



Healthy lives.
Measurable results.



UNSW
AUSTRALIA

Kirby Institute

Papua New Guinea: Pathways to Family Planning - A Consumer Study 2019

**Understanding decision-making, opportunities and barriers for women
for family planning products and services, and community knowledge
and attitudes regarding family planning**



Papua New Guinea: Pathways to Family Planning – A Consumer Study 2019

Understanding decision-making,
opportunities and barriers for women
for family planning products and
services, and community knowledge
and attitudes regarding family planning



United Nations Population Fund



Photo credit to Nalisa Neuendorf

AUTHORS

James Newland
Nalisa Neuendorf
Shannon McVey
Mahesh Paudel
Angela Kelly-Hanku

DEDICATION

To the women and girls in Papua New Guinea who seek the right to control their own reproductive lives and to the service providers who continue to provide family planning in order to ensure all – not some – Papua New Guinean women and girls have access to the reproductive health choices they desire, and the freedom to decide if, when and how often, through consumer-powered family planning.

ACKNOWLEDGMENTS

Our sincere thanks for the time and generosity of the people and communities in Milne Bay and Eastern Highlands Province who supported Population Services International (PSI) and the Papua New Guinea Institute of Medical Research (PNGIMR) in this study.

The principal investigators and authors of this report would like to thank the following for their participation in, or support of, this research.

To all those who took part in the study participating in the in-depth interviews and focus groups, their contributions are invaluable and underpin the findings in this research.

To the communities and their leaders, including family planning service providers for your tremendous support and access to communities.

To Dr Edward Waramin, Manager for Population and Family Health Services, Division of Public Health from the National Department of Health (NDoH) and the Provincial Health Authorities of Milne Bay and Eastern Highlands and their respective CEOs, Mr Billy Naidi and Dr Joseph Apa.

To Mr Micha Yawing, Health Advisor for the Provincial Health Authority Lae; Mr Abraham Apisai, Health Advisor for Central Provincial Health Office; and Mr Clement Totovun Secretary for Health, Health Division of the Autonomous Region of Bougainville.

To all provincial and community stakeholders who participated in the provincial workshops that informed the research design. To each member of the Provincial ‘Keystone’ Research Advisory teams that were established in Milne Bay and Eastern Highlands to ensure a collaborative and participatory approach throughout. To Sr. Anna Pongua, Mrs. Edith Liviko and Dr. Kendauro in Eastern Highlands Province and Dr. Grace Kariwiga in Milne Bay Province, we would like to extend our sincere gratitude.

To all those at UNFPA, PSI and PNGIMR who assisted, enormous gratitude is also extended.

Thank you to our donors. This study was made possible through support and funding from UNFPA and EXXON Mobil.



Contents

List of Acronyms	vii
1 Executive Summary	1
2 Introduction	5
3 Research Objectives	13
4 Methodology	15
Study locations	15
Recruitment	16
Data collection	19
Data analysis	19
Informed consent and ethics	20
Study limitations	20
Key terminology	21
5 Key Findings	23
Knowledge and awareness of family planning	24
The community's education and literacy	29
Informal channels of knowledge and information	30
Discussions with peers	36
Disinterest of young people (relevance of family planning)	38
Entitlement to family planning services	39
Marriage	44
Denial for childless women	46

The 'entitled' woman's family planning journey	48
Value, purpose, motivators, and barriers of family planning	50
Decision-making, choice and agency	67
Impact of violence on family planning use	74
Decision making and choice of different family planning methods	78
Family planning service providers	94
Embarrassment and shame	103
Supply of family planning methods	105
Finance and logistics	109
Maintenance and continuation of family planning	113
<hr/>	
6 Mapping the Family Planning Journey	123
Family planning journey time points	126
<hr/>	
7 The Challenging Family Planning Journey of Women in PNG	131
Steps within the family planning journey	131
Key insights within the family planning journey	135
<hr/>	
8 Concluding Remarks	143
<hr/>	
9 References	146

LIST OF ACRONYMS

EHP	Eastern Highlands Province
FGD	focus group discussion
FP	family planning services and methods
HCW	health care worker
ICDP	International Conference on Population and Development
MBP	Milne Bay Province
mCPr	modern contraception prevalence rate
MMR	maternal mortality rate
MRAC	Government of Papua New Guinea Medical Research Advisory Committee
MTDP	Mid-Term Development Plan
NDoH	National Department of Health
NGO	non-government organisation
NPP	National Population Policy
PHA	Provincial Health Authority
PNG	Papua New Guinea
PNGIMR	Papua New Guinea Institute of Medical Research
PNGIMR IRB	Papua New Guinea Institute of Medical Research Institutional Review Nourishment
PSI	Population Services International
PSI-PNG	Population Services International PNG
PSI REB	Population Services International Review and Ethics Board
SSI	semi structured interview
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
WHO	World Health Organization



1

Executive Summary

The Papua New Guinea Family Planning Consumer Study (2019) focuses on understanding barriers and facilitators in accessing family planning products and services from women's or consumers' perspectives, and contributes important and timely contextual and in-depth qualitative knowledge about women's engagement with and use of family planning services, products, and methods in Milne Bay and the Eastern Highlands Province, two diverse settings in Papua New Guinea (PNG). The study forms part of the 'Keystone – Making Markets Work for Family Planning' project, a larger, rigorous assessment of the family planning market in PNG undertaken by Population Services International PNG (PSI-PNG) in partnership with UNFPA, National Department of Health (NDoH), and provincial partners in Central, Milne Bay, Eastern Highlands, Morobe, and Bougainville.

This report outlines the findings from a multi-site qualitative study designed to understand consumer perspectives on where the family planning market is failing the women of PNG. The study sought to understand decision-making, opportunities, and barriers for women who have a need for family planning products and services, as well as community knowledge and attitudes regarding family planning. A particular focus is placed on the consumer family planning journey, and within this journey, the critical points of consumer engagement, uptake, use and discontinuation of use of modern methods of family planning together with the barriers and motivating factors for each point that influences access, choice, and decisions for women in Milne Bay Province (MBP) and Eastern Highlands Province (EHP).

Data collection took place between November 2019 and February 2020. In total, 253 qualitative interviews were conducted with married and unmarried women aged 18 to 24 years; and women aged 25 to 34 years; 62 qualitative interviews were conducted with the husbands of women, and 24 focus group discussions were conducted with community members and stakeholders who influence women's family planning journeys.

The first entry or engagement with family planning services is an important point in the consumer family planning journey and one that was directly influenced by the information and advice received about family planning, the timing of this information, and trust in the person/organisation from which the information is received.

In both MBP and EHP, there were a range of diverse informal 'information channels' that were in competition with formal service delivery communication channels. These informal channels were seen as important sources of truth.

The information shared was strongly influenced by cultural norms and beliefs that directly influenced who was and who was not entitled to access family planning: **those who were perceived to be entitled were typically women who were married and had already birthed children.** In some instances, these beliefs influenced the denial of family planning methods for young women due to a fear that it may impact future fertility and child-bearing, or encourage promiscuity, as it is perceived. These beliefs are held and enforced by all influencers including family, community, health care workers, and the young women themselves.

Some young women challenged these norms by making their own decision to access family planning, and these decisions were sometimes supported by and/or negotiated with others and were based on the need to prevent unwanted pregnancy.

Women's decisions to use, not use or discontinue use of family planning method are influenced by numerous factors, one of which is related to the understanding of the benefits of family planning in spacing the birth of children. Spacing of pregnancies is valued by users, as it supports the health and wellbeing in their role as women, enabling improved child welfare, and allowing men and women to adequately and appropriately plan their desired families in an environment of financial constraint and land scarcity.

Women were expected to seek permission and/or approval from a partner/spouse to take up family planning. Women reported pressure from their partner/spouse that would influence and/or motivate women to hide their use of family planning, often at great risk to themselves, and if discovered, to discontinue family planning. In some instances, it is believed that the man holds the power to make the decision about family planning. This belief is accepted and reinforced by both men and women.

Uptake in family planning in older women was motivated by considerations of self-worth and to prevent maternal health risks or death. Among younger women, aged 15 to 24 years, uptake in family planning was driven by the desire to continue education.

The choice of contraceptive for all women was strongly influenced by actual and perceived side effects, the availability of the different methods, misconceptions, and beliefs. Information on the side effects were received through informal information channels, which in many cases were delivered from individuals that did not experience them first hand and/or lacked factual information. Choice of method is also influenced by beliefs around entitlement and appeared restricted for young women who are not married or have no children when seeking long-acting contraceptive methods such as implants. This kind of behaviour was observed among health care workers (HCWs).

Women who choose not to use modern family planning made this decision based on individual and wider-held community beliefs, disinterest, fear of modern methods, lack of education and/or comprehension of services and products, or lack of information and advice to make an informed decision. Some non-users were more likely to trust traditional methods, particularly the ovulation method and customary practices.

Uptake and discontinuation were found throughout women's family planning journeys. For some women, the discontinuation of a method occurred following experiences of adverse side effects or after encountering product and service limitations – particularly shortage of methods. Other significant influencing factors for the discontinuation of use were partner/spouse pressure and risk of or experience of violence as a direct cause of family planning use, cultural beliefs, community stigma and discrimination, the desire to have children, access and logistics, financial hardship, and family and community pressure.

Often re-uptake of modern family planning would occur when women were motivated to space their children, and when they had access to specific methods that they believed were affordable, suitable, and appropriate to their individual needs.

The family planning journey across MBP and EHP is generally similar in that not all women receive equal access to family planning, and the family planning journey is non-linear and not uniform. Particular points of difference within the consumer journey are associated with age, marital status, local context, and social and cultural norms. Each is a moderating factor that contributes to a woman's individual experience of unmet need.

The insights presented in this report will contribute to designing user-centred health solutions to build pathways to family planning that allow women to make the sexual and reproductive health choices they need in order to plan the families they desire.

2

Introduction

Access to universal sexual and reproductive health information and services, including family planning, is a right for all women. A right that provides women the freedom to make informed decisions with respect to contraceptives and planning a family, that gives women reproductive autonomy and control over the number and spacing of children (1) as well as the provision of information and services needed to plan, prevent, and terminate a pregnancy (2, 3). This requires that women's choices are supported by reproductive health care services, goods and facilities that are

- available in adequate numbers,
- physically and economically accessible,
- accessible without discrimination, and
- of good quality (4).

These rights and associated service-level provisions are essential to the achievement of gender equality and women's empowerment, poverty reduction, and economic development. These rights are cornerstones of the 2030 Agenda for Sustainable Development, particularly as they relate to the Sustainable Development Goals (SDGs) of Good Health and well-being (Goal 3), Inclusive and quality education (Goal 4), and Gender equality (Goal 5) (1).

Women in low- and middle-income countries like Papua New Guinea (PNG), where universal primary health services are severely constrained; where economic, socio-cultural, religious and political structures as a whole can

be restrictive impede women's access to reproductive justice (2, 3, 5, 6); and where issues of access and justice are more prominent for women in rural and remote areas (7).

Papua New Guinea is the largest Pacific island nation with a population of almost 9 million people. More than 87 per cent of the population lives in rural and remote areas (13, 8). The population is expected to grow to 10 million in the next five years (8) and double by the year 2050 (9, 10). It is currently ranked 156 out of 187 countries on the Human Development Index (HDI) and 153 out of 189 countries in the Gender Inequality Index. These rankings reflect particular constraints on the population and Government to achieve equitably higher standards of living (9) and the disproportionate impact of these on women.

The median age in PNG is 22.4 years (11), and 67 per cent of the population is under the age of 25 years (10), representing one of the highest 'youth bulges' in the Pacific region (12). Uncontrolled population growth is identified as the single greatest risk to achieving the overall goal of the Government's Medium-Term Development Plan (MTDP) III (2018-2022), and securing the country's future through inclusive sustainable economic growth (11).

The Government of Papua New Guinea launched its first five-year Integrated Population Policy in 1991 prior to the International Conference on Population and Development (ICDP), the third and current National Population Policy (NPP) 2015-2024 Volume 1 was approved by the National Executive Council and launched in July 2014, however, Vol 2 that details the implementation is still pending publication by the Department of National Planning and Monitoring.

The NPP 2015-2024 is based on the ICDP Plan of Action, Millennium Development Goals 2000-2015 and SDGs 2015-2030, but does not incorporate the goals of Family Planning 2020 despite being included as a reporting country. The NPP 2015-2024 does contain 16 Policy Goals of which 6 recognise the importance of modern family planning as part of addressing the overall health and wellbeing of the population.

The Government of Papua New Guinea has invested in creating and enabling a development and policy environment to support the provision of family planning and sexual reproductive health within its various frameworks and

national plans, which include the MTDP III, NPP 2015-2024, the National Sexual Reproductive Policy 2014 and National Family Planning Policy 2014. To date no budget allocation has been provided by Government of Papua New Guinea to implement the NPP 2015-2024 Vol 2, which remains pending, and the 2019 budget handed down by the Government in 2018 contained no funding allocation for family planning programmes.

Despite recognition of the importance and investment in family planning by the Government and development partners, key performance indicators in the sector, including fertility rate and modern contraception prevalence rate (mCPr), unmet needs and gaps in the provision of services and products have not shown progress over the past decade.

Fertility rates

Reducing the total fertility rate is essential to mitigating exponential population growth in PNG. In 2019, the total fertility rate of women in PNG was 4.2 children, with lower rates in urban areas (3.5) and higher rates in rural areas (4.3) (13). The fertility rate begins in teenage years, where 12 per cent of young women have begun childbearing, leading to an adolescent fertility rate of 68 per 1,000 women aged 15-19 years (13). Women who have obtained a high school education or above are reported to have a lower total fertility rate (3.1) than women with no formal education or only elementary education (4.6). The total fertility rate also reduces among women with increased wealth (13). This high fertility rate is compounded by unmet family planning needs, occurring for almost one in three women (32 per cent) aged 15 to 49 years (13), and by a mCPr of just 21.6 per cent among all women of reproductive age (14), representing one of the lowest rates among married women in member states of the WHO in the Western Pacific Region (15, 16). The unmet need for family planning in PNG is greatest in the Momase Region, particularly among poorer women and women in rural areas of the country. The unmet need is much higher among unmarried sexually active women than it is for their married counterparts (13).

Birth spacing

Short birth intervals, particularly those less than 24 months, place newborns and their mothers at increased health risk. In PNG, almost 1 in 4 births (24 per cent) occur less than 24 months after a previous birth (13).

Maternal mortality

The PNG Demographic Health Survey (2019) reports the maternal mortality ratio at 171 deaths per 100,000 live births (10) during the seven-year period before the survey (CI 95 – 247). The School of Medicine and Health Sciences, University of Papua New Guinea, reports the maternal mortality rate (MMR) at 545 per 100,000 live births (18, 19). Estimates by the Maternal Mortality Estimation Inter-Agency Group, led by WHO and including UNICEF, UNFPA, the United Nations Population Division and the World Bank Group, reports MMR of 145 [CI 67-318] per 100,000 live births for 2017 (WHO, 2019). Whilst these numbers differ across sources, these maternal mortality estimates for PNG are high and can be directly attributed to service-related barriers – less than 60 per cent of women access antenatal services (13) and coverage rates of supervised deliveries attended by a skilled birth attendant is less than 42 per cent (13).

Economic and social influences

Economic and social influences, such as educational attainment, place of residence, and wealth, are critical intermediate factors that play a significant role in women's willingness to access and utilise family planning services. These factors include acceptability of family planning, access to family planning services, human resourcing, service integration, and ongoing supply of family planning methods (13).

Removing barriers to family planning access is an integral part of the PNG's National Department of Health's strategic priority (11, 13). PNG faces a number of challenges in regard to supply and demand for modern family planning, including supply-side factors such as difficult terrain (20), lack of infrastructure (13, 20), and persistent law and order problems that disrupt health service delivery (13) and prevent health personnel from taking assignments (20), leading to staff absences and closure of health facilities (13, 20). On the demand side, there remains low uptake for modern contraceptives despite service and method availability that is free of charge in most public and NGO clinics.

In PNG today, it is estimated that up to 40 per cent of the current population live below the income poverty line of US \$1.90 a day (9, 21), and women in

PNG have particularly limited access to the formal economy and/or employment (21). Poverty, gender, and social inequality also contribute to a low socio-economic status of girls and women (9, 10, 22). A large proportion of PNG women rely solely on subsistence farming with limited means of generating any income. Where possible, women participate in informal economies, where small amounts of income are generated from the sale of garden produce and other items recognised as ‘marketing’ (9, 22).

Gendered relationships and cultural values and expectations also play an important role in determining access to, uptake and (dis)continuation of family planning (23). This is a particularly important influence in PNG since gender roles and responsibilities are still largely defined by the traditional Melanesian culture – one that has deeply embedded cultural values, beliefs, and attitudes about women’s social status, and places expectation of raising a family on any woman in a long-term relationship or marriage. PNG has some of the highest rates of violence against women globally, 63 per cent of women report ever having experienced spousal violence (13). The stereotypical gender roles in domestic duties along with poor access to health and education, employment, and political representation, limits the opportunity of women to be effectively involved in decision-making.

Children, in the context of family planning in PNG, are an important consideration. Children are highly valued in the culture and tradition of PNG and make up almost half of the population (27). The welfare of children, particularly nutrition and the ability to provide children with education, is important in the lives of PNG people. Inclusive education is a driver for development and for the empowerment of young girls and women in PNG (28). The National Education Plan (28) recognises inclusion as an important factor to allow all young people to have access to education, while also acknowledging that there are many challenges to achieving this, particularly for rural and remote students. Many students (male and female) in rural, peri-urban and urban areas will start and/or leave school at various stages of their lives. Not all students engaged in the education system are within particular age categories, social standings, or marital status. Furthermore, economic hardship is a particular issue that inhibits access to education at various stages of a young woman or young man’s life (28).

Religious context

PNG identifies as a Christian country with more than 99 per cent of the population identifying themselves as Christian (13). The reach of religion and church extends from urban to peri-urban and to rural areas (8, 11), and plays a central role in community life. Religious affiliation has been constructed over time through the experience of missionisation and continues to embed itself in contemporary life, particularly in the lives of PNG women through their roles as wives and mothers, together with the expectation and value placed on child-bearing and on children (25, 29). It is important to recognize that church health service providers play a prominent role in primary health care service delivery in PNG. They are responsible for up to 50 per cent of rural and remote health facilities and for several training facilities for nurses and community health workers (37).

Land ownership

A patrilineal social structure in the EHP acknowledges that land entitlement is passed down through fathers and sons with a desire to have sons to take over land (30). In MBP, land entitlement is matrilineal and is passed down through mothers and daughters. The matrilineal nature of land entitlement does not distinctly privilege a desire to have daughters, as having both sons and daughters are favourable to families and communities, particularly when associated with customary practices such as the Yam Festival in MBP, where both sexes' value to the families and communities are intricately intertwined (24). Land is integral to the lives of people and considered an important possession, with 97 per cent of the total land mass held by traditional owners under customary rights and landowner laws (31). In contemporary PNG, where the population is rapidly increasing, land scarcity is an issue of concern for as much as 85 per cent of the population that rely on arable land as part of subsistence lifestyles, such as small-scale gardening of fresh produce (22). Population growth, environmental change, and limited mobility are concerns for people in rural MBP where land is a bounded and finite resource (24).

Cultural practise of initiation to adulthood

An issue exists in contemporary life in PNG regarding a perceived erosion of cultural practices and the transfer of knowledge between generations in regard to land and other important cultural matters (32), including sexual relationships and family planning. In the EHP, it was historically common to separate men and women into ‘men’s houses’ and ‘women’s houses’ (33). The separation of young people during formative adolescent years is when specific ceremonial initiations were practised and where information was imparted to adolescents prior to adult life (33). Similarly, in MBP, ‘women’s houses’ were culturally important for young women experiencing first menses as a time to initiate sharing information about sexual and reproductive health and for childbirth, as a site for traditional antenatal and post-natal care and support (24). An absence of these spaces in contemporary life in PNG is perceived to be inhibitive for transferring life lessons and cultural teachings (33, 34). The importance of these male and female spaces in PNG is influenced by the importance of social and family or kin networks to interpersonal interactions amongst men and women (35). These networks situate themselves in health service delivery, which can be both beneficial and/or challenging to individuals in their daily lives. In the EHP, particularly, where there is a history of inter-clan conflict and on-going disputes, interpersonal interactions can be complex and layered, and this can extend to different areas of service provision, including health (30).



3

Research Objectives

Papua New Guinea Family Planning Consumer Study (2019) was designed by Population Services International PNG (PSI-PNG) to form part of a larger, rigorous assessment of the family planning market to provide vital insights into family planning challenges and motivations in PNG. These insights will inform the design of user-centred health solutions that address gaps in family planning interventions and allow women to make the sexual and reproductive health choices they need in order to plan the families they desire.

The aim of the study is to provide an in-depth analysis of consumer influences in relation to their (dis)engagement with the family planning market in two provinces of PNG: MBP and EHP. This analysis is central to designing women-centred programmes that allow women and girls in PNG to access family planning services and to reduce unmet need for family planning as part of the overall aim of universal primary health coverage.

The study sought to engage with those who understand the market most – the frontline service providers, the provincial and district governments, the communities, and most importantly, the women and girls for whom this intervention seeks to support. The study was designed to document women's decision-making, opportunities, and barriers for accessing family planning products and services, as well as community knowledge and attitudes regarding family planning within urban, peri-urban, and rural settings in PNG. The findings will allow sector stakeholders to better un-

3 Research Objectives

derstand where the family planning health market is failing and where it can be feasibly strengthened in order to inform the design of consumer-centred health solutions that address these weaknesses.

