasons for early removal of contraceptive implant, nearly one-third of women wanted to get pregnant again and stated this as the reason for their early implant removal. Disapproval of either husband/partner or experiencing side effects (specifically menstrual disruption or allergy) were

among the other reasons, mentioned for early removal of implant.

This study paves ways for future research on women's experience and acceptance of contraceptive implant. One of the outcomes of this study is demystification of user journey which could help in building evidence-based strategies for expanding family planning basket of choices in India. India has announced the rolling of implant contraceptives in the national FP program which will expand choice for women seeking contraception. However, the question on accessibility of this new contraceptive to the last mile is an area to be looked at. It is interesting to note that in Nepal, implant services were delivered by staff- nurses which is unique to the South Asian context. The implant is both inserted and removed by the staff-nurses, thus demonstrating a good example of successful task sharing in healthcare. Task sharing policy for implant is being implemented in a few countries across the globe. Likewise, in South Asia, Nepal has executed task sharing policy for implant and made significant contribution to the accessibility of implant and improved quality of care for their clients. Therefore, advocacy efforts are needed to address the policy need towards improved accessibility by broadening the provider base for implant in other South Asian countries.

References

American College of Obstetricians and Gynecologists. (2018). Adolescents and long-acting reversible contraception: implants and intrauterine devices. Committee Opinion No. 735 (replaces *Committee Opinion Number* 539, *October 2012). Obstet Gynecol*, *131*(5), 8. https://www.acog.org/-/media/project/acog/acogorg/clinical/files/committee-opinion/articles/2018/05/adolescents-and-long-acting-reversible-contraception-implants-and-intrauterine-devices.pdf

Chetri, M., Bhatta, A., Amatya, R. N., Lama, H., Dunson, T. R., Spivey, S., ... & Balogh, S. (1996). Five-year evaluation of safety, efficacy and acceptability of Norplant implants in Nepal. *Advances in contraception*, *12*(3), 187-199. https://doi.org/10.1007/BF01849662

Conde-Agudelo, A., Rosas-Bermudez, A., Castaño, F., & Norton, M. H. (2012). Effects of birth spacing on maternal, perinatal, infant, and child health: a systematic review of causal mechanisms. *Studies in family planning*, *43*(2), 93-114.

Family Welfare Division, Nepal. (….). NHTC. Implant Guidelines for Family Planning Service Programs, Reference Manual, 2075

Haakenstad, A., Angelino, O., Irvine, C. M., Bhutta, Z. A., Bienhoff, K., Bintz, C., ... & Lozano, R. (2022). Measuring contraceptive method mix, prevalence, and demand satisfied by age and marital status in 204 countries and territories, 1970–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet*, *400*(10348), 295-327.

Hardee, K., Harris, S., Rodriguez, M., Kumar, J., Bakamjian, L., Newman, K., & Brown, W. (2014). Achieving the goal of the London Summit on Family Planning by adhering to voluntary, rights-based family planning: what can we learn from past experiences with coercion?. *International perspectives on sexual and reproductive health*, *40*(4), 206-214.https://doi. org/10.1363/4020614

Harrison, M. S., & Goldenberg, R. L. (2017). Immediate postpartum use of long-acting reversible contraceptives in low-and middle-income countries. *Maternal health, neonatology and perinatology*, *3*(1), 1-9.

Hubacher, D., & Dorflinger, L. (2012). Avoiding controversy in international provision of subdermal contraceptive implants. *Contraception*, *85*(5), 432-433. https://doi.org/10.1016/j.contraception.2011.11.018

Hubacher, D., Mavranezouli, I., & McGinn, E. (2008). Unintended pregnancy in sub-Saharan Africa: magnitude of the problem and potential role of contraceptive implants to alleviate it. *Contraception*, *78*(1), 73-78. https://doi.org/10.1016/j.contraception.2008.03.002

Hubacher, D., Olawo, A., Manduku, C., Kiarie, J., & Chen, P. L. (2012). Preventing unintended pregnancy among young women in Kenya: prospective cohort study to offer contraceptive implants. *Contraception*, *86*(5), 511-517.

International Institute for Population Sciences (IIPS) and ICF. 2021. National Family Health Survey (NFHS-5), 2019-21: India. Mumbai: IIPS

Jacobstein, R., & Stanley, H. (2013). Contraceptive implants: providing better choice to meet growing family planning demand. *Global Health: Science and Practice*, *1*(1), 11-17. https://doi.org/10.9745/ghspd-12-00003

Jonas, K., Mazinu, M., Kalichman, M., Kalichman, S., Lombard, C., Morroni, C., & Mathews, C. (2021). Factors Associated With the Use of the Contraceptive Implant Among Women Attending a Primary Health Clinic in Cape Town, South Africa. *Frontiers in global women's health*, *2*.

Kantorová, V., Wheldon, M. C., Ueffing, P., & Dasgupta, A. N. (2020). Estimating progress towards meeting women's contraceptive needs in 185 countries: A Bayesian hierarchical modelling study. *PLoS medicine*, *17*(2), e1003026.

Lince-Deroche, N., Pleaner, M., Morroni, C., Mullick, S., Firnhaber, C., Harries, J., ... & Holele, P. (2016). Achieving universal access to sexual and reproductive health services: the potential and pitfalls for contraceptive services in South Africa. *South African Health Review*, *2016*(1), 95-108.