The specific research objectives of the study were:

1. To understand insights in relation to family planning method preference and choice among young women aged 18 to 24 years, and women aged 25 to 34 years.
2. To understand the extent method mix plays in the decision to adopt family planning.
3. To understand the barriers to access and factors facilitating access to family planning services.
4. To describe the pathways by which women access family planning services, including formal and informal routes.
5. To describe the decision-making process, as well as the influencers and role they play during each phase of women's journeys.
6. To understand collective knowledge and perceptions surrounding access, as well as community attitudes towards the use of modern family planning.

4

Methodology

In order to understand the family planning decisions and pathways of women, a qualitative study was undertaken. Semi-structured interviews (SSIs) and focus group discussions (FDGs) were undertaken between November and December 2019 in Milne Bay Province (MBP) and from November 2019 to January 2020 in Eastern Highland Province (EHP). These interviews and discussions add important knowledge to the numerically driven data collected and available in national health surveys and other behavioural and clinical data sets in PNG (6, 13), as qualitative data allows for further exploration of women's decision making process about family planning and the varied paths women take to engaging with family planning services, making it possible to understand the consumer journey in-depth.

Study locations

The study sites were purposively sampled in the EHP and MBP. The provinces were selected by UNFPA and their implementation partners, and consultations with Provincial Health Administrations (PHAs) and other key stakeholders informed the final site selection within each province. In addition to the provincial capitals, peri-urban and rural sites were selected in each province.

These provinces are important locations to comparatively assess family planning markets due to their cultural and geographical differences. The EHP is situated in the central part of the mainland of PNG, and is the eastern most province within the Highlands Region, covering an area of 11,157

square kilometres. At the last census, in 2011, the population was approximately 579,825 (8). The terrain is mountainous and rugged, and although the National Highlands Highway cuts across the interior, most districts within the province remain remote and/or inaccessible. The EHP is landlocked by four provinces: Simbu, Madang, Morobe, and Gulf Provinces. The societies of EHP are patriarchal.

MBP is in the Southern Region of PNG and at the eastern most point of the country. This province covers approximately 14,345 square kilometres of land and 252,990 square kilometres of sea, including more than 600 islands. At the last census, in 2011, the population of Milne Bay Province was approximately 276,512 (8). Urban mainland centres are well connected by roads, while the islands are remote, and long distances need to be traversed by dinghy or canoe.

Recruitment

The sample population was purposively recruited to include women ('consumers'), husbands ('influencers'), and community leaders and health care workers ('other influencers'). For SSIs, women were purposively recruited by age (18 to 24 years and 25 to 34 years), marital status (married and unmarried), and family planning status (current user and non-user). Men were recruited based on the age of their wives (15 to 24 years and 25 to 34 years) and the family planning status of their wives (current user and non-user). Participants for FGDs were recruited based on their identity as an elder/other family member, community leader, or family planning service provider. In both provinces, the identification and recruitment of participants was guided by the predetermined categories and was facilitated by HCWs and community leaders.

The study recruited participants 18 years of age and above (male and female). Female participants reported retrospective family planning knowledge and experience from when they were between 15 to 17 years of age, while spouses/partners were recruited to include men married or men in union with women currently aged between ages 15 to 24 years and 25 to 34 years. For current family planning users, the study aimed to recruit an even number of users of short-term and long-term methods to gain an understanding of both user categories. For non-users, the study aimed to include women who identified as a non-user at the time of recruitment. This included women

who had no history of family planning use and women who had a previous history of use, but at the time of data collection, were not using a method of family planning (i.e. discontinued users).

Screening and enrolment

Prospective study participants were identified by HCWs or community leaders. These prospective participants were then referred to a field researcher who used a script as a general guideline to gauge their interest in participating in the study. Field officers then administered a Screening and Enrolment Form, with each respondent being assessed for eligibility (inclusion and exclusion criteria). All eligible and interested participants were invited to suggest a time and place for an interview or focus group discussion where they felt comfortable and that their privacy would be protected.

Sample sizes

In total, 253 SSIs and 22 FGDs were conducted across MBP and the EHP. Of the 253 SSIs, 191 were with women and 62 with husbands/spouses. The breakdown of the women who participated in SSIs is represented in Table 1, and the breakdown of male husbands/spouses who participated in SSIs is represented in Table 2.

Women	Number of semi-structured interviews by women's family planning usage					Total	
	Current users of FP		Non-users of FP				
	Eastern Highlands Province	Milne Bay Province	Eastern Highlands Province	Milne Bay Province			
Young women unmarried (age 18-24 years)	Urban	8	8	8	8	32	
	Rural	8	8	8	8	32	
Young Women married (age 18-24 years)	Urban	8	8	8	8	32	
	Rural	8	8	8	8	32	
Women ¹ (age 25-34 years)	Urban	8	8	7	8	31	
	Rural	8	8	8	8	32	
Total		48	48	47	48	191	

TABLE 1: Semi-structured interviews – Women who are current users and non-users of family planning

¹ As a general category based on age, rather than distinguished by the combination of age and marital status: general category included MARRIED and/or UNMARRIED women.

Men	Number of semi-structured interviews by women's family planning usage					Total	
	Current users of FP		Non-users of FP				
	Eastern Highlands Province	Milne Bay Province	Eastern Highlands Province	Milne Bay Province			
Husbands of young women (age 15-24 years)	Urban	4	4	4	4	16	
	Rural	3	4	3	4	14	
Husbands of women (age 25-34 years)	Urban	4	4	4	4	16	
	Rural	4	4	4	4	16	
Total		15	16	15	16	62	

TABLE 2: *Semi-structured interviews – Husbands of women who are current users or non-users of family planning*

Of the FGDs with community leaders and family/in-laws, seven FGDs were held with women, seven FGDs with men, and eight FGDs with formal family planning service providers that were not recorded by gender. See Table 3 below.

Other influencers ²	Number of focus group discussions (Number of participants)				Total	
	Eastern Highlands Province		Milne Bay Province			
	Urban	Rural	Urban	Rural		
Female community leaders	1(3)	1(3)	1(6)	1(8)	4(20)	
Male community leaders Men	1(6)	1(6)	1(4)	1(8)	4(24)	
Female family/in laws Elders in household, mothers, sisters, mother in-laws	1(6)	-	1(6)	1(6)	3(18)	
Male family/in laws Elders in household, fathers, brothers, father in-laws	1(6)	-	1(6)	1(6)	3(18)	
Formal family-planning providers	1(8)	3(10)	2(12)	2(16)	8(46)	
Total focus group discussions (Total participants)	5(29)	5(19)	6(34)	6(44)	22(126)	

TABLE 3: *Focus group discussions by stakeholder group and location*

| 2 (-) No transcript

Data collection

Field training and pretesting

Prior to data collection, a one-week training and mentoring workshop was conducted with field researchers at the Papua New Guinea Institute of Medical Research (PNGIMR), Goroka (October 2019). This training involved theoretical and practical sessions on qualitative research methodologies and techniques. PSI-designed interview guides were reviewed during this time and pretested in Bena (EHP) and Port Moresby, National Capital District (Central Province). Study guides for interviews and focus groups were further refined after pretesting.

Semi-structured interviews (SSIs)

SSIs were used to capture individual behaviours and attitudes regarding family planning, barriers, and motivators for family planning use as well as to capture individual beliefs, perceptions, and societal/community norms towards family planning access, purchase, and usage among women aged between 18 to 34 years who were users and non-users of family planning. The husbands of women aged 15 to 34 years also participated in SSIs.

Focus group discussions (FGDs)

FGDs were conducted with identified groups of community influencers, who included family planning service providers, community leaders (women and men), and other family members of SSI participants (both men and women). FGDs were integral to documenting the community perspective toward family planning and the influence of others (beyond their husbands) on women's decision-making processes across the family planning journey.

Each SSI and FGD followed a guide designed by PSI that was later translated into Tok Pisin by PNGIMR. In MBP, SSIs and FGDs were mostly conducted in English with only a few interviews in rural areas requiring a local translator for Tok Ples (local language). Conversely, in EHP, interviews were conducted in Tok Pisin, with only a small number combining both Tok Pisin and English.

Data analysis

All SSIs and FGDs were digitally recorded and then transcribed by a consultancy firm contracted by PSI. Tok Pisin interviews were not translated for analysis. All written transcripts were stored, managed, and coded in the qualitative data management software program, NVivo 12 (QSR International Pty Ltd). The research used a pre-defined coding framework designed by PSI for the same study in other countries for analysis of the PNG data. Translation of Tok Pisin quotes was done at the time of report writing. It should be noted that the use of Tok Pisin by participants was important in understanding how people both expressed themselves and engaged with messaging around family planning.

Informed consent and ethics

Prior to conducting SSIs or FGDs, each participant was provided with information and consent forms to read. If they were unable to read, the information sheet was read to them by the field researcher. Information and consent forms were provided in English and in Tok Pisin in EHP and in English in MBP. When necessary, a local translator in MBP translated English into the local language. All participants provided written informed consent to participate in the study. Participants were provided with the opportunity to ask questions and clarify any issues prior to participation and were reminded of their right to privacy and to withdraw from the study at any time without any adverse consequences, including their right to access health services. All SSIs and FGDs were digitally recorded with consent, and pseudonyms were used to ensure confidentiality and anonymity of participants.

Ethical approval for this study was obtained from the PSI Research Ethics Board (REB), PNGIMR Institutional Review Board (IRB), and the Government of Papua New Guinea Medical Research Advisory Committee (MRAC). In accordance with these approvals, this study complied with all policies and procedures stipulated by all Research Ethics Review boards.

Study limitations

This study had several limitations in design, recruitment, and field work. Although this study sought to also capture the experience of young women's family planning journey from ages 15 to 17 years, Principal Investigators were unable to secure a waiver of parental consent for this age group from the relevant PNG ethics board. Given the risk of requiring parental consent for this age group, the decision was made by Principal Investigators to remove the cohort and amend the tools to ask about experiences retrospectively. This strategy may have created a recall bias. Recruitment issues also impacted the study results – no interviews were conducted with Unmarried Current Users aged between 25 to 34 years in MBP, one interview was conducted with an Unmarried Current User aged between 25 to 34 years in rural EHP, and no interviews were conducted with Unmarried Non-Users aged between 25 to 34 years in urban EHP.

During recruitment and data collection, local complexities, including a lack of infrastructure and persistent law and order problems, presented various challenges to fieldwork, particularly in the EHP.

Logistical barriers exist in both provinces to varying degrees, such as in the ability to facilitate access to and interview of women in community settings due to partner/spousal pressures, security for research teams, time constraints (women and daily duties), and communicating and clarifying the purpose of the research, particularly in EHP.

The research teams in both provinces made efforts to consult with key contacts (service providers and community leaders) to address these issues, as necessary. Given these considerations, broader engagement of participants in hard-to-access and/or inaccessible areas remains an important opportunity to broaden the understanding of the family planning market in PNG.

The EHP research team had limited time in the initial field site in Lufa District due to inter-clan conflict. Additionally, with a largely patriarchal society, the recruitment of female participants was challenging due to the need to seek approval and permissions predominantly from spouses/partners and from other family members (e.g. fathers, mothers, mother in-laws) but proved a necessary part of engaging female participants in EHP, particularly in more rural areas, as a security measure for both researchers and female participants. For women, the need to obtain approval/permissions to be recruited for the study is an important consideration in the Eastern Highlands, and it informs the extent of influence that some partners/spouses and/or other kin have on family planning consumers.

Key terminology

Within the report, the terminology “younger women” will refer to girls and women below the age of 18 years. The terminology “young women” will be used to refer to women aged 18 to 24 years, while the terminology “older women” will be used to refer to women aged 25 and over. The term “women” will be used to refer to women of all ages, unless specified by age demarcation (e.g. aged 25 to 34 years).

5

Key Findings

The family planning journey for women in PNG is complex, layered, and significantly influenced by factors within and beyond their individual control. A woman's pathway to use, not use, or discontinue use of family planning services and methods is moderated by several factors. Understanding the factors, both facilitators and barriers, that are influencing family planning access and decision making, as outlined below, is critical to ensuring access for all women.

Women represent the largest number of consumers of family planning products in Papua New Guinea. Despite this, findings clearly indicate that the needs of women are disproportionate to the level of decision-making that they are able to exercise in their choice of family planning products.

Uptake, non-use, and discontinuation were not linear journeys for women; rather, use is based on individual experiences, relationships, and the needs and choices of women at different points throughout their life. The specific influences, sometimes acting as motivators or barriers, contribute to these journeys and the decisions women make regarding points of entry to and departure from the family planning market. These specific influences and periods of decision-making regarding uptake (i.e., initial engagement), non-use, and discontinuation will be identified throughout the report to map the journey of women's use of and engagement with family planning services and methods.

Knowledge and awareness of family planning

Family planning knowledge and awareness was diverse between men and women, young women and older women, and across research sites. Some participants were aware of modern methods, some traditional methods, and some were aware of both traditional and modern methods, whilst some had no knowledge at all.

For some younger/young women, knowledge on family planning was received at school, whilst for others there was limited or no formal knowledge of family planning or the different methods available. This disparity also existed between younger and older women generally, and among all men. Knowledge further appeared to be an individual trait. Together these have implications for service providers in the development and dissemination of audience-appropriate information due to the diversity of knowledge within and across these cohorts.

A number of critical channels – both formal (school, college, health care workers) and informal channels (discussions with women with experience, discussions with family, discussions with peers) – of information were reported by women.

These often were the first points of entry or engagement with family planning services, products, and methods for young women and important sources for all women at all stages of their family planning journeys. Women's family planning journeys required them to consider multiple sources of information, where one may be perceived as more trusted and useful in making their decisions about continued use, non-use, and discontinuation. These sources of information were also reported to influence older women's decisions in family planning.

Family planning information and education

In this study, women reported that access to information and/or education, or absence of, are vital to women's family planning journeys. The data shows that most women had some level of primary schooling, whilst women from urban areas were more likely to continue education beyond primary school, they often stopped at grade 10 as a result of pregnancy, inability to pay school fees, or a combination of both. Among participants there were a

limited number of women who had completed tertiary education and, conversely, a limited number of women who had no education at all. Differences in the level of women's education were evident between EHP and MBP. In EHP, women with no education resided in both urban and rural areas, whilst in MBP, women generally had some level of formal education, even if only through grade 1 or 2.

Women's education and literacy

Information, support, education and literacy are an important part of the family planning journey. These factors were reported to directly influence women's decision making with respect to the uptake of family planning. The information, support, and education that women received impacted their ability to engage with service providers, specifically HCWs, and with their partner/spouse, particularly concerning when and how they make decisions about family planning use. Education and literacy were reported to directly influence women's decision making with respect to uptake of family planning. Women who were not literate or did not attend school were believed to be less likely to attend health care services, a barrier more commonly reported in MBP:

The only mothers that come to receive contraceptive methods here are only [literate] mothers otherwise the ones that are not literate are the ones that find problems, especially in childbirth.

Female,
health care worker,
rural area, MBP

Due to some mothers, they did not go to school and so are uneducated. There are some, they know the family planning and how to come for their next visit and some of them they don't know their next visit and maybe their friends will tell them, they'll give them wrong days and so they come on wrong days and that's where they face problems.

Female,
health care worker,
rural area, MBP

In EHP, education and literacy as barriers to accessing family planning services is rooted in lack of comprehension of family planning itself. People recognise the term 'family planning,' but cannot explain exactly what family planning is and what services are available.

The term 'contraception' was familiar to many when highlighted in interviews, however, the preferred terminology in interviews was 'family planning' and not 'contraceptives,' particularly when both men and women

were unsure about specific contraceptive methods. This is also due to the framing of included questions as family planning and not as contraceptives. Additionally, ‘family planning’ was used synonymously to indicate the most prominent modern contraceptive methods: implants, ‘gumi’ or ‘rubber’; contraceptive pills or ‘marasin’ or ‘medicine’; and injectable medicine or ‘Depo’ or ‘sut marasin’. A male service provider in rural EHP saw this language use as a “double barrier”: 1) to reach people because of the lack of information, awareness, and counselling and limited service provision and 2) due to a lack of comprehension amongst clients:

Male,
service provider,
rural area, EHP

They know the words family planning, but they do not know the services that we have; that's what I go around and see and when I talk about family planning and young age like me and go up to the older age ... We go to areas where they do not have these things, so we take more time for counselling as well as services, we do all these methods, the way we work, we work with double barriers, the side of young people's health, even educated elites but they don't know what family planning services means.

Literacy and education were seen to directly influence women’s family planning journey, particularly their ability to ask the right questions of their HCWs and to follow the administration protocols of the specific contraceptive methods they were using. In the EHP however, some women were reluctant to ask questions due to fear of chastisement and feeling unable to articulate their needs:

Lacy,
unmarried current FP user,
age 18 to 24 years,
rural area, EHP

Sometimes they (HCWs) get cross/angry at the patients, it stops them, they say “you do not look after yourselves, you go around and get all sorts of sickness/illness and then come back to the hospital”, these are the kind of complaints they make.

Women in EHP were concerned that they would be unable ask the right questions regarding family planning, thereby not getting all their concerns addressed, and they suggested that other women find it easier to ask questions and clarify their concerns:

Yanerle,
married non-FP user,
age 18 to 24 years,
rural area, EHP

For some (women) like they can talk and get it (information/advice) and they get it (information/advice) but like some of us, it is hard for us to talk like that, like they (HCWs) can talk about it (family planning) yes, we find it hard (to understand) but like the people that can go and ask the question(s) then they will get answers ...

The inability to directly ask questions may not stop women from uptake of a method of family planning. However, as the following comment from MBP reinforces, a lack of prior information and/or advice can impede the correct usage of a method, particularly if proper directions are not followed:

But that knowledge is sometimes it has been tried out and questions can be asked and when they are trying out that's the problem where they fail or not. If they follow them correctly then it works.

Hansen,
other family influencer,
urban area, MBP

Women's knowledge of family planning

Knowledge is also seen as an important factor by HCWs in women's family planning journeys and family planning decisions. As described by one HCW in MBP, besides the availability of supplies and methods, knowledge is one of the next most important influences in family planning, particularly where women's knowledge of family planning is believed to be directly impacted by restricted formal education.

Additionally, family planning counselling and education by HCWs can be impeded due to the existence of numerous local languages (known in PNG as Tok Ples) that may be spoken in their area, languages the HCWs may not speak:

Okay to my own point of view I would say it's the knowledge, second to the supplies. Knowledge, we should take up this education awareness to schools and women fellowship and all these. And because like, I am not locally from here, so we have to have people who can speak the language and do more to educate to our mothers. Especially those mothers who have not been educated in the villages.

Female,
health care worker,
rural, MBP

Lack of knowledge and restricted levels of education also contribute to some women feeling shame, which prevents them from actively seeking out information that supports the uptake of family planning:

Oh, they do not move around and try to hear other stories. Because a lot have not had education, so they do not understand these kinds of things too. So, a big thing, eh, they are ashamed. They are ashamed/embarrassed to move around.

Dinah,
unmarried non-FP user,
age 25 to 34 years,
urban, EHP

School and college

For some women, the entry to family planning journeys began in the education system, where information was provided in age-appropriate stages beginning in primary school:

Rodney,
other family influencer,
urban area, MBP

They teach them and the students come along and then they try to do their assignments on what type of family planning are given to these age groups and should they receive family planning and what are the side effects and so they start to learn that when they are in Grade 6.

Mona,
married non-FP user,
age 18 to 24 years,
rural area, EHP

*Yes, the time I was in school;
I heard about it in school.*

School is an important, formal environment and a facilitating factor within the family planning journeys for women. This was highlighted by a male community leader in MBP, who reported on the importance of the relationship between formal schooling and the willingness to access family planning services:

David,
community leader,
rural area, MBP

Those who do not attend to family planning, maybe some they do not understand, some they fear it because nobody comes around to tell them the usage, only maybe the educated ones, you find them visiting the clinic. But those who never went to school never go there.

Dinah,
unmarried non-FP user,
25 to 34 years, urban, EHP

Women also reported family planning information was available in college and outside school settings, such as the hospital – a location that was deemed appropriate and useful to gain an understanding of family planning:

It's good if they give information so that we can have a fair idea and avoid these things and keep ourselves safe for a long time. They come into the college but outside [outreach] at the hospital or places like that they go around and do their awareness.

For some younger women, “a silence of family planning” information was reported to begin in school years, impacting young people by limiting entry points for contact with potentially lifesaving information until they were 18 years of age or when they went to college.

This silence sometimes extended to the family and community due to shame, stigma or lack of knowledge. Factors contributing to silence or conversely discussion about family planning were also framed within cultural norms and beliefs regarding who is ‘entitled’ to information, which will be explored further. Factors including shame, embarrassment, lack of content at school, lack of interest in the material presented, and lack of discussions among peers or at home contributed to silence of family planning information.

This silence remains as a significant barrier for younger/young women, as it can either prevent women from considering family planning at all, i.e. resulting in non-use; or prompt them to seek information and advice from their trusted sources such as family or peers, and/or rely on other sources of information, such as community gossip, to help them in their decision-making:

No, I never heard of people talking about this up until I was in the college.

Narelle,
unmarried current FP user,
age 18 to 24 years,
urban, MBP

The community's education and literacy

Education and literacy were reported to directly influence community awareness about family planning. These factors can also shape men’s perceptions regarding awareness, which then influence acceptance of this information and of the choices and decisions women make:

Many of our people refuse to, many of our mothers refuse to take up that birth control because for us in the community, we feel that you know, there was no awareness carried out and our people didn't know it works and who's going to do that.

Max,
community leader,
urban area, MBP

We need to push that service close to our men. We all need to work together, community, government and NGO to work together now.

Leroy,
married to current FP user,
age 25 to 34 years,
urban area, EHP

Leroy, married to current FP user, age 25 to 34 years, urban area, EHP
For older members of the community in MBP, the lack of knowledge was explained in terms of modern family planning changing over time. Without education and awareness, the wider community is not keeping pace with this change, and therefore, does not understand what family planning is for or how it is used in the current context:

Elias,
community leader,
urban area, MBP

Like maybe the elderly people like some of our men who are seated here, in our time, we didn't have many services in relation to family planning and birth controls in those days. But today, like one of our friends have mentioned, technology has evolved, and many things are happening, and many methods have been used.

Dalton,
partner of current FP user,
age 15 to 24 years,
rural area, MBP

It is impossible to educate the group of people at the same time as they are culturally intact with their traditional beliefs and therefore it's really hard. When you talk about such things like white men ideas, old people walk away.

At other times, men also spoke of being unable to ask questions or generate discussion about family planning, therefore remained uninformed:

Rodney,
community leader,
rural area, EHP

We are not good at getting up and talking so it's hard for someone to ask questions ... what is this or something like that, we do not know. Because of this we do not know too much about family planning.

Informal channels of knowledge and information

Discussions with women with experience

In both MBP and EHP, women who had previous experience with family planning were considered a trusted source of information. For many, the discussion about other women's previous experience of family planning is the first point of entry for information, influencing decision-making about uptake and/or use. This is crucial for younger/young women, and to a lesser extent older woman, who may be embarrassed to engage with services and/or have limited education. Once in the family planning service sites, discussions with other women are more towards other topics rather than family planning.

Yeah, and from my big sister too. After she had a baby, she had implants. That's when I heard about implants. They [nurses] also do awareness and tell us, 'If you want to stay a while without getting pregnant, you take these methods so you can stay for long without getting pregnant.

Rosel,
married non-FP user,
age 18 to 24 years,
urban area, MBP

I hadn't seen it, but other women told me about it, experienced women. While we went and sat inside, they were saying. This is like that. They went on and I thought I'd like to try one method, if it's not good then I'll try another one.

Brandi,
married current FP user,
age 18 to 24 years,
peri-urban area, EHP

First time like we have not like what plenty medicine here, and [inaudible] told me like ladies and women's' use to go to [Name] hospital, they use to get medicine. So that time I went with some pregnant ladies, we went for clinic and some for family planning. So, we went there [pause] we combined with the other ladies there, they are coming there from different places, so we never talk about anything or family planning, but we use to talk any unnecessary talk.

Flora,
married current FP user,
age 25 to 34 years,
rural area, MBP

Other young women reported having overheard discussions about family planning between other women as how they were introduced to family planning information:

I just heard the ladies talking, those who were getting the family planning but to know more about family planning I didn't know. They just said it used to help them for the babies. They said they got family planning to help for the birth spacing for their children.

Patricia,
married current FP user,
age 18 to 24 years,
rural area, MBP

Discussions with family

Throughout women's journeys of family planning, whether as a woman who has yet to access family planning, as a current user, or as a non-user who had discontinued use, women also reported discussions with other family members and in-laws as impactful to their decisions, where they received advice and information, space in which to ask questions, and encouragement to access family planning services:

5 Key Findings

Larina,
married current FP user,
age 18 to 24 years,
urban area, MBP

She (big sister) said you must go in time and on the dates the nurses tell you. If not and if you miss out, you will get pregnant. That's what like she used to tell me. Like she doesn't tell me everything, like all the what, only those small. I was already expecting this one, I received this implant and I was asking them those questions and she (big sister) was explaining it to me.

Sandra,
married current FP user,
age 18 to 24 years,
rural area, EHP

Before I went and asked some people, like the mothers that have gone and already know, I asked them to explain, so you go now (health workers) they will explain. So, then you will choose whatever you like, so I heard it there first and then I went to family planning.

Monika,
married non-FP user,
age 25 to 34 years,
rural area, MBP

I let my husband know that how mothers are giving birth and my husband accepted me to get family planning. Yes, my mother told me about family planning, so I told my husband about what my mother suggested.

Dinah,
married non-FP user,
age 25 to 34 years,
urban area, EHP

It is my man's sister's story. They say when you go and give birth, and after the child is 1 month 2 months, you must go and get family planning quickly. If you do not go and somewhere in between that time you sleep with your man, and your child is not big yet, you will have another child. So, family planning is best, you must go and get family planning, stay on family planning.

Marcia,
unmarried non-FP user,
age 25 to 34 years,
urban area, EHP

At first it was another one of my aunties, she told me that "you must put an implant in your hand/arm when you are still a young woman. So that when you go around with boys you will not get pregnant".

Less commonly reported within the family planning journeys were young people having family planning discussions with male members of their extended family, particularly fathers. Where discussions occurred they were reported between an uncle and niece or grandfather and grandson and were focused on the need to prevent unwanted pregnancy. Discussions with male extended family were more likely to be reported in MBP than EHP:

Allie,
married non-FP user,
age 18 to 24 years,
rural area, MBP

They just told me that getting family planning will help to space or control the bearing of kids and it will also prevent women from getting pregnant ... My father's uncle told me about it.

*That's what my grandfather told me when you're too young to get married
your wife will be pregnant every now and then.*

Patricia,
married non-FP user,
age 25 to 34 years,
rural area, MBP

Discussions with fathers, although rare, were more likely to include more specific details about family planning and/or support to access services, and were more likely to occur when the father worked in a formal health care role:

I spoke with my parents and my father because he is a health worker, he encourages us to go and take it cause we will be staying safe. After taking my father's advice I went, and the sister put (the implant in).

Zinnia,
age 18 to 24 years,
rural area, MBP

Ye my daddy tells me, he works at the hospital so, he works in the media (department) so, from time to time he will hear updates about family planning, and he will come and story with me.

Zeraphina,
unmarried current FP user,
age 18 to 24 years,
urban area, EHP

Conversely, some women reported family planning discussions do not take place within their families due to customs and beliefs and the understanding that family planning is not a topic for open family discussion.

This silence is a barrier, particularly at the beginning of their family planning journeys when younger and young women were not able and/or willing to access formal family planning services:

Like those times, our parents, they don't talk in front of us because of our customs. Like they keep it to themselves and they talk about it among themselves.

Lola,
married current FP user,
age 18 to 24 years,
urban area, MBP

If only I used family planning methods when I was young ... I never heard about family planning when I was about that age (15 to 17 years) ... It wasn't very popular. Mothers who take that [family planning methods] do not talk about it. It was hidden [private/personal]. When we ask them, they would say they were sick and went to the hospital but they [actually] go there to take family planning.

Janelle,
unmarried current FP user,
age 25 to 34 years,
urban, MBP

Venna,
married non-FP user,
age 18 to 24 years,
urban area, EHP

They story but they don't story well ... I don't know, they talk about family planning, that they go. But I haven't heard the full story.

The lack of family planning discussions between younger/young women and their mothers and elders was influenced by mothers and elders having limited knowledge about modern family planning methods, embarrassment or unwillingness to initiate and/or have these discussions, or perception that these discussions were unsuitable for unmarried young women.

This silence between young women and mothers and elders creates a barrier in women's family planning journey, and again, a barrier particularly significant for younger women who do not have alternative sources of information:

Selina,
married current FP user,
age 18 to 24 years,
urban area, MBP

No, it wasn't that easy because no one talks about those things you know? Until you are [pause] maybe when you get into the motherhood and then – people feel shy to talk about it to young people you know? On family planning, just give advice or awareness to them. Maybe because [some] of them haven't gone through family planning and maybe they've made mistakes along the way that they're too shy to tell their stories to young people.

Dinah,
married current FP user,
age 25 to 34 years,
rural area, MBP

Yeah, we use to hear women and men talking but not us. When they talk its only for the women and the husbands not us. [Interviewer] Ok, that was when you were 15- 17 years old. You said women talking huh who are ...[Interrupts]. Our mothers. Because our mothers are not educated.

Lency,
unmarried non-FP user,
age 25 to 34 years,
urban area, EHP

Because I get shame/embarrassed to talk about something. Like it is easy to go and get it (family planning), but some women hesitate and that, they find it hard.

Female,
health care worker,
rural area, EHP

A lot are not using because they are not educated, they don't have counselling, so they do not use these things.

A cultural barrier also influenced silence between young women and their fathers where customs and traditions perpetuate that women (mothers, sisters, aunties etc.) were responsible for these discussions. The shyness of fathers to have these discussions with daughters compounded this cultural silence:

Family must sit down with their children and encourage them not to do these things and have family planning. But another thing, fathers, our culture fathers cannot encourage the daughters, they feel shy. But now what you are saying, you know some of us we don't feel shy, when we call our children, we must tell them they'll sleep with men. You must be faithful in your education until you complete them. But not many of us, most of the, most of us we feel shy to encourage our daughters. And even you know, in our tradition, that's what I have seen.

Ezekiel,
other family influencer,
rural area, MBP

Participants also reported the silencing of some women's conversations with their boyfriends and husbands. The contributing reasons included men finding it hard to discuss these topics and the gendered role in family education as part of the family planning journey. Compounded by silence between younger/young women and their mothers, fathers, extended family and elders was the inability to discuss family planning with boyfriends and husbands, therefore creating a further level of silence.

This serves as a barrier for both men and women to engage in these discussions and choices together:

I know that about 75 per cent of them will not talk to their girlfriends about family planning.

Dalton,
partner of current FP user,
age 15 to 24 years,
rural area, MBP

Like in regard with our culture it's complicated for us to sit with our daughters and sons to talk about sex. We have to sit separately the mother will talk with the daughters and the father will talk with the sons about sex and how to go about it, how to look after the family, how to get married, how to have sex and all that. We cannot sit together and talk about it.

Christopher,
husband of non-FP user,
age 25 to 34 years,
rural area, MBP

We do not talk about these things too much; uh I do not know too much about these things.

Felix,
community leader,
rural area, EHP

Discussions with peers

Younger and young women reported having family planning discussions with their peers, usually their best friends. However, these discussions were more likely to focus on boyfriends/husbands, children, and activities rather than family planning:

Karen,
unmarried non-FP user,
age 18 to 24 years,
urban area, MBP

It used to be my best friend from school who lives at Raba Raba (that I discuss my relationships problems with), yeah, I usually call her and tell her everything, but when like I don't have credits, then I go to the small ones and tell them, but not the serious ones, the minor one's ... (I trust her) because she usually encourages me, and she's more advanced, yes, so I trust her, and she usually gives me advice, tells me, what to do, and what not to do.

Philly,
unmarried current FP user,
age 18 to 24 years,
urban area, MBP

It's normal for us, like we always talk about school and what we want to be in the future, like our family or our husbands that's like you know college life and college friends and those are the only stories we talk about. Yeah, sometimes we talk about our boyfriends to each other.

Where family planning discussions were had with peers, the history and trust in the friendship and in the discussion influenced the modern method choice (discussed later):

Tallulah,
married current FP user,
age 18 to 24 years,
rural area, MBP

My age groups. Those who are with me, those just have a child now. My friends especially, those ones who we grew up together I feel ok to talk to them about family planning.

Ida,
married current FP user,
age 25 to 34 years,
urban area, EHP

So, these others are my mother's they tell me. The other thing, sometimes I will be with the girls/women on the road or street and they will tell me to get family planning ... (friends or family?) Friends.

Tanesha,
married non-FP user,
age 18 to 24 years,
urban area, EHP

The young girls, my besties/friends, they are my in-laws, they have already put it (implant) and they tell me the story about it. So, I talk about it later and say 'I'll go and put this implant' that's what I say.

Yeah, my squad, some of them have got it (implant) so they say or keep telling me ‘it’s a good thing that’s why we got in, our bodies were not well. I get it (implant) and now I am growing’, that is what they say. ‘We get it (implant), but we are still seeing our period, two weeks only, so annoying, we might go get it removed’, they say this, and I get scared.

Elissah,
married non-FP user,
age 18 to 24 years,
rural area, EHP

While some women engaged in family planning discussions, silence around these issues was prominent for others who reported not having discussions with peers and friends for reasons including a break of trust in the past, fear of these discussions being repeated to others, and that these types of discussions are perceived as gossip:

No, I have a best friend, but I don’t share my problems with her I use to keep it to myself ... I used to get scared. Sometimes like that best friend you trust she’ll go and betray you, that’s why like whatever I face I keep it to myself ... Because one of my best friends that I used to share my secrets with, she then use to go and tell people about it, like about me. So, from then on, I see like it’s ok you and have a best friend but your secret you cannot tell them.

Fennella,
unmarried current FP user,
age 18 to 24 years,
urban area, MBP

Because my friends, when we tell them, they will go out and you know, they used to turn things around and spoil us. So, I keep to myself, I don’t share my stories with them. So, myself and only my husband I trust him.

Jerrolyn,
married current FP user,
age 18 to 24 years,
urban area, MBP

Ah, inside our hamlet/community our close friends will stay together, but I’m not really a woman that likes to sit down and story (gossip) or that because what if I tell the wrong stories and I get in trouble. So, I’m not really that type of woman.

Tillie,
married non-FP user,
age 25 to 34 years,
rural area, EHP

Younger women were sometimes discouraged by their family from having these discussions with their friends:

Yeah. I used to come back to my parents. I come to my parents, share my problems. They give me advice. The advice they give me is you don’t tell other people I’m in this situation.

Kiki,
married current FP user,
age 18 to 24 years,
urban area, MBP

Disinterest of young people (Relevance of family planning)

A common theme reported in MBP and EHP was that information about family planning was available, however younger people were either not interested in this information, felt the concept of family planning was not relevant to their age at the time, ignored it, or did not take it seriously.

The lack of interest seems related to the perceived relevance of 'family planning' to younger women's life course stage and directly influences some young women's decisions and choices about the entry point to family planning usage:

Dunstan,
community leader,
rural area, MBP

What I have already experienced with some of them is that they think is when it comes to boy-girl relationships and they are not really concerned or they are not really serious of what they have already planned to do and they are taking it as something that is just a joke, you know.

Clare,
married non-FP user,
age 18 to 24 years,
urban area, MBP

[I heard about it] at Misima [I was in school at the time] But like I was not really interested in that, because like I was a student, like my interest was not in those things but yesterday this sister met us, when she told us like I was really interested to come and hear about it.

Shainlee,
married current FP user,
age 18 to 24 years,
urban area, EHP

Yeah, they used to talk about family planning and I only heard it (15-17 years), I wasn't interested at this time, when I was young and going around, I wasn't interested in hearing about it.

Sammie,
husband of current FP user,
age 15 to 24 years,
rural area, EHP

In the EHP, younger people's lack of interest in family planning was believed to be the result of them preferring to act out of enjoyment and not think about consequences of their actions:

Like they young ones, 15, 17, young women and men like they go around to enjoy their life, go around like that and then have unwanted pregnancy.

Delilah,
married non-FP user,
age 18 to 24 years,
urban area, EHP

It is our young life so we will enjoy it and go around but, that's my thinking.

Entitlement to family planning services

Despite a family planning policy in PNG that sanctions women's access to family planning methods from age 16 irrespective of her marital status, conflicting beliefs and attitudes towards equitable access to family planning exists, thus making entitlement to family planning services contested.

For some women, younger/young women in particular, their own norms and beliefs, as well as the beliefs of their peers, family and service providers on 'who' is entitled to family planning, influences access to and uptake of family planning. This is especially true for all women prior to being in a union or marriage. Further there were strongly held beliefs around access to family planning for any woman who had not yet had a child – this was equally reported among married and unmarried women.

These beliefs are significant considerations in understanding the barriers women face in their family planning journey, as well as who and what the facilitators and motivators are behind these beliefs. However, it is also important to acknowledge that norms and beliefs about 'entitlement' regarding family planning use must be considered within each local context in PNG.

Young women

Being unmarried remains a barrier to young women's access to contraception. Access to family planning for younger/young women who are sexually active is acknowledged as important; however, the belief that these same younger/young women should not be seeking family planning services, particularly unmarried younger/young women is common. This is reported in the denial of services. Divergent beliefs about the need for family planning for younger/young, unmarried, and childless women were shared equally across MBP and EHP. In some instances, the value of family planning was not viewed by the community or by married women as the domain of married women only:

You're not married but having sex and you face a problem (and then) you conceive (and have a child) or have a baby (already); you can get family planning. It doesn't mean that only married women can get family planning, no.

Francine,
married non-FP user,
age 18 to 24 years,
rural area, EHP

Female,
health care worker,
peri-urban area, MBP

We all gone through it so, our responsibility is to help them to understand the consequences of these things and to access these services so that they can continue to go through their education or whatever they are planning to have before finishing it off before they can start to have children. We say that having these contraceptive cause women to become promiscuous and they become prostitute, I believe it's not a good word to say or label to our women, cause all these family planning methods don't cause a woman to do that. It's their own attitudes, how they think about themselves, their own behaviours that lead them to do this, so all these family planning methods don't cause young women specially to do these things.

Acknowledgment that family planning was not limited to married women meant that younger/young and unmarried women, including those still at school, could benefit from access. This influence, with support from the family and community, can motivate their family planning journey:

Darleen,
married non-FP user,
age 25 to 34 years,
rural area, MBP

Like they are in relationship with boys and they can get family planning to help them so whatever they want to do, especially the students.

Stanley,
husband of non-FP user,
age 25 to 34 years,
rural area, MBP

Nowadays you'll see those elementary school kids and you'll think that they don't have 'friends' but they have friends ... They must get it because to prevent them from getting pregnant so that they can continue with their education, if they are having sex

It was widely agreed that young women were sexually active, even while at school. Young women who were entering casual and long-term sexual relationships prior to marriage and without family planning risked an unintended pregnancy:

Ivy,
married non-FP user,
age 18 to 24 years,
urban area, EHP

Like now the young women and men get involved in relationships with boyfriend and girlfriends and have sex but then they get pregnant and have a child and then have to look after that child now, they need to know about family planning.

No, anytime I might accidentally meet up, like I might get into trouble and that's why. Like I might make you people angry. And you (mother/family) might be upset with me for making that wrong decision and you might not want my unplanned child and whatever, so I got that (implant), ... because I already have that bad attitude of drinking and that's why I said and I got it not to protect myself from getting pregnant especially the unwanted one.

Kendra,
unmarried non-FP user,
age 18 to 24 years,
peri-urban area, MBP

In some cases, support from other family influencers for access to contraception was positive, for younger/young unmarried women, and related to a belief they were too young to have children. While the support from service providers was positive, it was rooted in the belief that the younger/young women should be married first to ensure the child would have a father. The advice and support of service providers and family influencers, while driven by their own and differing beliefs, supported younger/young unmarried women to start their family planning journey:

You want to have a serious boyfriend, you either want to have a child or not. If she says no, she doesn't want a baby, we say, 'You're still young, you should get family planning and stay on it.' The nurses will say bring your young girls whether they are pregnant or not and not here otherwise they might get pregnant and they have friends, they have friends for some time so they will still get pregnant.

Sherri,
other family influencer,
urban area, EHP

The thinking of these young women is that they want to have children. And the doctors will come and ask them why do you want to have children, we need to stop this until it's time for you to have children; give yourself time. And the doctors themselves will say to have a child you have to do these things, to have a child it has to have a father, you must have a child when that child has a father that is around. You have to put an implant now so that this child can be fed. You can remove it when you want to have another baby.

Cleo,
married non-FP user,
age 18 to 24 years,
rural area, EHP

In a sex positive culture, as evident in the research findings from the rural area of MBP that acknowledges 'sexual freedom' particularly amongst young unmarried men and women residing in those areas(24), many people participating in this study expressed a concern that many young people aged 15 to 17 years are getting pregnant. Having sex and sexual freedom is allowable and acceptable within their culture, but underage pregnancy and complications it can create was seen as a problem:

5 Key Findings

Sandra,
married non-FP user,
age 18 to 24 years,
rural, MBP

In Kiriwina we have plenty problems, many problems we are facing here because some girls are aged 15 to 17 but already, they are pregnant, after they get that, they have problems; they can get it, but they are still underage.

Supported here is the idea that family planning education, awareness, and services should target this population of young women and young people more generally, including educating young men to understand and support family planning:

Barnie,
husband of current FP user,
age 15 to 24 years,
urban area, MBP

Because before like I said my culture in line with these ages 15 and upwards are allowed to have sex and going around. Okay 15 and below is not allowed to have sex. As for this new generation is ah ... [They are] having sex so under the age of 15 females should go and get family planning.

In contrast, there were also members of the community who believe that young women under the age of 18 years were too young (underage) and as such, should not be having sex or access to services, information, or education about family planning. Being underage was typically described in terms of body maturity:

Allie,
married non-FP user,
age 25 to 34 years,
rural area, MBP

They are too young to have sex. In the past people were matured before having sex. Males will have beard, females their breast will grow big and all that then they will have sex not like nowadays these girls with just small breast, but they are having sex (i.e., reproductive maturity).

Doreen,
unmarried non-FP user,
age 18 to 24 years,
peri-urban area, EHP

The young girls it's hard/they shouldn't be getting this. But like married women that have had children from a man, if the man is happy, they might put the implant.

Denial of service was reported even when parents accompany their sexually active young daughters to a health provider seeking access to family planning. In PNG, age limits are set in the National Sexual Reproductive Policy and associated case law (34), whereby it is illegal to provide family planning services to women under age 16 years in PNG.