Moore, Z., Pfitzer, A., Gubin, R., Charurat, E., Elliott, L., & Croft, T. (2015). Missed opportunities for family planning: an analysis of pregnancy risk and contraceptive method use among postpartum women in 21 low-and middle-income countries. *Contraception*, *92*(1), 31-39.

Ngo, T. D., Nuccio, O., Pereira, S. K., Footman, K., & Reiss, K. (2017). Evaluating a LARC expansion program in 14 sub-Saharan African countries: a service delivery model for meeting FP2020 goals. *Maternal and child health journal*, *21*(9), 1734-1743. https://doi.org/10.1007/s10995-016-2014-0

Puri, M., Henderson, J. T., Harper, C. C., Blum, M., Joshi, D., & Rocca, C. H. (2015). Contraceptive discontinuation and pregnancy postabortion in Nepal: a longitudinal cohort study. *Contraception*, *91*(4), 301-307.

Rajbhandari P, J. Pokharel & S. Chitraka. (2022). Nepal CRS company: pioneering social marketing of FP commodities in Nepal. https://knowledgesuccess.org/2022/08/18/nepal-crs-company-pioneering-social-marketing-of-fp-commodities-in-nepal/

Singh, S., & Darroch, J. E. (2012). Adding it up: Costs and benefits of contraceptive services. *Guttmacher Institute and UNFPA*, 1269-1286. http://bibliobase.sermais.pt:8008/BiblioNET/Upload/PDF4/002878.pdf

Staveteig, S., Mallick, L., & Winter, R. (2015). Uptake and discontinuation of long-acting reversible contraceptives (LARCs) in low-income countries. *DHS analytical studies*, (54). https://dhsprogram.com/pubs/pdf/AS54/AS54.pdf

UNFPA. (……). UNFPA Sierra Leone | Family Planning. https://sierraleone.unfpa.org/en/topics/family-planning-6. Accessed on 11-01-2023

United Nations, Department of Economic and Social Affairs, Population Division (2019). Contraceptive Use by Method 2019: Data Booklet (ST/ESA/SER.A/435).

United States Agency for International Development. (2012). Three Successful Sub-Saharan Africa Family Planning Programs: Lessons for Meeting the MDGs. Washington DC: USAID:1-31. https://pdf.usaid.gov/pdf_docs/PA00HQSV.pdf

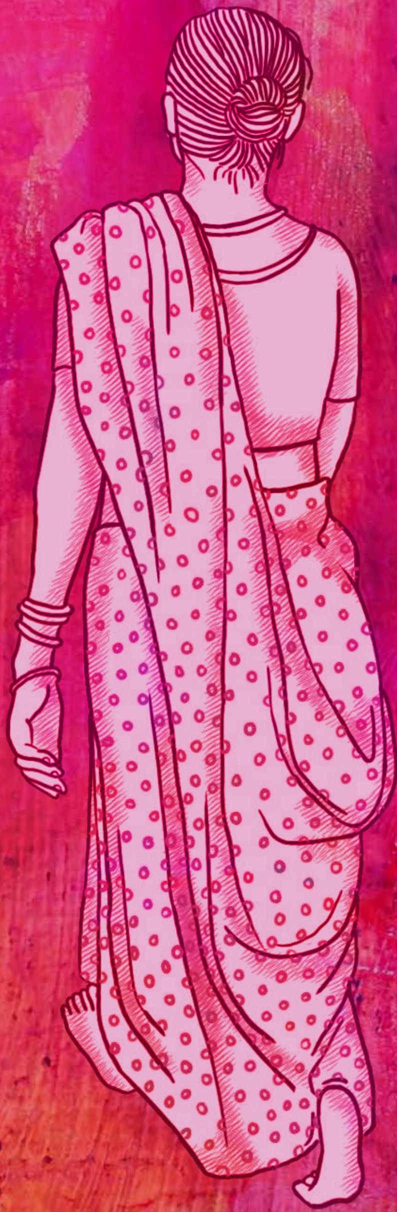
USAID, (2018). Long-Acting and Permanent Methods Community of Practice Contraceptive Implants Technical Consultation: Addressing Barriers to Service Delivery as Implants Move to Scale. Meeting Report. Washington, DC. Contraceptive Implants Technical Consultation: Addressing Barriers to Service Delivery as Implants Move to Scale (knowledgesuccess.org)

Vos, T., Lim, S. S., Abbafati, C., Abbas, K. M., Abbasi, M., Abbasifard, M., ... & Bhutta, Z. A. (2020). Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet*, *396*(10258), 1204-1222.

WHO. (2022). World Health Organization Department of Sexual and Reproductive Health and Research (WHO/SRH) and Johns Hopkins Bloomberg School of Public Health/ Center for Communication Programs (CCP), Knowledge SUCCESS. Family Planning: A Global Handbook for Providers (2022 update). Baltimore and Geneva: CCP and WHO; 2022.

World Health Organization. (2015). *WHO statement on progestogen-only implants* (No. WHO/RHR/15.20). World Health Organization. https://www.who.int/publications/i/item/WHO-RHR-15.20

ZIMSTAT, ICF International. (2016). Zimbabwe Demographic and Health Survey 2015: Final Report. *Rockville, Maryland, USA: Zimbabwe National Statistics Agency (ZIMSTAT) and ICF International*.



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