Despite this, some mothers have tried to access family planning services for their young daughters, and HCWs have considered administering family planning services to younger women/girls because they believe it is necessary and important.

An instance where a mother tried to access family planning for her younger daughter aged 14 years, the health care worker did not acknowledge policy or law for denial of service rather advocating against sex because of a belief that girls that age are too young to access family planning. This advice from HCWs influences parental support of girls/younger women, the family planning decisions girls/younger women might make, and can be a barrier to girls/younger women's timely uptake of and access to family planning to avoid unintended pregnancy when they become sexually active:

Now a days, we are receiving girls at grade 5 and grade 6, children coming in. I think the age of 14 girl, the mother brought her in, she wanted to be on family planning. I asked, 'why do you want your daughter to be on family planning', then I asked her 'what grade' and then she said, 'in grade 5'. I said, 'too early for your daughter to be on family planning, the only is that you go back and advice your daughter not to have sex'.

Female,
health care worker,
rural area, MBP

Denial of family planning for young unmarried women

The belief that family planning should only be accessed by married women appeared to be based on a community value and belief that unmarried women, and more specifically younger/young women, were having sex and were promiscuous, the denial of family planning to these women may reduce promiscuity. This barrier that was specifically reported to restrict young women's access to family planning, but also unmarried women at any age who are/perceived by others to be sexually active and not in a formal union. The labelling of women as 'promiscuous' and the enactment of stigma and health service-related discrimination from this label continues through women's family planning journeys':

Now there's a lot of sneaking around is happening with young women and they are having unwanted pregnancy.

Traci,
married non-FP user,
age 18 to 24 years,
urban area, EHP

Louise,
married non-FP user,
age 25 to 34 years,
urban area, MBP

If she is married young girl [she can go to hospital for FP] ... Family planning is not for the young girls but for married couples ... My opinion is that young girls are given medicine and it allows them to go with boys to another boy ... Like they sleep from one boy to another person. That is my opinion ... [They might] Like about contracting sickness or AIDS or any disease ... They are telling us that family planning is for married couples. They won't give birth one after the other that is not good.

Promiscuity as an outcome of accessing family planning was reported as a belief by both men and women. For unmarried women and unmarried mothers, using family planning was viewed by HCWs and the community as an encouragement to have sex with other men for money, to become spoiled, and to spoil others. This belief is spoken of amongst all cohorts of women rather than one cohort, representing a broad barrier within the family planning journey for unmarried women.

Unmarried women feel the pressure of this perception, while married women express this belief when they talk about other women, particularly unmarried younger/young and/or unmarried women generally:

Shelly,
married non-FP user,
18 to 24 year,
urban area, MBP

Well I think they should be giving to young girls too otherwise, on the other hand to a bit like, they came up with this implant and this family planning and all that and you know, if young girls especially like good girls is okay but some girls like they have bad thoughts and they go around everywhere and if they are getting these things then it will like make them like they don't care and they can do whatever they want like go here and there to people and they won't get pregnant. That's like what I see as a bad side of young girls especially.

Doreen,
unmarried non-FP user,
age 18 to 24 years,
peri urban, EHP

And these women that go/sleep around and they get pregnant they get scared and they go (to family planning). They go/sleep around with any kind of man. But still, they will not get pregnant. They already have a blockage in their hand/arm so (implant).

Marriage

It is common for younger/young women to be denied access to family planning if they are not married. Those in the role of HCW specifically (rather than the service provider) were reported to enforce this belief by labelling women wanting family planning, and therefore, having sex, before marriage as prostitutes.

This label contrasts with ‘good’ married women and is associated to cultural norms and beliefs about who should be entitled to access family planning services.

While spacing children was seen as important due to population issues, drug shortages were cited as an awareness communication tool to discourage unmarried women from seeking services and straining the capacity of the health system.

This labelling by HCWs and the associated cultural norms and beliefs about who is ‘entitled’ to access and use family planning remains a significant barrier, particularly for young unmarried women in the family planning journey:

If I found out that the woman is not married, tell her that it's no need for you to get family planning, unless you find a partner and you trust that person, you can come along and receive family planning, cause family planning is not for prostitution, it is for married people, for someone who is trying to make a family, someone who has to plan the number of children they should have and they should space them because, we have population issue right across the nation.

Female,
health care worker,
urban area, MBP

This is another thing that we tell our mothers, when we are doing awareness, that because today the drugs situation it's for family but when we open it up to any others like our children or mothers who are single not married but they also need it too, so now everybody is coming for it, but we are not ready to cater for the population that is coming for family planning so.

Female,
health care worker,
urban area, MBP

For younger/young unmarried women, the need to be married before accessing family planning was also communicated and reinforced by parents, particularly those who were believed to have less education:

Nes,
unmarried non-FP user,
age 18 to 24 years,
urban area, MBP

No [it is not easy for a girl between 15 to 17 to access FP]. Of course, they use to tell us that Family Planning is only meant for married people ... My parents [told me this].

Magda,
married non-FP user,
age 25 to 34 years,
rural area, EHP

You have to be married well first
with your man and then you can get it.

Denial for childless women

Bearing children is seen as a requirement and responsibility for all women in PNG. **This study shows that there is a strong held belief that women should have had a child before starting on a modern method of family planning.** This was influenced and reinforced by the belief that use of modern methods (implants were specifically cited) can have a negative impact on a woman's future fertility and childbirth, a belief described by community members, young women, and HCWs across all sites and all locations:

Mona,
community leader,
rural area, MBP

My disagreement is towards those women who haven't had any children, but they are family planning, so I disagree with that. Until they have a child then she will decide to go on family planning.

Renita,
married non-FP user,
age 18 to 24 years,
peri-urban area, EHP

My thinking is that when we are young and we get family planning the time we have children or I think that it will be hard for us, it will affect us because we have not had children yet.

Roseanne,
unmarried non-FP user,
age 18 to 24 years,
rural area, EHP

But like, now I am young and it's hard for me to go back and get it because I am not married. I am not with a man so cannot get it. I don't have any children too. But my biggest thought when I have a child. If I have one child now, then I can go and get family planning.

HCWs enforced the community belief that younger/young women should not access family planning until they had children. This belief served as a significant barrier, as the participants reported that they were being denied access at the point of service:

Like I was trying to go and ask but then I told one of my sisters to go and ask the nurse. She went and asked the nurse, but she didn't allow. She said, "You stay until you have one baby or two, like one, you come for family planning. But now you are young, you won't get family planning.

Larissa,
married current FP user,
age 18 to 24 years,
urban area, MBP

This belief also directly influenced the decision-making ability and willingness of these young women to access family planning services and to consider the best time to have their first or subsequent child:

But like, now I'm still young it's hard for me to go back and get it because I'm not married too. I'm not with any man so I can get it. I don't have a child too, no. But what I think is that if I had one child, one child and I would go and get family planning.

Roseanne,
unmarried non-FP user,
age 18 to 24 years,
rural area, EHP

A service provider in an urban clinic in the EHP acknowledged that reaching younger/young women before they have their first child, and whether these younger/young women were married or unmarried, was a major gap in service provision and therefore a barrier for these younger/young women without children to seek family planning services. The individual beliefs of HCWs and service providers is impacting and influencing the family planning journey for younger/young unmarried women.

Who are yet to be married, yet they need to know/understand first and then later they can come to family planning, by the time they are married, and they come in, I think it's too late.

Female,
health care worker,
urban area, EHP

Denying family planning access to women who had not had children appeared to be influenced by the belief that using modern methods of family planning before a younger/young woman has had children could create problems with conception, linked to their development and maturity of sexual organs. In the following quote, it is important to highlight that it is unknown as to whether this misinformation was based on the doctor's belief or their own:

Regarding that, I've heard the doctors say that it's not good for young girls because they are young and haven't given birth yet. If they get family planning, they'll have problems when they're with their husbands or even when they have children; that's what they said. They might have problems conceiving.

Vida,
married current FP user,
age 25 to 34 years,
urban area, MBP

This belief that young women who have not had children should not be provided with contraceptives is often talked about in terms of sexual maturity. That is, younger women are too young to be having sex and therefore should not be thinking about sex and by extension, should not be using family planning:

With these younger children, I think I talked to less than five, those who are fourteen and fifteen. I am not a churchgoer, but you know I always feel that way, with that age group again we shouldn't be going around with men. So, there is no need for us to get that family planning, you should just be faithful to yourself until you come to certain age where you get married then you can think of sex. So, if you are not thinking about sex then there is no need for you to get this family planning and too it's too young for you to have that child, baby to receive that help, I explained to them.

Female,
health care worker,
rural area, MBP

One man in the EHP suggested customs reinforce the belief that modern methods 'disrupt' young women's bodies, and therefore there is a fear that when family planning is provided, it is intended to ruin or corrupt these young women's bodies:

I think that custom it gives some – it disturbs/disrupts the thinking of some men a little to understand that these things and they will say that treatment is not real, they want to give it to you to ruin/corrupt your system, something like that.

Darryl,
husband of current FP user,
age 15 to 24 years,
urban area, EHP

As a result of these beliefs, childless women overall were perceived to have less of a right to access and use family planning, presenting a significant barrier to family planning for women without children.

The 'entitled' woman's family planning journey

Many married mothers and unmarried single mothers, across both MBP and EHP, begin to explore their contraceptive choices and uptake when they engage with maternal health care services: pre- and post-natal services. The provision of antenatal care services was reported as a formal entry point for many women. This is where they first receive information on family plan-

ning service provision. This was a typical experience for women having their first child or women already with one or more children:

I went to the clinic for my antenatal check-up and the nurses said that “there is family planning here. So, after you give birth to your child you can come and get family planning to help you prevent/avoid you from having babies close together to give space between having children and for the mother’s womb to get strong for when you do have another child.”

Velda,
married current FP user,
age 18 to 24 years,
rural area, EHP

Women reported of hearing about family planning immediately after the birth of a child, a time where many first-time mothers, interestingly regardless of marital status, were advised by HCWs to take up family planning:

When I gave birth, they brought a booklet and they asked me “do you want to have family planning?” I told them yes. They told me “which one do you want?” and I said “implant”. First, I came here when I was pregnant, and they asked me. They asked me that same question and I said yes. So when I went up there for my due month, I was in the hospital. So the doctors came they wanted to give me my what, I want to get my family panning they put this implant in. (After birth) They came, they brought a booklet and I signed that – I signed the, I signed for implant and they took me inside a small room to go and put it inside and then they told me that – advised me, they told me how many years it’s going to be inside my hands. I got it the – when I gave birth the other day I got it.

Rosemary,
married current FP user,
age 18 to 24 years,
urban area, MBP

The big hospital is at the District centre, but now the aid post has a nurse to deliver babies. The same time the nurses deliver they babies they give the mothers family planning too.

Doreen,
unmarried non-FP user,
age 18 to 24 years,
peri-urban, EHP

Women reported they seek out and enter into family planning use after receiving knowledge and information about family planning. For some women, the family planning journey was reported to start after a child has reached a certain age. Women also reported uptake of family planning through the targeted approach of HCWs at other service entry points related to maternal child health. This period was defined as qualitatively rather than at a specific age, i.e. when my child is strong/big enough or when their children needed to be immunized. This belief was more commonly reported by women in the EHP:

Nancy,
married current FP user,
age 18 to 24 years,
peri-urban area, EHP

The baby was one month old and I went and got the baby immunisation, the nurses came and got the baby for his injection and then they just sent my book to the other side (family planning side). I did not know what it was but they asked me “are you on family planning?” and I said “sorry, no.” I did not have a clear idea what family planning was ... Family planning – that was my first time to hear about it at the hospital. Hospital, yeah. So the first time I heard was at the Hospital when I brought my baby to have her injection.

Value, purpose, motivators, and barriers of family planning

Education and information are vital to women's understanding of family planning and contribute to their choices and decisions regarding if/when they start their family planning journeys. The key areas regarding the **value, purpose and motivators** for ideal family size and associated family planning uptake, use, and continuation were identified across all categories (i.e. men and women; users and non-users; all ages; and in group discussions).

For many mothers (married and/or unmarried) the perceived value of family planning can result in uptake and continued use after the birth of a child. For all women, the value of family planning encourages them to consider if/when it is appropriate to engage with family planning services.

Within the family planning journey, the value of family planning, as it specifically related to issues of child welfare, financial security, land scarcity, and self-worth, was prominent in women's decisions to take up family planning services and to reengage family planning after discontinuation.

Family Size

Beliefs and customs around the value of a particular family size influenced the desired number of children and how women and men planned their families, including what decisions and choices they made regarding uptake and the use and/or discontinuation of family planning methods. These factors are explored further in the values of family planning.

For some, a larger family of five or more children was preferred. This preference was influenced by customs and by desire to have assistance of children for the familial line, agriculture, and support in old age:

We will be here and we will look after our children so it is for our own good when we deliver our babies, when the children are small that's when I talk about family planning. Like my man says no to go, and me, (I say) 'you haven't given me life, if I die, you won't die with me', so if I die, on my side, so we both can stay a long time for our own good, I must get family planning so it can help me to stay a long time ok, or like I can have another child. That's what I say.

Kirsten,
married current FP user,
age 25 to 34 years,
urban area, EHP

The other is the traditional method of family increases because in the traditional society of Trobriand Islands it depends on the number of family you have, what should I say, the more children you have, the more wealthy you will get, and that is the ideology of the Trobriand Island culture. So that is why they prefer to have more children, rather than having none.

John,
community leader,
rural area, MBP

Others preferred a smaller family size, typically of up to two or three children, and had a gender preference of a boy and girl:

So I have two children already, so for myself, I do not want more after these two, like (having) children is hard, we feel pain and there are a lot of things that children need, you know?

Pamela,
married non-FP user,
age 25 to 34 years,
urban area, EHP

My husband wants two boys and one girl and I want two girls and one boy but to my limit, the doctor that gave me the operation told me that two or three child is enough for me, not more than two or three. Yes (there is a reason for wanting a boy and girl), the girl one can help me like in the house doing housework while the boy one can help the daddy.

Alice,
married non-FP user,
age 18 to 24 years,
urban area, MBP

Child welfare

All women saw value in spacing the birth of children and limiting family size in order to ensure each child's welfare was considered. Welfare was commonly described across MBP and EHP as the practice of spacing and protection of children. Study participants were likely to include spacing and protection in their understanding of the term family planning across all sites, locations, and cohorts.

These values were similar among users and non-users of family planning, within age ranges, and among provinces. There appeared to be no significant differences between urban, peri-urban, and rural locations. There were slight differences by gender in acknowledgement of the value of child welfare, where child welfare includes supporting access to future education, a commonly valued endeavour in PNG. Women expressed the consideration of the value of child welfare emotionally, while for men, child welfare was reported in terms of the men's financial responsibility to take care of the family unit.

Women who made the decision to use family planning often did so with the intent to support and care for their existing child/children and to ensure their welfare. The ability of families to provide adequate nutritional and emotional support to growing children was reported as important for a child's welfare:

Cathy,
married non-FP user,
age 18 to 24 years,
rural area, EHP

I like it [family planning] because I want my children to grow. When they grow they must be healthy, they must develop with good thinking (morals/beliefs), so I don't disturb their growth. The child must grow well to the age I said, five, and then at this point I'll have another child.

Health and emotional development, particularly emotional stability and moral virtues of developing with 'good thinking,' is similarly important to other development domains. Women described family planning and spacing children as allowing them to provide the children with the time to grow in a stable and secure environment. While some women used family planning immediately to prevent short intervals between births, others took up family planning methods after seeing the adverse effects of what is described as not being aware of a child's welfare or not providing sufficient care to their children before planning their next child:

Feli,
married current FP user,
age 25 to 34 years,
urban area, MBP

I have deprived my first child's right, you know. She was just six months old when I was expecting the second one. I've seen the pain my child had. Like, I deprived her rights because she was very small when I had the second one. And like, my concentration was on the small one and I felt like the big one was left out. So, I decided to take family planning so that I see both of them grow first.

Financial security

Ensuring financial security was commonly described as a motivator for women when making decisions about uptake and/or continued use (pre and post childbirth) of family planning. This was reported across all women in both provinces, but particularly among those aged 25 to 34 years.

As part of their family planning journeys, young married women aged 18 to 24 years consider their financial security in regard to how many children they might like to have. For older married women aged 25 to 34 years, who have reached their desired family size, the decision to continue family planning use is to prevent having any more children and enable financial security.

It was widely recognised that the cost of living in PNG had increased, and although free primary education had been introduced, the burden to financially care for a family in the current economic environment was difficult. Controlling family size and spacing children was a means to enable financial security, including limiting the associated costs of schooling and reducing the opportunity cost for women in terms of conflict on her time and across the many roles women are expected to fulfil such as being able to generate income for the family from gardens:

Because there are a lot of things going on. Even though schools offer free education, people who teach in school need to get paid and everything costs money these days. Everyone is spending money on education and everything so family planning methods help to space children so we can spend our time to attend to one child until he or she is in the right age to look for a job before we can have another child.

Daisy,
married current FP user,
age 25 to 34 years,
urban area, MBP

My dream is that I want, like now, I must support my two children along with my little sister with their schooling.

Cleo,
unmarried non-FP user,
age 18 to 24 years,
peri-urban area, EHP

For unmarried women in both provinces, the decision to use family planning is to prevent the burden of being a single parent without the financial support of a husband and his extended family to help take care of the everyday needs of children:

Lola,
unmarried current FP user,
age 18 to 24 years,
rural area, EHP

It's like, I face hardship when I don't market and then I think 'Will I be able to find soap or other things?' If the father of the child or if I had a husband supporting me it would be alright. But I don't now so if I had baby that would be a big hardship for me.

Donna,
unmarried current FP user,
age 25 to 34 years,
urban area, MBP

I feel free and I am okay with family planning. It helps me especially in my case where I am not living with a man who can help me or support me by giving me money to buy things. I rely on sales from the market to help me support my children. That's why I think family planning is important for people like us as well as other women who should take family planning.'

The cases above highlight that young unmarried women with one or two children consider child welfare as burdensome, especially without a partner/spouse to share the responsibility. While young unmarried women saw men as important support for children, unmarried women with multiple children or for women who were older, their choice to use family planning provided them with empowerment for themselves and their children.

In contrast to women who valued family planning for financial security, other women discussed the financial implications that attending family planning services has on their ability to generate income, particularly the opportunity cost in terms of time, transport, and income generation lost when accessing services:

Willow,
married non-FP user,
age 25 to 34 years,
rural area, EHP

I don't go (family planning clinic). I do not like to go. Like the market it is one big thing too, we don't want to go, we don't want to miss one day of the market ... I don't have any other work; it is just the market.

Land scarcity

Explained previously, an important cultural consideration in PNG is an increasing population in relation to land ownership. As the population in PNG grows, greater demands are placed on limited resources, the most significant of which is land. Land is valued an important cultural possession, and women and men's concern regarding land present an important factor when determining how many children they may have, the spacing of these children, and/or the need to prevent further pregnancy. This is true for the rural areas in both provinces, where climate change also affects the ongoing suitability of the land, and is of significance in MBP where the islands have a finite amount of land:

Why we are getting family planning is because now soil is becoming infertile that's why we have to space children in order to take care of them.

Dina,
married current FP user,
age 18 to 24 years,
rural MBP

If we don't have family planning information, we will have a lot of problems like land shortage.

Dalton,
partner of current FP user,
age 15 to 24 years,
rural, MBP

Compounding this fear of land scarcity across both provinces is the cultural responsibility and importance of having children as part of family and community life. Having children is observed as a sign of wealth and a benefit for contributing to the household labour, particularly for maintaining land and making gardens:

For their work...children...because we, here, if one man has lots of children, this boy or this man rich, something like that.

Harry,
husband of current FP user,
rural area, MBP

My father told me, he is old now, he found it hard to give/have children so he should let me make up for it and have many children.

Stanley,
husband of current FP user,
rural area, EHP

In the EHP patrilineal society, men were more likely to discuss sons taking over land. As a result, too many sons, and children more generally, would create pressure around land, an already limited resource. Other women and men expressed this concern about land scarcity and increasing numbers of children more generally, including urban areas where space in settlements was also discussed. However, when probed further, particularly in rural areas of the EHP, this pressure may have been influenced by land ownership and tenure pressure framed within broader cultural considerations of the importance and use of land, particularly the need to have a separate space for women and men (refer to Introduction section: Cultural practise of initiation to adulthood):

When our fathers and mothers used to have the men's house and women's house, so that's when they would put them (men and women) inside and give them advice/education/information, and encourage them like "you will go through this experience" or like "you will have children who will own the land", thoughts/considerations like that.

Lance,
community leader,
rural area, EHP

Cindy,
married current FP user,
age 18 to 24 years,
urban area, EHP

Our population is increasing, first there were one or two fathers and mothers here and one or two young men and women now there are so many people. People from outside are coming and buying blocks (land) renting houses and these rent houses are small, and they are everywhere, lots of men and women. Mix of men and women and the population has grown and there is not much space left to make a house.

While reducing the demands on scarce land resources is a motivating factor for women and their husbands, there were examples of entire communities motivated to support family planning programmes, as illustrated in the rural area of MBP, on islands where land is a particularly finite resource under pressure of growing populations. In these instances, community support for family planning services is an important factor within the family planning journeys that can encourage women/families to consider and take up family planning:

Stella,
married current FP user,
age 18 to 24 years,
rural area, MBP

So when all the men they sat down and see what the problem in this land is, the land is too small and the population is growing so they limit all the young people and the married ones; they can give birth but must space their children. Because they did not have the garden in order to make those children survive, so they bring the committees, so they start to make the programme. And they [community elders] talked to all the women, telling them that they can give birth but give the children spacing. When the committees talked about this, all the communities agreed to this programme. So now you can see some 30 to 40 years but have only two or three children.

In rural EHP, the scarcity of land was acknowledged by local male leaders in historical and cultural terms. They suggested that this issue should be considered at the National Government level as a factor that appeared as an important influence in men's opinion of and support for family planning:

Larry,
community leader,
rural area, EHP

We didn't control our birth rate and now we have an influx of people, and our community now has little land. Our fathers and uncles had our generation and now we have had children, and then those after us will have children and now there are so many... this is an issue that affects all of Papua New Guinea, and I think it would be good for our Government of the day to share their thinking on this.

Self-worth

Self-worth is defined in a variety of ways for women – for some women, it means having control in decision making about the use of their time and being able to return to or complete their education. Younger/young women who are students, particularly in rural areas, will enter and/or leave school at various points in their life. Being able to continue and complete education is highly valued and deemed important despite the persistent challenges to education access. The decision to use contraceptives by women still in school, whether unmarried or married, is to secure current and future self-worth and value as part of their own family and more broadly within their own communities related to the value and status education carries.

The family planning journey begins for younger/young unmarried and married women when they decide to use contraceptives while they continue school, taking up family planning to support their desire to further their education:

A lot of young girls are coming in for family planning now a days. Just to add on what sister has said, especially the school age in girls, grade 8, 9 and 10, high school girls; they volunteer to come to the clinic to get family planning, especially the implant, just to keep them going safely to continue their school some students came.

Female,
health worker,
rural area, MBP

That's why, I like getting family planning service; you get family planning and you'll think about your school [education] and you'll go somewhere.

Ronnie,
community leader,
peri-urban area, EHP

Many women used family planning to space and prevent unintended pregnancy, which not only provided a sense of empowerment and freedom, but also linked to women's socio-economic status and considerations regarding income. Using family planning allows women to continue to work, earn off their land (growing crops for household and commercial purposes), and provide for their family, which is made more difficult if they are repeatedly pregnant and raising children.

We talk between us and she said I've had pregnancies close together and she says 'Can you give me a chance and give me freedom to work in the garden and get food?'.

John,
husband of current FP user,
age 25 to 34 years,
peri-urban area, EHP

5 Key Findings

Feli,
married non-FP user,
age 25 to 34 years,
rural area, MBP

The reason is to keep me safe even a year, just to stay by myself and go for work, for gardening, like that. I don't want to carry children to stop me from making garden and like that.

Some women express and project their own ideals of self-worth by making assessments of other women that have many children. This presents as critique of a woman's ability to manage their family size and is expressed in a way that elevates their own position of self-worth through the use of family planning to space births. Interestingly, some women, even those that are non-users, mentioned that family planning is what differentiates them from other women, using the example of animals that are unable to control their reproductive lives:

Katie,
married non-FP user,
age 25 to 34 years,
rural area, MBP

I'll just say that like, family planning is good. It's good for us women, if we don't like family planning then we will be like the chicken, giving birth one after another. So, if you get family planning, it will be good for your family, and also your health, like that.

Lacy,
unmarried current FP user,
age 18 to 24 years,
rural area, EHP

Like living like pigs and dogs and having a lot of children is not good.

In the family planning journey, women consider returning to/continuation of education, child welfare, land scarcity, financial pressures, and self-worth as motivators and/or integral to specific points where women may decide to take up family planning or re-engage if they had previously discontinued use.

Prevent maternal morbidity and mortality

Family planning was viewed as lukatim (look after), a method of looking after women and preventing maternal morbidity and mortality. The prevention of maternal morbidity and mortality appeared as a significant influence in women's family planning journeys, a motivating factor that contributed directly to the decision to uptake/and or discontinue use:

Belinda,
other family influencer,
urban area, EHP

If we stay without using it [family planning] it's not good. We think it's good to cut and remove [Tubal Ligation] because we might face other problems or sickness again or even die.

My experience goes towards ladies. Ladies giving birth one after the other gives us problem. Firstly, our womb gets weak then it gives us problem, you know, we die. Another problem is that if we go through these problems it is very hard to come to the hospital, or health centre, or even the hospital in Alotau. It is very hard.

Doris,
community leader,
rural area, MBP

Another area of concern reported is related to teenage pregnancy, given that young women's bodies are not biologically ready to carry a child and give birth. This is leading to young women dying. The recognition of this aligns to PNG's high maternal mortality rate (MMR) and is a facilitator for influencing in younger/young women's access to family planning:

To avoid teenage pregnancy because some of these ladies are dying from this teenage pregnancy. When they are not yet fit to get pregnant and they force themselves into doing such things.

Roy,
husband of non-FP user,
age 25 to 34 years,
rural area, MBP

Religion and the Church

Religious acceptance of family planning was reported to influence women's decisions about acceptability, uptake, access to and service provision in both MBP and EHP.

The study showed that some HCWs deny service for unmarried women based on religious beliefs. Religious views were also influencing the method of family planning that women choose if they decided to use family planning services. These findings are of significance given the role church health services play in the delivery of health care in PNG:

On the side of church they say it is good to get family planning, but our purpose on this ground/earth, like God made us, He made us to grow the population, so you cannot stop that.

Felicia,
married non-FP user,
age 18 to 24 years,
urban area, EHP

And also God has made a time of menopause where God will decide that we don't have any more children, we have stopped having more children.

Constance,
community leader,
urban area, MBP

I don't want to be on family planning too. I saw it when I had my first implant, I didn't like family planning because it didn't help me too. That's why is said it's not good because our monthly period, we have to get rid of it every month. It's how God made all of us women.

Sheri,
unmarried non-FP user,
age 18 to 24 years,
peri-urban area, EHP

5 Key Findings

Gary,
husband of non-FP user,
age 25 to 34 years,
urban area, EH

These religious beliefs are influenced by biblical doctrines, which teach that being able to have children is seen as a blessing from God for men and women:

Children are a blessing from God because of our belief, and trust and faith.

Both religious doctrines and the Church influence parental opinions and present an ideal of moral behaviour that shapes how parents view their role as advisors for their children in all aspects of life, including matters of family planning:

Denis,
other family influencer,
urban area, EHP

*So the Church is one good place where we should be encouraging them.
The little ones when they are like 10 years old, 12, 11 years old, they
must continue to go to church with their aunties and uncles, fathers and
mothers and from there they will learn moral principles. And that will
guide them. It will guide them too in the walk of life.*

Rodney,
other family influencer,
urban area, EHP

*Now a lot of the time, now our children are our duty now, it starts with
us fathers and mothers. It's also God's law too, like children must respect
their father and mother. Ok, then they go to school and their teachers say
"listen to your father and mother" that's a good teacher.*

Female,
health care worker,
rural area, MBP

In Milne Bay Province, religious influences included the belief that the use of family planning was unacceptable and may be associated with the devil, this resulted in and was expressed by denial of services to people who are not married:

*Because in the bible it says that sex is only for married couples and not for
single people.*

Male,
health care worker,
rural area, MBP

*I also don't know, maybe they feel uncomfortable and they don't want to
continue with condom or I don't know why they don't go back to [HCW].*

Female,
health care worker,
rural area, MBP

*And for implants there have been lots of talks about implants, who know,
wrong information has come out, when they brought implant saying it
was 666 and that so.*

HCWs also reported the influence of the Church and religion on family planning decision making, describing it as a big challenge that could force women to lie to other church members in order to attend family planning services out of fear of rejection:

But it was still and priest and nuns, they didn't agree with me and what we were saying. So what the mothers did was like they would trick and say they were coming for outpatient cases and all these and would hide away and come get family planning method and then go back again.

Female,
health care worker,
rural area, MBP

Powerful members of the church communicated beliefs that negatively influenced women's willingness to use modern family planning. This combined with local cultures that adopted religious doctrine as cultural practices, create barriers to family planning uptake, particularly where these beliefs and policies judge and stigmatise those who chose to use family planning:

The point is that, the pastor was talking about, the [inaudible] is that, the wife goes to another fellow, he will get pregnant so in order to go to the other fellow, the thinking of the wife, so she must go and get family planning so that it can avoid the pregnancy, and then herself will go to the other guy ... That's what the pastor say.

Caleb,
other family influencer,
rural area, MBP

The church workers who wants to go get family planning but because of the Catholic policy that has been stated they cannot go to the hospitals to get family planning ... Family planning services does not encounter problems or challenges in relation culture and church. Churches and culture have to work together to support family planning for the good of the people ... I think family planning is against Catholic religious belief but other denomination I don't know. I heard from the priest that it is against their teaching ... Yes (the church teaching that is against family planning methods) ... The Catholic doesn't allow this, but it is individual plan and decision to receive family planning ... Maybe (the Church) want to avoid having children because there are already many people in our community. Due to population increase they may have made the decision to control birth.

Lawrence,
husband of non-FP user,
age 15 to 24 years,
rural area, MBP

While less common, some specific churches/religions were reported to assist women in accessing family planning. In one example, an elderly person at church, who was also a former health care worker, promoted family planning and, therefore, assisted women with accepting family planning:

Female,
health care worker,
rural area, MBP

Some mothers came for family planning when they went back and then they, in their church, they talked about those mothers that are coming and getting family planning, just nearby that place, village. Okay the mothers refused to come until one of the elderly person in their church advise them to, he is a former health worker so he understands. He told mothers to come and get their four days no restrictions. So now mothers are coming and getting for family planning.

Richard,
community leader,
urban area, EHP

I know about church, and then after I saw that there is a part of family planning that I have to learn, I don't know, so I'm happy that I am here at this meeting to share my viewpoint. Like a lot of men are outside, they think they are ok, sitting in their comfort zone and they think that there is no need for family planning. There is a need for us men to go inside and hear and know/understand this.

Men's influence

Women were expected to seek permission and/or approval from a partner/spouse to take up family planning. **Women reported pressure from their partner/spouse that would influence and/or motivate women to hide their use of family planning, often at great risk to themselves, and if discovered, to discontinue family planning.**

In some instances, both men and women believe that the man holds the power to make the decision about family planning. This belief is accepted and reinforced by both men and women.

In relationships, support from a partner/spouse to discontinue use of family planning was the result of shared discussions and acknowledgement of side effects women may experience while using family planning.

Women that did not seek permission and/or approval from a partner/spouse before uptake, led to men pressuring them to discontinue use. The experiences of deferring to their husband for decisions or permission, or instances where women may be forced or coerced about family planning, were prominent and commonly reported. There were slightly more experiences reported in EHP, particularly when women regard the approval of men as important and integral to the 'choices' they make:

But she hid. After time I found out, that thing was in her skin. And I asked, I had no idea, so I asked her, ‘What is that thing you hid and put?’ I asked her, ‘What is that thing you put, something to block/prevent you from having children?’ ‘So, I would sleep with her, tried everything, but something/that thing in her hand was blocking/preventing me. Because of this, she did not want to, but I forced her. I gave her my advice so she will go and remove this thing that was in her hand blocking/preventing her. I told her to go and get it removed and send her to go and get it removed.

Bennie,
husband of current FP user,
age 15 to 24 years,
rural area, EHP

He (husband) will get cross and hit me so it brings me problems too, he will say ‘You did not get my permission and you went and did this’.

Renita,
married non-FP user,
age 18 to 24 years,
peri-urban area, EHP

Man has the power he will what; the woman will come and get permission from the man.

Roger,
husband current FP user,
15 to 24 years,
rural area, EHP

If the husband disagrees on her to take family planning, then she won’t take it. Therefore, most women don’t take family planning.

Dina,
married current FP user,
age 18 to 24 years,
rural area, MBP

So, my husband reckons that you are not supposed to take any, any family planning tablets and methods and you are not allowed to practice anything unless if I say so.

Maria,
community leader,
rural, MBP

In a number of cases, men appeared to have significant decision-making control over women’s family planning choices, posing a significant barrier for women who are married or in a union. This control may have been expressed through violent actions or intent to act violently. These issues of control directly impact women’s family planning journey, particularly for young women, and the choices available to them with respect to family planning access, methods, and decisions regarding the discontinuation of use:

If a man wants, you are his women you marry him you will get rid of the implant and you will have his child.

Shainlee,
married current FP user,
age 18 to 24 years,
urban area, EHP

If I need it [implant], later my husband may think negative towards me.

Loretta,
married non-FP user,
age 18 to 24 years,
rural area, MBP

5 Key Findings

Nancy,
married current FP user,
age 18 to 24 years,
peri-urban area, EHP

Many men do not like condoms much, so that is why we just use family planning.

Female,
health care worker,
urban area, MBP

Another cause I see is the men wants, their men wants them to stop having this (family planning) because one particular woman told me this; when is went on the family planning I stop doing my housework, I continue to sleep and sleep and eat, now my husband is getting cross with me so he wants this thing to be removed.

Dinah,
unmarried non-FP user,
age 25 to 34 years,
urban area, EHP

And some men they think, like they are illiterate, they do not know about family planning, you talk about family planning they will think it is to stop children altogether/forever, they will not have children again if they go and get family planning.

Community enacted gossip, stigma, and discrimination

Community responses to women who transgressed community norms that determine who is entitled to access or use family planning methods and who should have access to education on family planning methods (unmarried, childless and/or younger women, i.e. below 18 years) resulted in gossip.

Gossip was initiated by other women, community members and peers; was reported across all provinces and site locations; and has direct impact on young, unmarried, childless women during their family planning journey and the choices they make regarding uptake and use of family planning services.

This gossip was particularly directed and discriminatory toward younger/young unmarried women and directly supports, discourages, or inhibits these younger/young women's decisions to access family planning services, a barrier that extended across the family planning journey:

Letitia,
married non-FP user,
age 25 to 34 years,
urban area, MBP

The community talks behind their backs when they are in those situations that's like the community spoils them ... There are a lot that is happening in this community, especially like our young ladies, when they finish grade 8 or they haven't finished grade 8 and going up, they step into that situation, so the community doesn't agree with that type of behaviour that they display.

I don't think so (easy access to family planning) ... It is her right and her choice if she wants to get Depo or implant that's up to her regardless of people talking at her back.

Clarisa,
married current FP user,
age 18 to 24 years,
rural area, MBP

We talk behind each other's backs. It's not real talk that we make we just talk behind each other's backs to pick a fight. And then problems come up between friends, family.

Sandy,
unmarried non-FP user,
age 18 to 24 years,
rural area, EHP

The fear of and impact of being gossiped about within the community was reported to influence young women's willingness to access family planning services, particularly for those who were not married:

*[What stops women, particularly young women going to the clinic]
[paused] some it's because they are shy, because especially ladies that used to talk a lot, if they see young ladies going out, they used to really gossip about them. Not married, unmarried ladies, they used to gossip about them and especially they used to say it's for married couples to get this because they have their own families and it would be applicable for them, not we young ladies.*

Flora,
unmarried current FP user,
age 18 to 24 years,
rural area, MBP

Yes [the types of problems I experience], like gossiping from others [laughs] ... Yeah only gossip ... Maybe (younger unmarried women) they face some problems ... Like these ages are too young, maybe they some people do gossip about us.

Rosela,
unmarried current FP user,
age 18 to 24 years,
rural area, MBP

Community gossip links directly to the norms and beliefs about the 'entitlement' of young unmarried women to use or not use family planning services before marriage and/or before having children:

Gossip or other kinds (of talk) but that's their problem, I don't care ... I don't think they will make bad talk or that kind, they will talk about 'she has a steady boyfriend so she must come to his house, so it's good that she's got an implant' kind of like that. I think that's what they will say.

Selma,
unmarried current FP user,
age 18 to 24 years,
urban area, EHP

Real and significant impacts of community judgement and gossip resulted in perceived and actual stigma and discrimination. This stigma and discrimination influenced women's willingness to access family planning services due to discomfort, shame, and embarrassment:

Loretta,
unmarried current FP user,
age 18 to 24 years,
urban area, MBP

And I don't feel comfortable when people know that I got implant because I am not married and they might have bad thinking about why did she like she's not married and why did she get it.

For some young people in MBP and EHP, embarrassment, shame, and fear of community stigma and discrimination, led to them to access family planning services in secret, such as attending clinics on days that are not scheduled for family planning in order to hide the real reason for attendance. This is similar to the strategy exhibited by women accessing services and hiding it from their spouse/husband:

Female,
health care worker,
rural area, MBP

That's the fear that they have so that's why they used to come anywhere and meet us in secret and they will whisper and we can help them anytime, not that family planning day, but anytime they will come and we will put in, that's one reason.

Issues of embarrassment and shame were particularly prominent in the retrospective experiences of women, recounting when they were age 15 to 17 years old hearing about family planning in school. On the other hand, embarrassment and shame were also prominent in the experiences of married women and women with children. This experience was similar across all provinces:

Patricia,
married current FP user,
age 18 to 24 years,
urban area, MBP

I was like 15, 16, 17. But they didn't like go straight to the point but just bit by bit. Like they (teachers) use to tell us that you must go and have family planning to protect yourself. We don't want you to go and you just line children one after the other. So, after you give birth to one you have to go back and get family planning. Like I felt, sometimes I felt, ashamed.

Female,
health care worker,
rural area, EHP

Some mothers that come, a lot of the time we know them but after we give them the implant or IUD then we do not see them anymore so when we meet them in the street 'you're hiding from us' and they will say 'you already know we are being cautious so it's hard for us to come back.' Sometimes a lot of mothers we ask them to come so they hide and come, they don't like to speak out and be known.

It's around the country, it is already here and they know already but one thing we see at the clinic is that high school students, primary, upper primary that age, they get pregnant and they come, because of ignorance they just want to try it (sex) out you know? Curiosity, these kinds of things so they get pregnant and some of them (younger women) they have this thinking that family planning is there, I should go but because of this kind of mentality amongst us all PNG like the clinic is for only married or family – “are you married and want to get this?”

Female,
nurse, rural area, EHP

Decision making, choice and agency

Agency of young women to access family planning

Agency of younger/young women to access family planning was described as a choice made by themselves, a decision that reflected their need at that specific time and included, for some, having to hide their use of family planning from others. This agency, at times, was realised individually or realised with the support of trusted influencers. At other times, this agency was limited. For some women, agency to restart family planning was described as “a negotiated choice” with their husbands – it was seen as suitable given the timing of their children growing up and attending school:

No, now this one is four years old now then I don't think ah, that's why I want to get family planning. Yeah because I want to look after her, she will go to school and then maybe I'll talk with my husband and like that, then we'll have another one. But at the moment is I'm on the, like I want to get family planning.

Flora,
married non-FP user,
age 18 to 24 years,
urban area, MBP

You know my husband wants me to have children and just stay in the house. He does not want me to take (family planning) ... I did not tell him after all that I took family planning ... So, living together with him he realised that I did not get pregnant. And then it went on...I used to hide my card. I hide it away from him and did not mention anything to him.

Gloria,
married current FP user,
age 25 to 34 years,
urban area, MBP

Young women in MBP and EHP who had boyfriends and were having sex were aware of their need for family planning. They would choose to access services, even in instances where this decision may have gone against their parents' wishes:

Steph,
married current FP user,
age 18 to 24 years,
rural area, MBP

Because some of the girls at a young age their parents will advise them not to have boyfriends in order to be on the safe side and not to get pregnant ... She knows that she's in a boy/girl relationship and even if her parents don't want her to get family planning, she will still go and get it to prevent her from getting pregnant. (opinion)

Lacy,
unmarried current FP user,
age 18 to 24 years,
rural area, EHP

For some women in EHP, decision making around the use of contraception was motivated by a desire to avert family shame (i.e. doing the right thing by your family). In some instances, fear of bringing shame to the family was a motivator for unmarried women to use contraception. It is worth noting that condoms can be acquired without accessing formal services:

Like sometimes, I'm not married, and if I get pregnant, they will point at me and will say this kind of girl, settle down and then gets pregnant it's not good. Her mother and father want to stay well and they looked after her and she went and got pregnant and had a child and what if her father felt shame that is not good. So that's why I use it (condom).

Influence of family

For some young women in MBP, parents played a prominent role in decisions about starting family planning. These decisions, although spoken of as their own decisions, highlight how support from mothers and family, both through discussions and accessing services, enables these young women to use family planning. Women are then supported by health care workers in their choices to prevent unwanted pregnancy:

Vashti,
unmarried current FP user,
age 18 to 24 years,
rural area, MBP

Firstly, I asked my mother, Mum do you think it's good or not, and she told me it because I am not married, and I might have a baby ... Then I told my mum," do you know family planning, are there any problems with it? And my mother said "I don't know, you go to the medical clinic and ask them ... So I went and get it, came home, and work and sleep, being aware if there will be any problems from my body but there was no problem, that's why I said it's alright ... I was listening to my mother, when she told me to get family planning, I followed what she told me.

Zinnia,
unmarried non-FP user,
age 18 to 24 years,
rural area, MBP

I spoke with my parents and my father because he is a health worker, he encouraged us to go and take it cause he will be staying safe. After taking my father's advice I went and the sister put it on.

Fathers also supported young women to start family planning. In the following example, a young single woman approaches her father who works at a health clinic for advice about family planning after childbirth. He subsequently supported her in accessing Depo. Although supportive, it is unclear if her father would have supported access to family planning before having a child:

[I started using Depo] When I gave birth ... My first time, I went and I told daddy, coz when we were at [the health service], daddy was working and I told him, I said I want to get Depo and then I got it. Like, when my first time, I asked daddy about this Depo, because of that idea I have when I was still young, when I'm single and I thought of this. I said if I get baby then I'll get Depo, when my first time like I saw that happen to me, like I got baby and when baby's daddy left us and I was thinking that I have to get Depo coz I'm still...Yeah, I have a card so I gave it to daddy and he wrote my name and he's using his in his tally, so that's where I got this medicine from him.

Valerie,
unmarried current FP user,
age 18 to 24 years,
rural area, MBP

Influence of community leaders

Influencers and community leaders in both rural and urban areas of MBP described agency in terms of the having access and education that would allow young people to make their own decisions about family planning, particularly when entering relationships. Having access to information appeared significant in women's family planning journeys, and the research identifies that the timing of this information is a barrier that requires further attention.

Women in both provinces, but particularly in EHP, identified uptake and continued use of family planning as a safeguard from unintended pregnancy, a mode of informed decision making, and as such, agency to care for one's self. Education and support for this is influential in the decision's women make about use and method throughout their family planning journey:

They should have early education in that subject (sex education) so once they get into relationships, they should be able to make decisions for themselves.

Barry,
community leader,
urban area, MBP

But like, I was trying to look after myself. What if I am with a man and I have an unwanted pregnancy again.

Laura,
unmarried non-FP user,
age 18 to 24 years,
urban area, EHP

Tony,
community leader,
rural area, MBP

I think I agree that they [age 15-24-year-old] must get family planning because they can be able to look after themselves and they can plan for themselves.

Vivian,
community leader,
rural area, MBP

Sometimes boys don't allow girls to get family planning because they will go out to other girls while the mother is struggling to look after the baby ... when the husband doesn't allow the mother to get family planning – oh the wife, maybe, the wife will go to another man.

Influence of health care workers

HCWs are trusted sources of information and are considered experts in providing advice for some women. Across both MBP and EHP, and in the experience of women that seek family planning services, women will initially follow the advice of HCWs, particularly when women feel they have limited knowledge.

As reported, limited education and low literacy of women inhibits their agency to make informed decisions during their family planning journey.

While HCWs can be seen as influential in the choices that women have, particularly in the types of family planning methods available, women were also acutely aware of the power they hold in the final decision to start or stop family planning based on their needs and preferences as well as men's influence in the decision:

Nancy,
married current FP user,
age 18 to 24 years,
peri-urban area, EHP

The decision for me to get the implant, the nurses made that. So, she sent my health book over and I went, the nurse looked at it and asked me some questions and said you 'you will still get family planning'. If she had said no to some of the methods, then I would stop.

No, I came to ask but they; I brought my baby to the hospital eh they said, 'you must go on family planning and you will get the injection (Depo). You choose pills, injection or implant'. So that is why I came. I came for them to give me medicine and then to go back. I asked for the injection (Depo) but they said no. 'It is not time for you to get the injection yet'. It is only time for pill or the implant. So they gave me pills.

Cleopatra,
married current FP user,
age 18 to 24 years,
urban area, EHP

No (the HCW does not tell us which method to choose) because it is our decision ... We told them: pills, or Depo or implant, it's our decision ... (If our choice is not available the HCW will say) "There's no Depo here". So then it is our decision to tell them what medicine to give us.

Virginia,
married current FP user,
age 25 to 34 years,
rural area, MBP

They instructed us to drink tablets to prevent us from getting pregnant, not Depo. (The health care worker) said only people who had delivered already would receive the Depo ... We went up to get Depo and our medical stopped us. He could not inject us, but he gave us only tablets. And then as for me, I refused to get tablets, I wanted them to inject me and then he said "No. You are going to take your tablets and go" ... I will not get the tablets. If injection, yes. This (pill), no ... Only people, girls who delivered already will get (Depo) ... Like, who did not deliver, will not receive (Depo) ... We wanted to receive (Depo) and not (the pill) and he was stopping us from getting this one.

Vivianna,
unmarried non-FP user,
age 18 to 24 years,
rural area, MBP

Financial influence (cost)

Women in MBP and EHP commonly reported that family planning services were free of cost and that this influences decisions to seek family planning services as well as where they go to seek services:

Because the other mother's that we stay with they go and come and tell us that it is free, so I came down with them for this, so I went to the Well Women's clinic other than [NGO] or any other place.

Selma,
unmarried current FP user,
age 18 to 24 years,
urban area, EHP

*It's because it is free,
and it will help me too.*

Violet,
unmarried current FP user,
age 18 to 24 years,
urban area, EHP

However, due to stock shortages (described later), women may have to obtain their family planning from pharmacies, which incurred a cost and, therefore, posed a major barrier to access.

Negotiated family planning decision making

While a gendered narrative of agency, restricting women's decisions making and choice was reported, there was some diversity in the way women and their husbands approached family planning. For some women and their husbands/spouses, family planning decisions were in fact negotiated; however, the balance of control in decision-making appeared to still mainly remain with the husbands/spouses:

Florence,
unmarried current FP user,
age 25 to 34 years,
urban area, EHP

We are currently sitting down and discussing this. When should we have our next child; the next child; what kind of child; at the same time we have a child, it depends on how the man discusses with the women in the home.

While women may defer to their partner/spouse in decision-making, men also acknowledged that they are under-informed about family planning. The lack of information that men have contributes to their perceptions toward family planning, which then impacts the type of support they may give, or not give, to women:

Terrance,
husband of non-FP user,
age 25 to 34 years,
urban area, MBP

Before, if I had some understanding about these things like implant and medicine that they drink, that's like I would have some little understanding on that but at that time I did not know anything ... You must always have that thought in your head, you don't act stupid, you understand we are men, when another person comes and touches us, we're going for it only but you must be strong and stay ... It's like some people don't know about these things and just like a group of ladies, they are the ones that get these things ... For us men we need to know about these things ... Like you know, to help us in our livelihoods ... a lot of children gives us headache ... That's the way men think.

Some men believed that it was their responsibility to initiate these family planning discussions with their wives to increase understanding between them. However, in the following example, decision-making for family planning extended from the husband and wife to also include the involvement and influence of extended family. This practice was reported in urban and rural areas in MBP and EHP:

The man should initiate conversation with the women and the two can sit down and talk. The woman is strong enough to work in the garden, look after her man and children. The man cannot so he must get the women's perspective. The father and mother of the married couple will tell the two to go to the hospital to help avoid pregnancy. This goes into the decision made by the married couple and then they go to the hospital.

Bernie,
husband of non-FP user,
age 15 to 24 years,
rural area, EHP

Where I come from is because we are very small population, because we kept our village values from our parents, from our grandparents to parents and to us and we continue to live on our village values. And so we are the smallest population on the Island. And when they see that those young girls, especially those unmarried girls, you know they are just having children. We just sit them straight and you know we given them our talk. This is disgrace to the family. You know you bringing, I'll just say it in our terms, only the language speakers will understand. Because you know, if I use English it will not be good, but we just tell them that [inaudible] children. And these children are not supposed to be fed because they don't have a father. Have your children a father, to go and have garden for them, to go and get their fish, build their house.

Carmella,
community leader,
urban area, MBP

Men may either support or pressure women's choices for family planning. This situation extends to the influence of the women's extended family, whose support or pressure directly influenced some women to access or discontinue services at specific points throughout their family planning journey:

Yes, when I went, I just gave my book and they served me. After that I came out. So my in-laws took me there. His (husbands) aunt and uncle (took me to the hospital).

Vida,
married current FP user,
25 to 34 years,
urban area, MBP

For clinic, my grandmother, she was a VBA, when I was four months pregnant for my baby, she told me like you go with the clinic book, because the nurses will check you if you are sick or you have some problems, they will tell you and give you medicine.

Loretta,
married non-FP user,
age 18 to 24 years,
rural area, MBP

I let my husband know that how mothers are giving birth and my husband accepted me to get family planning. Yes my mother told me about family planning so I told my husband about what my mother suggested.

Lisa,
married non-FP user,
age 25 to 34 years,
rural area, MBP

Renita,
married non-FP user,
age 18 to 24 years,
peri-urban area, EHP

My mother told me, one child is enough and I do not want you to have another. She said to go and get family planning, she said got and get the medicine (pills) and she sent me.

Anita,
married current FP user,
age 25 to 34 years,
rural area, EHP

My mother supports me. And sometimes my man supports me when we are sick. They help with money to go and get injections (medicines). And my man said it is not good to put the implant, it was my brother that said let the implant stay and stop her from having children. My mother agrees with/says this as well.

Family planning is women's business

Culture and customs also influence the ability of the husband to be engaged in, and negotiate with, his wife's family planning decisions – decisions that in some instances in MBP were described as "women's business." These customs, compounded by lack of knowledge and shyness, directly influenced some men's willingness to engage in family planning, particularly when these decisions occurred in public spaces such as clinics:

Only the mothers come ... (The men don't come) maybe the mothers are ashamed to come with their husband or they go by themselves ... In the village custom is one of the big that that also affects this ... According to our custom any activity involving women, men doesn't want to look, know or go and join and they stay away from it. They don't want to be seen part of the activities of women.

Spencer,
husband of current FP user,
age 25 to 35 years,
rural area, MPB

I do not feel comfortable about going to our own aid post to ask for that kind of information ... For us here, we have a nurse but I am not comfortable talking to her about this because she is a woman. It is her job but as a man, I do not feel comfortable about going to her and discussing it ... (if there was a man there) Then I would feel comfortable talking to him.

Trenton,
husband of current FP user,
age 25 to 24 years,
urban area, MPB

Impact of violence on family planning use

Violence was reported across the collective narrative and was symptomatic of wider social norms and structures, particularly with respect to the patriarchy and differences in the desired family size. In both provinces, women and service providers are exposed to the risk of and had experienced vio-

lence. Intimate partner violence included sexual, psychological and physical violence and in extreme cases, this included forced removal of implants by the partner. Violence also resulted in family separations.

Intimate partner sexual violence

Threats (real and perceived) of sexual and interpersonal violence directly influenced married and unmarried women's willingness to use contraceptives in both EHP and MBP.

For one young unmarried woman in MBP, interpersonal violence directly impacted her uptake of family planning in order to prevent pregnancy, a factor also reported by men in MBP

I got a boyfriend but he's not good like he's not faithful to me ... Yes (we have problems) ... when my days of period, and I try to tell him not to sleep with me but himself, he uses to force me to sleep with him ... I decided to go onto family planning in case of problems or giving me, like, I'll get pregnant, so I went onto family planning ... No other people (helped me make this decision), only myself decided to get this family planning.

Chloe,
unmarried current FP user,
age 18 to 24 years,
rural area, MBP

Women would want that but for us men, some of us cannot control themselves. They would want to do it all the time ... Yeah but women would want family planning. Men these days don't use their heads. If he asks [for sex] and she refuses, he would go get drunk and return ... Then return and rape her. So, my opinion is that women would want to use family planning.

Kieran,
husband of non-FP user,
age 25 to 34,
urban area, MBP

Perceived risk of sexual violence is also reported to influence women's willingness to use contraceptives. This included female condom use. For example, threats communicated to women were usually related to their security and safety when using PNGs road transport. Such threats while common across both EHP and MBP, were more in MBP:

For condom yes, they tell us about it at the hospital, they say condom for women, but I have not used it so they story and say you women can put this and go to Lae, Madang, where ever you go for market or you are part of a hold up or something like that and they rape you like that sometimes they might make you sick, so this you can put it and it can stay ...

Yanerle,
married non-FP user,
age 18 to 24 years,
rural area, EHP

Vivika,
unmarried non-FP user,
aged 18 to 24 years old,
urban area, EHP

If there is a roadblock and they (attackers) want to (rape you) and you do not want to get pregnant from this, if they want to rape you, you must say, 'if you have to do this can you use a condom'. Show them the condom, something like that.

Kendra,
unmarried non-FP user,
age 18 to 24 years,
urban area, MBP

Like I might get raped somewhere and in case I get pregnant that's why I get it and also I was a student too and yeah.

Intimate partner psychological and physical violence

Pressure from husbands/spouses surrounding family planning could end in extreme and violent reactions, particularly where women hid use of family planning. A HCW described the impact of men's use of violence on women's family planning decisions:

Female,
nurse, rural area, EHP

And sometimes they get it and go, their men find out; because the mother has not informed them and come; they (men) burn their health books, we saw many experiences like that here at the clinic. They (men) burn the mother's health books and you know, they come and talk to the nurses and sometimes they get cross and they (women) tell them (nurses), 'No. My man burned my health book, that's why I didn't come'. That's one reason that stops mothers, and some of them their men say no, and at the same time they remove the implants or stop getting pills and Depo, same time, like the next day they will come, some of our cases have been like this. Argue with men and women and this stops them to continue getting family planning. Some working mothers transfer out to other locations.

Trent,
husband of non-FP user,
age 15 to 24 years,
rural, MBP

Sometimes the women get family planning the husbands might not know and that is where they will have problems in the family. It's better not to get family planning without first agreeing to do so ... If the man doesn't know that the wife is getting family planning and he would bust her if he finds out himself.

Instances where women had felt the need to hide their family planning use from their spouse/partner, when discovered they were exposed to more extreme physical violence including forced removal of methods like implants. Violence is perpetrated toward the woman and in some cases the HCWs and service providers in response to the provision of family planning services.

Many mothers they hide and come, they are scared of their men so they hide and come ... They hide and come and get it because they know their men will be angry and react.

Female,
health care worker,
urban area, EHP

There is a woman in the village that had seven children and one time while the husband was out fishing, she went and got family planning. She didn't tell the husband after he returned but one time, he noticed the wife was not feeling well and couldn't sleep. She was trying to go for family planning with the other women to replace the implant. When the husband asked, she said she wanted to replace the implant they put it in her hand. The husband asked what was injection (implant) and she said this was to stop pregnancy as she said she have many children and am already old. After she went and came back, and husband returned and busted her. The wife got her belongings and left for her own village and the husband has to go and make peace with the wife's family in order to bring her back ... Seek family planning without informing the husband about family planning.

Trent,
husband of non-FP user,
age 15 to 24 years,
rural area, MBP

She must not have informed her man and came, and I inserted (the implant) into her hand/arm, finished and she left. Sometime later her man must have found out and the two of them must have had a fight, the man pushed the women down, he got a kitchen knife and he did his 'surgery' in the house and removed it.

Female,
health care worker,
urban area, EHP

Plenty of mothers, they hide and come get it (family planning), they are scared of their men, so they hide and come. They are scared of their men so they hide and come get it (family planning) if they (men) know they will chase them (angry at them).

Female,
health care worker,
urban area, EHP

For some women, the experience or threat of intimate partner violence influenced their decision take up and/or use a method of family planning to prevent further children with a partner/spouse:

He is not a good man, that I married, he fights and all that and I don't want to have another child with him again so that is why I want to go and get the injection again.

Matilda,
married non-FP user,
age 25 to 34 years,
rural area, EHP

Violence is sometimes directed at the health care service providers for their role in making services or information available, in response to women accessing family planning.

Female,
health care worker,
urban area, MBP

Because of family planning methods it made me learn about families, which situations, I call them and I speak to them. I found out that in the past years, it was a problem, especially dealing with males, and when we give the family planning to females, men come up with their own say. And they can come up to the clinics and they attack us.

Decision making and choice of different family planning methods

A range of modern methods including long-acting reversible contraception (LARCs) and short-acting reversible contraception (SARCs), and traditional family planning methods are used by women in MBP and EHP.

The choices available for women and their decision-making appeared to be influenced by the availability of the different methods, convenience and suitability for the individual woman, and a range of HCW, community, peer, and partner/spouse support.

Long-acting reversible contraception method use

Implants

Implants are a long-acting reversible method (LARC) of contraception that can be effective for up to five years. Women who preferred or had implants for family planning discussed their preference in its long-lasting effectiveness in relation to the spacing of children and less requirements to attend a health facility in comparison to the Depo-Provera birth control shot (Depo):

HCW,
rural area, MBP

So when these mothers got the implants it really controlled the birth rate in the community and also it lessens the mothers coming for other methods regarding family planning in our facilities ... Okay most mothers prefer implants because, the implant takes a long time, according to some years ... Those who are okay with it they always prefer to go for the implant because of the longer time they stay.

Yeah like you know, Depo is like three months three months and like I don't want to go back and forth after three months, implant is like, it stays.

Taya,
unmarried current FP user,
age 18 to 24 years,
urban area, MBP

So, I went and got family planning, that implant ... I was already pregnant and after I delivered the (baby) came so I came and got implant ... Second baby (implant after second child) ... Yes and then I choose from there. So, I choose implant ... (I chose implant) because they said five years so I chose implant so that to give space to the children to grow.

Tallulah,
married current FP user,
age 18 to 24 years,
rural area, MBP

When the baby's old enough, that's when I will think about using family planning. (My preferred method is) implants ... So I can stay for some time [without getting pregnant] until I get married and that's when I can have a family and think of what's ahead ... (I have heard implants) letting children grow old enough and know how to take care of themselves before we can have another child after removing the implants.

Taylah,
unmarried non-FP user,
age 18 to 24 years,
rural area, MBP

Young and unmarried women cite the benefit of using the implant to avoid unintended pregnancy and continue their education:

Yeah. The unmarried women, I think that they will get this implant and stay ... because this is better than pill or injection ... because the implant I got, I did not have any problems with my skin (health), I stayed normal ... the [NGO] put it good. The other's we have tried, they poke and touch your skin, and muscles inside ... because I got the pill and they told me if I miss a day I might get pregnant, something like that so I thought, I want to continue school and I don't want to get the pill, now I went and got the implant ... Yeah. I'm thinking of going back to get the implant next year again. I haven't used it for one year now.

Trinity,
unmarried non-FP user,
age 18 to 24 years,
rural area, EHP

Peer influence was also reported to have great impact on young women's access to information and decision making. In the following example, a young woman who had used the ovulation method for four years accessed services for an implant after discussions with friends:

Teagan,
unmarried current FP user,
age 18 to 24 years,
rural area, MBP

Yeah (I started FP this year) ... (I used the ovulation method for) 4 years ... and then when I heard about implant and then I took implant ... Like, I was staying and then my friends came and they were talking, these young girls, they say you go and you take implant to stop ladies not giving...and then I asked my friends ... So I came in I asked this sister here, can I get the implant? She said yeah. If you want ok come ... When I came inside I was really scared, when I asked the nurse and she told me about those two, Depo and implant and then she told me to choose which one, so I said I think I'll get implant and then she say ok, stay in that room there, I'll go prepare the things and come. She told me the instruction how to go about it and told me to go away ... Yeah, they really assist me well with this one programme her ... Yes (I was given a specific date to go back).

At other times, due to the little advice and counselling given by HCWs regarding what contraceptive methods to use, the choice of implant appeared to be more influenced by the choice of the HCW:

Tamara,
married non-FP user,
age 18 to 24 years,
urban area, MBP

She told me – I went to her; I mean that nurse eh, she came around and then she asked for family planning so I told my husband and he said okay you go. I went, I signed in and then there's a doctor inside for putting it inside me. So we went to him ... I went to him he asked a lot of questions. Like not really but like he asked me where you are schooling, and something like that. And then after answering these questions he put my medicine and I came ... (I chose the implant) because they didn't – I didn't ask them about this like ah bad side of implant and good side of implant. I didn't ask anybody. Like I just saw them getting it, so I just went and got it.

Tahnie,
married current FP user,
age 18 to 24 years,
urban area, EHP

I chose the implant and put it in because I thought that sometimes the pills might not work and I might get pregnant, oh sometimes the injection (Depo) I will miss/skip my period so, 5 years I got the implant.

Turria,
married current FP user,
age 25 to 34 years,
rural area, EHP

One lady, a nurse lady. I saw one nurse lady sitting in there. I went inside, there was only her, she put the implant in my arm. She said 'it is to help you. When you have children close together, this can space and you can come back and remove it. You go back (home) you leave it, it is up to you, then you can get pregnant. And if you want to put it back again, that's up to you/your decision.'

Peer influence from other women in the community also influenced choices to take up/use the implant:

My mate/friend she's the kind of woman, she's still a young women, she has many friends/partners, we hang around together, she came and told me and she asked 'I want to stay/go and put in an implant. You can take me down and I will put one too', so I said 'it's up to you'.

Tessie,
married current FP user,
18 to 24 years,
urban area, EHP

Yeah, my friends. Some women came and told me, they said 'you too should go and get it" ... women here in the village ... Yeah. They get family planning. They told me to go and get it, so I went and got it.

Uma,
unmarried current FP user,
age 25 to 34 years,
rural area, EHP

Intrauterine device (IUD)

Interestingly IUD was not reported as a method widely discussed or used. Due to a lack of discussion about this method in the study, it is not clear how IUD, as a method of family planning, is known by women in PNG or being communicated by services, or considered in the choice to use or not use.

Short Acting Reversible Contraceptive Method Use

Depo

Depo is a contraceptive injection that is given every three months by a health care professional. For some women, this contraceptive was the most appropriate to their needs, including convenience for their work and future childbearing:

I got Depo and then they gave me injection, after three months and every three months ... They gave me different types of option and I suggested on Depo. Depo is good for me they ask for implant, but I saw the disadvantage of implant, so I decided for Depo.

Ursula,
married current FP user,
age 18 to 24 years,
urban area, MBP

Depo I got, I will take it for five years. Then I will have time to join in church activities and also do my other work, otherwise another baby come, it will (not) disturb my work.

Ulani,
married current FP user,
age 18 to 24 years,
rural area, MBP

Yeah. A lot (of women) have second thoughts about this injection (Depo) but it's like, what eh [pause] it's good. I asked about it, 'if I get the injection (Depo) will I still see my period or not?' They (nurse) said, when you get the injection (Depo) eh, it will stop your period.' And then I said 'okay'. And I was happy/agreed and I got it.

Eunice,
unmarried current FP user,
age 18 to 24 years,
rural area, EHP

5 Key Findings

Uma,
unmarried current FP user,
age 25 to 34 years,
rural area, EHP

(Ok. So, before you were using the implant, did you use any other method of family planning?) Yeah, I used/took the injection ... Yeah. If they take it (implant) out after 5 years now, I will get the injection from here ... Because I will see my period (again).

Women also reported the influence health care workers and other women in their community have in their own decision making. In a rural area of MBP, Depo was described as the contraceptive of choice in their community, a choice also communicated in urban areas:

Female,
HCW, urban area, MBP

Many of women come in the health centre always go for that Depo, the injection, only a few do go for the oral contraceptives ... Most mothers prefer Depo [here] ... They all prefer Depo because they think it's much convenient for them because they take it once and for all.

Tori,
married non-FP user,
age 18 to 24 years,
urban area, MBP

Like this Depo is through my mother who explained it. They said, if you get Depo then you will love for three months and then you will go check up again and then the nurse will give you injection and you will come again and when your dates come then you will come again.

A number of barriers, particularly to the side effects (discussed later in the report) and literacy influenced women's willingness to start or discontinue Depo. HCWs would write the date that women needed to return to the clinic on the patient's health card, and if a woman could not read this would impact compliance:

Zendaya,
married current FP user,
age 25 to 34 years,
rural area, MBP

Injection only the mothers who can read, so they can or who can check their books or cards so they can follow the dates and like that, not ah, non-school ones because they can't follow the date.

In the EHP, HCWs in some instances actively tried to persuade women to not use Depo and suggested alternative contraceptive methods:

But the other (method women) want too is Depo we do not advise this too much because [inaudible] so we tell women that too, 'if you have one or two children [inaudible] if you leave the injection and are not on any family planning but you haven't had any children yet but you stay for six month or you can stay for one year or something and then you will (be able to) get pregnant, a lot of times problems come up with this thing (injection) too. That's one of the one's (methods) we advise on, the other one is we say, 'you older or bigger (women) you have a problem in your joints or pain in your bones sickness or like that, we used to tell them and then we decide for which is suitable for them, they already think (about use) and if they are with their partners we go for what we have decide(d) for them.

Nurse,
service provider,
rural area, EHP

Stock shortages for Depo were reported by HCWs and service providers in urban EHP, acknowledging that choice of Depo for women is limited due to the products expiration dates:

(Respondent 1) Since August, ah not August, September, some we have some we have discarded, some are still there and we tell our clients that it is outdated so we cannot give out Depo, it's already outdated.

Male,
HCW clinic,
urban area, EHP

(Respondent 2) The hospital too, our little dispensary at the hospital is expired too it's outdated.

Female,
nurse, urban area, EHP

(Respondent 3) Already expired (Depo) so we do not issue it from there, I stand on this and say women come, give them implants only, our clients I will say 'I don't have any Depo now, the only way you come is to get an implant or IUD the long-term methods, so it's like common in there, a little but it's common there but I emphasise a lot on long-term methods, the implant and IUD ...

Male,
NGO service provider,
urban and rural areas, EHP

Oral contraceptive pills

Oral contraceptive pills were used by a small number of women. Women's preference for this method often is an aversion to having something inserted into their body. The importance of their ability to manage and remember to take the pill when required was emphasised:

5 Key Findings

Teyana,
married current FP user,
age 18 to 24 years,
urban area, MBP

Yeah I told her and then both of us came here and I said 'I came to have my what, family planning'. And then she asked me about one of the method and I said 'I want to have pills' so she gave me pills ... Myself I just chose it ... I don't want them to push this implant inside, rubber or what. And then Depo I don't want them to inject me [laughs] so I get medicine so drinking ... [I started using the pill after] My second baby ... [I intend to use it for] five (years).

Yasmin,
married current FP user,
age 18 to 24 years,
urban area, MBP

No. I always remember the date and time to take the medicine (pills) and then go to sleep ... I use a watch. So if I see that it is time for me to take the medicine, I take the medicine before I go off to sleep. Every day from Monday to Sunday, Monday to Sunday.

Yanina,
unmarried current FP user,
urban area, EHP

Pills it's like you drink every afternoon before you sleep, that's when you drink. If you get it, pills are not that good, when you miss one pill and you sleep with your man, that's when a child forms, sperm will go inside now and form a child quickly, so the nurse's say that pills are not too good, so if you take the pill they said, you must be faithful to drink.

A specific barrier to continued use of the contraception was associated with method and forgetfulness related to use. The forgetfulness and gossip of other women are specific barriers for women to use this method, particularly if other more suitable methods are not available or supported:

Danica,
married current FP user,
age 25 to 34 years,
rural area, MBP

I sometimes forget to drink when I am tired and sleep I forget to drink, but in midnight I drink it. Sometimes I forget and night I never drink, and another day comes I skip it to another day ... sometimes I forget it and I never drink it. Another day I skip because if I go back and drink it, I will mix and when I mix from there, I will get pregnant. Like in one month I forget after two months I will never remember because they give me 3 months huh?

Tahina,
married current FP user,
age 18 to 24 years,
rural area, EHP

That's true, I forgot and then I got pregnant on these pills but on the injection (Depo), like I didn't like the injection, so I thought now I will get rid of the implant and go back to the pills. So, this time I will not, I will make sure I know when to drink my pills.

For women who reported forgetfulness in taking the pill, LARC and longer-term methods were reported as an easier and more suitable option. The motivation for women to change from short-acting to longer-acting methods was availability of informed counselling and choice of methods to avoid unintended pregnancy. For younger/young woman, a desire to continue schooling was key motivating factor:

For pills, it is every, one month. We come back for pills everyone month when we finish our medicines. And I am always forgetful when it comes to drinking medicine so, I decided to take Depo ... Because we do not want to fall pregnant, you know. These days...otherwise life is hard in terms of money ... If the new stock comes in, we would come and get it. If not, then we would continuously pay for it until they bring in Depo.

Lorraine,
married current FP user,
age 25 to 34 years,
urban area, MBP

I wanted to continue school and what it sometimes I forget (to take pills) so I changed to implant. Me and my man (made a decision to change methods) because when I took pills, they told me if I miss one day you'll get pregnant so I thought I am still at school so I left the pill and went and got an implant.

Darrian,
married current FP user,
age 18 to 24 years,
peri-urban area, EHP

Male Condoms

Male condoms were reported as used by young and older married and unmarried women and men in both provinces, however the primary reason for use differed between MBP and EHP. In MBP, use of condoms as a contraceptive method is taught in school and discussed among young male peer groups. This method is mainly used by young unmarried couples due to its ease of accessibility. Interestingly, the men are the ones reported to obtain this method for use prior to engaging in sexual activity with their partners:

Yes (I am sexually active with my boyfriend). (To prevent pregnancy, we use) condoms yeah we use condoms ... Himself. He usually goes to the aid post and gets them ... From our aid post. No (we don't pay for them). We usually get them (condoms) free ... I don't go, only my boyfriend usually goes up there to get the male condoms only ... Yes. He usually lets me know before he goes up to get it ...

Viviana,
unmarried non-FP user,
age 18 to 24 years,
rural area, MBP

5 Key Findings

Zinnia,
unmarried non-FP user,
age 18 to 24 years,
rural area, MBP

We used condoms to protect ourselves (from) the health centre ... No (I don't get them my boyfriend does) ... I'm not sure about whether my boyfriend just asked the doctors for it or paid for it ... I never asked my boyfriend (where he gets condoms).

Tarryn,
married non-FP user,
18 to 24 years,
rural area, MBP

My husband sometimes use condom so that I don't get pregnant in that way we protect our child.

While other times used at all times or while the wife was breastfeeding:

Jeremiah,
husband of non-FP user,
age 15 to 24 years,
rural area, MBP

We (my wife and I) are using condom ... Yes (we use condoms every time) ... She doesn't use (other methods or injections) but she knows condom ... We use the male one ... I get condoms from the aid post here.

HCW,
rural area, MBP

Some fathers, like when their wives give birth to newborn babies, husbands come in asking for condoms. So, while mothers are breastfeeding, so when babies turn one year, that's the chance for mothers to come and get family planning while fathers stay and expect mother to get the family planning.

In EHP, condoms were largely seen as preventative measure for HIV/STI, which aligns to the strategic positioning of this product in the market by the National Department of Health is reinforced by implementers of programmes focused on prevention of HIV/STI. They were not commonly discussed in relation to modern family planning methods as many people in PNG equate condom use to protection against HIV/STIs due to rigorous and sustained prevention campaigns across the country.

Leroy,
married to current FP user,
age 25 to 34 years,
urban area, EHP

Because the condom is a good prevention against HIV and STI, and at the same time it helps to prevent unwanted babies.

Use of condoms for family planning or contraception is not common due to the belief there is promiscuity involved. We know from other research requesting use by married women that it is sometimes seen as a sign she has been unfaithful or an accusation against the partner. Both influence choice of condoms as a method, indicating there is some work to be done in aligning messaging between the HIV and family planning sectors:

We are strong about using condoms with them (men) now, that's what we do, continue to stay strong. To have sex without anything (skin) I say now because he is a man that goes around.

Monika,
married non-FP user,
age 25 to 34 years,
urban area, EHP

Right now I'm here and talking there are no condoms at the clinic. Inside town and the local government area, there is a lot of sickness, the bad kind of sickness, especially HIV AIDS. Why because there is no condom. And one thing we see with the doctor and nurses is that they get the condoms and go and sell it in their places. We see it at the takeaway places, or around private stores. We see them selling condoms. So there are plenty of people that need condoms and when they see them (being sold) plenty of people have no money (to buy them).

Donald,
husband of non-FP user,
age 15 to 24 years,
rural area, EHP

A number of barriers specific to condom use were reported, including religion, culture, shame, a lack of stock and fears that requesting or using condoms is due to the belief that there is promiscuity involved, increasing risk of conflict between partners:

No, it's allowed but ah what the bible is all about, how to stay pure from sin, that is why as for me, my wife she can use any, she can use condoms, as for me I cannot ... According to my culture doesn't allow it is because if I use condom, my culture, I will ah... they will know that I am using condom and talk about it ... I will be shamed.

Dalton,
partner of current FP user,
age 15 to 24 years,
rural area, MBP

Sometimes the condoms are not available, and we struggle to find them. This is one of the causes of the increase in unwanted pregnancies.

Darius,
husband of non-FP user,
age 15 to 24 years,
rural area, MBP

It's you know, men they talk a lot, they will talk and say 'you want to use this with us and the others you will go and sleep with them with nothing?' That's the kind of thinking they will apply and then there will be heavy/conflict between them (the couple).

Tillie,
married non-FP user,
age 25 to 34 years,
rural area, EHP

Vasectomy and bilateral tubal ligation

Permanent methods may be suggested for older women, particularly if there have been adverse experiences in previous childbirth. In rural EHP, permanent family planning methods are available to women with these experiences, and supported by husbands:

... I'll tell you about my own past experience, it's like this, I have been married for 20 years. Within this 20 years, ah 22, 27 years within this time. I have 5 children and two of them have died, from there I understand that family planning it is a very big, ah very important. So this time I took my Mrs. to go up to the hospital and she had an operation that stopped her from having any more children, that's why now I have 3 children, and now we have stopped and we stay. I stayed/waited for 20 ah 27 years, that's the time I went in and when my Mrs. had her operation, so now I have stopped (having children). So young people if they want to stop (pregnancy/having children) it is easy. If I can stop it they can stop it too.

Graham,
community leader,
rural area, EHP

In EHP, older women with a number of children are also given advice and support to consider permanent methods:

We went to go and have a baby or we went to the big hospital and they told us, if you have four or five (children), you think you have had enough of childbirth you can go and tell your man and come and sign (consent) and we can cut and close (your uterus), that's what they say.

Clementine,
married non-FP user,
age 25 to 34 years,
rural area, EHP

Vasectomy was also discussed by men and women in MBP and EHP. In a rural area in MBP, men discuss vasectomy as being a local law imposed when a family has two children and a law influenced by the scarcity of land (previously discussed):

Yeah so what I saw is that [here] is, they exercise that, they practise that, by taking balls out and turning the wombs, because of ground shortage (on) [the] Island. But for this community here, we have no policies on that, but even councillor was listening, later then we do it, maybe. Yeah (they cut the testicles off). They cut the balls here and then, remove the what out, sperm. Sperm line or [laughs] what we don't know. So only the specialists knew that thing ... No, no, no, real doctor, they go to Alotau specialist. According to [local] law is that when they have two children, that's enough they go for operation. That's the policy ... And the vasectomy, they say taking the balls out. In their language so the perspective of men now is taking the balls out.

Steven,
other family influencer,
rural area, MBP

As reflected in both statements above the description of what each permanent method involved was understood to include removal of the uterus and scrotum, both may be a barrier to uptake and indicate a need to focus on improved community education for these methods.

HCWs and other service providers in the EHP acknowledge a favourable acceptance of vasectomy – suggesting that a variety of men and women now seek out this service and choose vasectomy at the end of their family planning journey:

Uhm it's like, there are two groups of men currently, one is men from the village areas, some are afraid of other's seeing them come, so the men come by themselves sometimes. Some have good thinking and will come with their women, but the cases we see here, at the attending unit here, I think a lot come, the man on his own because of bus fare and those sorts of things. So we have many different types of men that come, with their own points of view, so a lot will come themselves and tie the rope (have a vasectomy), uh a small number will come with their women, like the man and woman agree and they come together. Otherwise, a lot are happy to come but their women might stay home/village.

Male,
HCW, urban area, EHP

We sat down together and discussed. He did not want to have any more children. He said one boy. One girl is enough. So he went down to (the) vasectomy (clinic). He went and had it tied. He told me, 'you are a woman'. What if you face some problems later with your body? You're not strong so stay. I will go. He agreed and he went and tied it (vasectomy).

Drusilla,
married non-FP user,
age 18 to 24 years,
urban area, EHP

Traditional Methods

Ovulation

Ovulation methods were commonly discussed across MBP and EHP. Ovulation as a method of family planning was taught in school, by mothers, by church outreach workers as a standalone family planning method, one that is referred to as allowed by the Catholic mission. It was also taught as a method to use before transitioning to modern family planning methods:

This method I was schooling at, during my high school, one of my PD teachers taught me about ovulation method. That's where I got it, when I finished schooling, I came home, I just follow what she said. I just follow the instructions ... She taught me how to follow the ovulation method for safe days and unsafe days. When the time comes for unsafe days we don't go with the boys, when the, when dry period, when wet period finished then you just wait for some days for the blood to get dry, when the period is over ok we just go with our friends ... Yes (the method is good) ... It's helping me to stay long.

Yolanda,
unmarried current FP user,
age 18 to 24 years,
rural area, MBP

He says, talking about the wet days of the mother, when the husband, the wife tells the husband that she's like a, feeling wet, and then the husband goes and does other things to take up time so that he will not go and sleep with her. Because he knows that when the mother is at her wet stages, and then she's fertile, so when the husband goes and lies with the wife, the wife will get pregnant so he has to go and do other things to take up his time and until she's dry and then he can come and sleep with her, have sex with her.

Manuel,
other family influencer,
rural area, MBP

We'll stick on the three days wet and dry which was an awareness carried out by the Catholic mission. But I'm not sure what it's about because during the awareness I wasn't here I was in Port Moresby but I heard it from my wife. She said she'll follow the strategy of the three days wet and dry which was allowed by the Catholic.

Frankie,
husband of non-FP user,
age 25 to 34 years,
rural area, MBP

The ovulation method is referred to as “safe and unsafe days” and in Tok Pisin “kauntim dai” “bihainim sikmun”, “bihainim mun” by men and women. Many women, particularly those in rural areas in EHP where there is limited mobility and accessibility to family planning services, discussed using the ovulation method. A method that is supported in some instances by HCWs as a method that prevents unwanted pregnancy in the same way as modern methods:

Like one doctor gave information like his advice eh they said you must count the days that you see your period eh, you must count your days and the days close to your period you will not fall pregnant.

Lacy,
unmarried current FP user,
age 18 to 24 years,
rural area, EHP

Stayed for a while and then I became friends (partner) with the little girl's father, I would follow (ovulation method). I followed it and a lot of times I avoided; I didn't get pregnant. I can see, it must be true. So, I know how to look after myself. I feel like I am safe when I go around (sleep) with him.

Yolanda,
unmarried non-FP user,
age 18 to 24 years,
urban area, EHP

In my thinking/opinion it's like get the injection or implant or another thing normally to space childbirth. It's like married people sleep together the main reason is to have children so it's more better if the women or like something is ready, so that she can say 'I'm like this (ready), so you cannot come close and hold (sleep with) me.

Glenn,
husband of current FP user,
age 15 to 24 years,
rural area, EHP

Withdrawal

Withdrawing before ejaculation was discussed by men in MBP and EHP as a method to prevent pregnancy: one that was also discussed in MBP in terms of ‘control’, but also with respect to limits to method effectiveness:

(In the future I want) maybe less than 5 children ... (the spacing between children will be) maybe one year only ... (I will manage this spacing because) I am an educated person so I can stay away from these things within this year ... What I am thinking is that during sexual intercourse, I will make sure the semen does not get into her. I will withdraw the semen to make sure she does not get pregnant again ... Yeah (I have been using this method).

Lawrence,
husband of non-FP user,
15 to 24 years,
rural area, MBP

Lance,
husband of non-FP user,
age 25 to 34 years,
rural area, MBP

Ok as for me I don't use those methods of family planning, what I do is release outside after everything is over to prevent my wife from getting pregnant and to space our children ... Yeah because from my own view withdrawal is not that effective. Sometimes I cannot withdraw (so that's why I use condoms).

Tanna,
married current FP user,
age 18 to 24 years,
rural area, EHP

Women in EHP, both currently using and non-using, will at times request that their partner/husband use the withdrawal method to avoid an unintended pregnancy:

Yeah, I tell him, 'when you want to cum now' I tell him like 'you must release outside, let it out'. I tell him that a lot of times ... He listens to me.

Grace,
married non-FP user,
age 18 to 24 years,
rural area, EHP

When we have sex I tell him when he wants to ejaculate and get rid of the ejaculate, it must go outside. I tell him to ejaculate outside ... He agrees with this, he says 'our child is not big yet, still a baby.'

Abortion and unintended pregnancy

Abortion in PNG is illegal. However, the criminal code allows an abortion to be performed to save the life of a pregnant woman. While for the most part abortion was reported in the context of naturally occurring/spontaneous events, there is wide acknowledgment that induced abortions are occurring and that access to family planning could help reduce the incidence of and adverse effects that can occur with an unsafe abortion, including maternal and child death.

The practice of abortion was talked about and existed within both provinces in rural, peri-urban and urban experiences. Women across age groups and in both provinces reported seeking family planning services to abort unintended pregnancy. Interestingly, respondents did not specify any use of formal methods such as emergency contraception, Where as traditional methods and 'alternative' medicine and practices were spoken of. Heavy work, herbs, natural medicine, and other outside medicine were reported as being used. One male community leader saw it as 'not right' as a way to space children:

But the villagers normally, sometimes kill, like have that abortion, kill babies in their wombs to space children which is not right. If they do not know how to use herbs but thank you so much we now have the health whatsoever to space our mothers and families. Thank you.

Jethro,
community leader,
urban area, MBP

Stories rather than personal experience highlighted the practice of abortion by younger women engaged in school. For some younger women who had an unintended pregnancy and underwent an abortion this results in their use of family planning to prevent further unintended pregnancy motivated by their desire to stay in school:

Now there are a lot of young schoolgirls too that get family planning. Because they are still in school when they get pregnant they kill the baby/child. So after this, I see that they rush to the clinic to get family planning to protect themselves so they can stay in school. Family planning saves them from having unintended pregnancies in school so, so they know/understand family planning.

Velda,
married current FP user,
age 18 to 24 years,
rural area, EHP

The husband of a young woman in MBP suggests married women may undergo an abortion to ‘stop’ or ‘spoil’ an unintended pregnancy, particularly if there is no access to family planning:

When the woman feels that she is pregnant she does heavy work to stop or spoil pregnancy. I use condoms and only the times when there are no supply in the aid post the wife turns to carrying heavy load to stop pregnancy.

Trenton,
husband of non-FP user,
age 15 to 24 years,
rural area, MBP

Discussions about abortion are present when people talk about younger/young women’s motivation to address unintended pregnancy. Within these discussions some acknowledge it as detrimental and sometimes fatal for younger women and/or babies, which presents a serious health concern for young women (whether married or unmarried):

It is not very good, if we go to the hospital it is ok. A lot of times they do this (abortion) they get other outside things or natural things and the mother dies and the baby/child is safe, or the baby/child dies and the mother is safe, on both sides it is like that. Or if not, sometimes they both die. They do that.

Regina,
community leader,
rural area, EHP

Wanda,
unmarried non-FP user,
age 18 to 24 years,
rural area, EHP

Few women in this study talk about their own experience of abortion. One young unmarried woman explained her decision as something she and her partner agreed to because her partner did not want the pregnancy:

Last time I went to the hospital I passed my monthly period, felt it after two months I hadn't seen it (period) so I thought I must be pregnant so I drank some medicine and then they rushed me to the hospital ... it was my boyfriend and I we made that decision. We did this so we were both in agreement to get rid of it (unintended pregnancy) ... Only his mother knew. My boyfriends mother knew ... she said "you both leave it" ... but my boyfriend did not like/want to.

Family planning service providers

HCWs play an important and influential role in all women's family planning journeys. The experience of which, for women, was influenced by the HCWs personal beliefs on who should access family planning and when. The HCWs' choice of method was influenced by both the belief of suitability of certain method types for women dependant on age as well as the level of training, confidence they had in a particular method, and of the information that was delivered or not to different locations.

HCWs can be both a facilitators and a barriers for women. Some HCWs facilitate access for women who feel the need to keep family planning use hidden, while some are making decisions about unmarried and childless women's right to access family planning with refusal at the point of service. Other HCWs influence the method choice.

HCWs' point of service decisions from access to method choice and counselling on these were influenced by biases and based on their own socio-cultural beliefs.

Women spoke of how their own experiences with HCWs when young, aged 15 to 17 years, have directly influenced their future willingness to access family planning services. For some, this experience was positive and supportive. HCWs in these instances were reported to be experienced and to be trusted:

Yeah. It's easy because of the staffs. They are very friendly. So, if they come up to the staff and open up to them, then the staff will also open up to them and talk but if they don't, then they tend to keep away from the nurses also. Otherwise they are good staffs.

Trina,
married non-FP user,
age 25 to 34 years,
urban area, MBP

When HCWs were trusted, they were also able to engage with parents and the community to inform them about family planning for children who were sexually active, particularly if they were students:

I was at the CHP working there for four months and that's what I did. Those school children age 13, 14, especially those in grade 4, 5, 6 and 7, I went around talking to the parents, the mothers and the fathers. And they already knew that their children are already having sex, so they had to agree, and I inserted implant. So now they are safe, and they are schooling. Those children who are not on implant, they are pregnant ... But many of them want to take up family planning but because of what the mothers coming around for family planning would say about them because they are students.

Female,
health care worker,
rural area, MBP

It's easy. I think it is easy ... Because we have people from hospitals and other health services who come around and do awareness and inform students about all these things. They even conduct awareness at the marketplace so I'm sure most students are already aware of it ... She (niece – grade 7) said the nurses came and did awareness on family planning. The awareness was for those going into high school to be informed about family planning so they could use it if they wished to.

Francine,
married current FP user,
age 25 to 34 years,
urban area, MBP

Your thoughts will clear when you talk to a doctor who can explain it. This man or women where they talk about how you get medicine ... we know and we are giving you. So you must be faithful when you get it. So, the doctor and nurses themselves need to talk about it.

Dolores,
community leader,
rural area, EHP

Women in EHP rural and urban locations acknowledge HCWs have the knowledge about family planning and should be listened to. However, barriers already outlined, such as apathy, shame, embarrassment, and male control and/or influence, and cultural norms and beliefs, remain motivators to **not attend** a health facility for information

Any such barrier is further amplified for those who have lower education, or limited knowledge, comprehension and/or literacy. Peers and their experiences were often identified as the important sources of information that guided women's decisions:

Rehema,
unmarried non-FP user,
age 18 to 24 years,
peri-urban area, EHP

I think it's better I get information there and go and see the doctor to get this health information. It's better if I go and see the people who are responsible for this and get some good understanding ... I trust them when they say it's good to use or it's not good to use.

Leslie,
married non-FP user,
age 18 to 24 years,
urban area, MBP

Because I've seen it with my big sisters already. One was on implant for five years and they just removed it and she's now on Depo. She has only two children.

Female,
health care worker,
urban area, MBP

There are so many stories that goes around saying so many things so they want to receive the service but because maybe one of their friend tell them this and that so we need to really have time to explain to them and they must understand it and receive it.

Loretta,
unmarried current FP user,
age 18 to 24 years,
urban area, MBP

We (friends) talked about our reason for getting it (family planning) and if we get it what shall we do and we encouraged each other like "Oh girls! When we get this thing don't think it's there to protect us and we go on to do this and this. Or do other stupid things, it's just for safety. At least it's just there to protect us but not to go beyond." That's what we discussed before we came here for family planning.

Rennie,
married non-FP user,
age 18 to 24 years,
rural area, EHP

It was one of my girlfriends, she is married, she's had a daughter before me, and she's on family planning implant and she told me that she did not want to have children close together, that's what she said, and her man, they both storied to me that they got the implant because they did not want to have children close together, they wanted to space their children.

In some instances, HCWs supported access to family planning methods for younger/young women. However, this support appeared strongly influenced by the health workers' beliefs and own experiences of specific family planning methods and their suitability for younger/young women, something

that also seemed to be influenced by side effects of certain methods and those that were seen to be less detrimental to young bodies that have not yet reached sexual maturity or yet had a child. The influence of HCWs impacted women's choice of, and access to, different family planning methods:

So, if they are young and they come out, most times, I introduce them to pills because of the side effects of Depo. The reason is I had an experience of my own that made me to introduce Depo to those who are young.

Trish,
other family influencer,
urban area, MBP

For me, when the young one's request for Depo I send them back because when a young girl shouldn't be having a Depo because of the side effects and I just put them instead on pills.

Male,
health care worker,
rural area, MBP

Because some single mothers they come, they want to get injection and then we say no, because you have no child you go for she'll say no but you see those mothers, other mothers and other single girls are using implant and why can't get injection.

Female,
health care worker,
rural area, MBP

She explained that the injection (Depo) when you are young and it is your first time and have only one child, you may want to have children later, so I didn't get it I got the pills. I did not get the injection.

Larina,
married current FP user,
age 18 to 24 years,
rural area, EHP

At other times, HCWs **knowledge and training** were reported to directly affect their ability to deliver family planning services and choices to women. In FGDs, health care worker training directly impacted women's family planning, the choices made available to them, and their trust in HCWs:

One thing our aid post health workers, they were not trained to put in implants, so mothers had to come here for the implants to be inserted.

Female,
health care worker,
rural area, MBP

I only keep pills and Depo for family planning ... Because some of us are not trained to insert the implant but we were trained at the college for Depo and pills, yeah that's all but for implant, no. The time that there were, those Rotary people when they came Islanders, okay maybe because only this health centre people they were trained to insert the implant but for aid post no, no we don't. We didn't attend the training.

Male,
health care worker,
rural area, MBP

Female,
senior nurse,
urban area, EHP

I started, the work I do is, I start with training, training the officers with the assistance of an international NGO, training the officers to administer implants and IUDs and other methods of family planning. The challenges I face now as a coordinator is ah, looking at our KPIs [key performance indicators] of family planning, it's not increasing after how many training, three training sessions altogether we have done, the providers, but they're doing their best; on the side of implants, a lot of women are coming to get them, ah the problem/challenge is that our officers are multitasked, they're doing immunisations, TB surveillance, polio (vaccinations), they are also doing other activities as well so not much time is given to family planning, they're busy with other work, this is a challenge to family planning in our province.

Family planning counselling and information provision

HCWs typically disseminate family planning information through individual consultations at family planning clinics and public awareness events. Given the stigma and silence surrounding open discussion on family planning experienced by some, this information and awareness from HCWs may be their only source. This appeared particularly true for those who were no longer in school. HCWs delivery of information was frequently described as an important source that allowed women to understand about different modern contraceptive methods including their use, advantages and disadvantages. However, this was not the experience for most men. Men appeared to receive very little information from HCWs: a barrier identified by HCWs as the result of women attending family planning services alone, and in men's responses about family planning being women's business. The importance of community awareness events was recognised by participants from both provinces, however, frequency and an absence of health worker delivered information at these types of forums over significant time periods were described as barriers:

Dalton,
partner of current FP user,
age 15 to 24 years,
rural area, MBP

From their education and some of them when they go to the clinic and the doctors carried out awareness ... I cannot remember their names but mostly we go to general hospital for awareness ... three years ago, a group came, I cannot recall their name because it was for girls and I was the only man

So just, only the public, you know, health workers when they come for awareness and this programme, we used to turn up to hear these things ... Before they come maybe twice a year or three times a year, but now they stopped coming often. Once in a while they'll come.

Moses,
other family influencer,
rural area, MBP

What do you think about [Service Provider] and [NGOs]? They do not come and visit. That is why we do not get any information/awareness.

Uma,
unmarried current FP user,
age 25 to 34 years,
rural area, EHP

So they (Public Health) talk about other things, they need to go down straight (to the point) and do this awareness about family planning. Go straight to (the settlement areas) and put this awareness. Come straight to the house door and put it there. The young men and young women need to hear this talk. It is the type of thing that our young people of today's generation or young married couples need to hear this talk about family planning, for their body (health).

Fergie,
community leader,
urban area, EHP

Barriers to community delivered information were also discussed in both urban and rural locations. For example, the format of group delivery may exclude some members of the community from participating – particularly men whose customs may dictate that family planning is women's business:

The ways we hem is to tell them the good side of family planning to families and let them know how family planning in that it will motivate them to go and get family planning ... (Information should be delivered to) individuals will be more effective (than groups or families).

Sebastian,
husband of non-FP user,
age 25 to 34 years,
rural area, MBP

Given these barriers, some suggest that community awareness needs to also be delivered at the individual level, removing such barriers:

The best way is to go from house to house and have a personal discussion with them about family planning. In open discussion like this they will not come ... No (public announcements) will not work. They will ignore it and close their ears to the information because his brother or sister is there, and he is scared ... There are a lot of educated here in this community and you should engage these people to go to their respective area and educated their own people about family planning. When an outside deliver family planning talk, the message does not get them because of shame and embarrassment.

Declan,
husband of non-FP user,
age 15 to 24 years,
rural area, MBP

I'm a community on my side, and I see a lack of awareness ... that is one big challenge, if only our men and women in the community, they have a good understanding of family planning, or if they can get this information.

Family planning mix and consent

HCWs beliefs about which method is suitable influences the choice of methods made available to women at the point of service. This influence was different for different women.

For some young women, decision-making and choice of method was constrained by a lack of balanced consultation by the HCWs, with coercion by the HCWs toward the use of a particular type of family planning method. In these instances, the absence of information, especially regarding advantages and disadvantages of these methods, were reported by women:

Rachael,
unmarried non-FP user,
age 18 to 24 years,
urban area, MBP

No [the health care worker did not explain family planning]. Nothing.
Just give birth and they said we give you what... and they didn't explain
it. Family Planning is we going to give you injection or what... Medicine
... Yeah [they just tell me to take it]. Nothing [taken yet].

Leslie,
married non-FP user,
age 18 to 24 years,
urban area, MBP

No. They just told us the advantages because like I said, they want most
people to be on family planning because most of the children or girls that
come here come alone. They don't have husbands.

Dina,
married current FP user,
age 18 to 24 years,
rural area, MBP

When the first time we went to get Depo or the family planning they
(health staff) told us the advantages and disadvantages about it and then
we decide whether to take family planning or not.

For others, HCWs discussed the advantages and disadvantages of family planning methods, including the difference between methods, in these instances the power of informed choice of method based on individual needs was with the women:

Yeah, they (HCWs) talked about getting injection (implant/Depo), medicine (pills). They told me about three different methods, and I chose the implant. Injections, medicine and condoms. They told me about them and I thought about it and I chose the implant and put it, because I thought, sometimes with the medicine if I do not go and get it I will get pregnant, or sometimes the injection (Depo) I might miss the month/date, I must get the implant. Yeah for 5 years only.

Shainlee,
married current FP user,
age 18 to 24 years,
urban area, EHP

She just said to take family planning so when the nurses told us about family planning, it was new to us. They told us to go on a Thursday, and when we went there they asked us, “What type of family planning do you want?” They said, “Do you want Depo, pills etc.” So I asked, “What does Depo do to our body?” and they said, “These are injections.” That time implants were not introduced yet. So when they mentioned the pills, I asked, “What are pills?” and they said, “these are medicine that you take every morning and afternoon every day.”

Lola,
unmarried current FP user,
age 25 to 34 years,
urban area, MBP

Alternatively, HCWs would discuss different family planning methods, but contextualise the importance of family planning for older women aged 25 to 34 years through the provision of information on the spacing of children: a motivator that was believed to be more relevant to this age group:

The talk was about spacing children so you will not have “ladder” when you have the next child, so when you are not on any medicine (pills), injection (Depo) the womb [pause] the womb will be open, so when you sleep again with your husband, a child will form. So to space your children you must get family planning.

Janice,
married current FP user,
age 25 to 34 years,
peri-urban area, EHP

Quality of family planning service

Positive or negative reinforcement for seeking family planning services was based on trust and result of interpersonal communication and relationship with HCWs. This is an influential mediating factor in women’s decisions to access family planning services. For some women, particularly in EHP, a mistrust of HCWs was reported as fear of being chastised and the perceived negative interactions that they believe they may experience from HCWs. Trust not only influences uptake but also continued use and method discontinuation.

5 Key Findings

Larina,
married current FP user,
age 18 to 24 years,
rural area, EHP

Yeah, sometimes they talk good with us and sometimes like the vocal women they get cross, they get cross with us.

Cindy,
unmarried current FP user,
age 18 to 24 years,
rural area, EHP

Sometimes they get cross at us sick men and women. They discourage us and say 'you do not look after yourselves and go around and get lots of different kinds of sickness and then come to the hospital' or they make that kind of complaint.

Lacy,
unmarried current FP user,
age 18 to 24 years,
rural area, EHP

Sometimes they (HCWs) get angry/cross at sick men and women, they discourage them. They (HCWs) will say you guys want to go sleep around and get sick and then come to the hospital", then complain like that.

Robert,
husband of current FP user,
age 15 to 24 years,
rural area, EHP

But they [nurses] will speak harsh a lot of times and because of that, we are scared to go along to the hospital.

Doreen,
unmarried non-FP user,
age 18 to 24 years,
peri-urban area, EHP

They don't put this talk out (share) and then our thinking is not clear and so we don't go and use it.

A lack of trust in the professionalism of service provision of HCWs was reported in both MBP and EHP. Commitment to and quality of general health service provision can influence a woman's decision to access services, equally a lack of resources such as staff and fuel for vehicles is a barrier, particularly in rural areas.

A lack of trust in services appeared influenced by women's belief that these HCWs were not professional or did not care for their patients, particularly in relation to women and health issues:

Rebecca,
married non-FP user,
age 25 to 34 years,
urban area, MBP

They provide the same kind of services but sometimes they don't really care about the patients. They don't come to work on time. They take their time in their own houses. Even if at night and a mother is in an emergency situation, they would give excuses. They would say the ambulance is spoilt or the tyre is flat. They give all sorts of excuses that's why I did not want to go there because if I ask them to come pick me up when I'm about to give deliver, they might come up with excuses. Because I'm a first-time mother, I do not want to lose my baby. That's why I did not go to the health centre nearby.

He's there, in (place), at (place) it is at the (place), just at (place), we go down to the aid post there, he doesn't give me the medicine good (service), he gets cross at us and we come back.

Josephine,
married non-FP user,
age 25 to 34 years,
rural area, EHP

Where HCWs were perceived to have a stigma or discriminate towards younger/young unmarried women, fear of this reduced the willingness of women to access services. As a result, continuity of method and woman's family planning journeys are impacted:

I used to fear because like, I might go and like, when I ask them about family planning, they'll try to ask me to, like, what will I say, [pause] try one of the methods, that's why, I feel scared to go the health centre to ask ... Yes, sometimes, I used to fear their questions [giggles] ... [pause] I think I'm still too young to use them [giggles].

Sophia,
unmarried non-FP user,
age 18 to 24 years,
urban area, MBP

Those younger ones, it is not for them. So, I used to think, I think stay for five days, wait for this, it will be safe. So, there is no need to go around to the hospital or this. I was scared. This used to make me scared. If I had that thought that it was for younger girls as well, go and get some information, I would have gone and got it. I would know.

Blair,
unmarried non-FP user,
urban area, EHP

Yeah, some women may be come to the health centre and maybe they don't feel good to speak to that particular staff.

Female,
health care worker,
rural area, MBP

Embarrassment and shame

Embarrassment and shame also appeared to influence men and women's willingness to access services. For some, there is a belief they will not be able to articulate themselves properly and, therefore, be unable to communicate effectively with service providers. For younger women, shame is a result of public visibility of accessing services. This was a more evident barrier in rural locations of EHP. Feelings of 'sem' (shame) by young women could directly influence women's willingness to access family planning and is a significant barrier in the family planning journeys of women in rural EHP:

Female,
nurse influencer,
rural area, EHP

A lot will come because they are pregnant, they are in high school and upper primary these are the ones that come, they know that there are consequences, they are ashamed/embarrassed, 'what will I do' they taught them already in class, some things they showed them, they made it clear to them already but just the ignorance and shame, their own shame to come and line up here their thinking is skewed from all this, young girls are influenced by many things and they do not come to the clinic to access these family planning methods that we can give them. And then when you think about the haus lain and community level, it's that we lack awareness, for health and that we do not make enough (awareness).

Bernie,
husband of non-FP user,
age 15 to 24 years,
rural area, EHP

Here many men and women don't go and get information and advice. None of us experience family planning. We're all village people so it's hard for us to go and talk well and get this kind of help.

Nancy,
unmarried current FP,
age 25 to 34 years,
rural area, EHP

I can hear the information they are telling me I go again, but it's hard for me to sit a long time with the doctors. I get embarrassed to talk with them.

In MBP, issues of custom and confidentiality were also discussed. Young women were fearful that HCWs would break this confidentiality and they would be gossiped about, further in rural areas, in particular, where women can be closely related to their HCWs was also directly reported to influence decision making and willingness to access family planning services:

Lola,
unmarried current FP user,
age 25 to 34 years,
urban area, MBP

They (young people) are too embarrassed and self-conscious about themselves that they cannot talk to others about it. They are afraid that if they tell the nurses, the nurses would go around telling other people. They do not want that to happen that is why I try to help them in the village.

Male,
health care worker,
rural area, MBP

Especially in custom, I face this in the aid post. Especially those ladies are close clans to me, they feel shy to come and say I want family planning but otherwise they go to other places. Like my sister will tell the HCW and the HCW will give me what she wants. In custom it is shameful.

Supply of family planning methods

Family planning supplies for various methods in public facilities was commonly reported as limited. The shortages of family planning products limits women's access to contraception methods and services, making it difficult to make decisions and plan their futures. The low stocks of family planning methods were reported by users as:

Since last year. Yeah 2018. Yeah, that's last year 'till now... that's empty – no stock. Since September 17, I waited, I kept on checking for that medicine but still no stock, so I'm still waiting.

Danica,
married non-FP user,
age 18 to 24 years,
urban area, MBP

At the clinic down there (names clinic), there are no pills, no Depo, zero. We feel sorry for the mothers who come from very far places for family planning. They have to come all the way here (hospital) and we do not have stock. If we had stock, we could give two to three in one day.

Female,
health care worker,
urban area, MBP

Healthcare workers reported that shelf-life/expiration dates of family planning methods is also a factor that contributes to access limitation, this included receipt of products that had already expired:

Maybe sometimes it's because of the long delays and holdups there and then the time of expiry is already here. And those are some of the reasons why we have shortfalls.

Female,
health care worker,
rural area, MBP

Since August, ah not August, September, so we had to discard some, there. We told the clients that they were outdated, so we cannot give them Depo, they were already outdated.

Female,
health care worker,
urban area, EHP

Additionally, availability and accessibility to family planning methods in the public sector (health centres and aid posts providing family planning services) is affected by the provincial supply chain management system and is further compounded where there is a burden of responsibility on centres for large geographic areas:

Male,
service provider,
rural area, EHP

So that is one thing that we have here (supply issues), when they have these contraceptives (supply) then so do we. If they don't have supply, we don't have supply, because of limited stocks.... It is the centre for four districts, so when we get a supply it comes in for all these four districts.

Where supply-side factors influence family planning access at specific health care services, women are being told many different things: to access family planning at other facilities, to return to the service at another time, and to source their own medication elsewhere and then return to the health care facility for service. Or they are denied their choice of method. The limited access to products and services prevents women from receiving quality care and adds a financial burden (cost of commodity, cost of transportation and opportunity cost of their time). Many times women return home without receiving any contraception and revert to using traditional herbal medicine:

Lena,
married current FP user,
age 18 to 24 years,
rural area, MBP

Yes, because they (nurses) come and ask what we are going to use on our bodies. What can I say? We face problems ... if we come and the Depo is finished, they tell us to go back ... I go back and eat some things from trees (if there is limited Depo stock).

Danielle,
married current FP user,
age 18 to 24 years,
peri-urban area, EHP

Yeah, we went at that time, I wanted to get the three years – implant – but they said that the three years had finished. So all of us, the women that went, we didn't have a choice and we got the five year, but they said after three years we could get it removed, we could go back and get it removed.

Because of the limited availability of family planning methods, HCWs recommend women to take a different method when their preferred method is not available. This factor is important in the family planning journey for decision making and choice because it removes power from the consumers' hands.

Women should not have their choice of method determined by what is available, particularly given the significant real and perceived impacts of the different side effects for different methods.

However, it must also be noted that these HCWs were trying to ensure continuation of family planning in an environment with shortages of supplies.

So sometimes when we don't have Depo, some mothers just refuse to go on to other family planning medications. It's very hard for us to convince them to go to another medication apart from Depo.

Female,
health care worker,
rural area, MBP

Men and women perceived the absence or shortage of specific family planning methods to be the result of service-related factors. However, the shortages were also a result of stock management, and infrastructure to support transportation and timely delivery.

Shortages and a woman's financial ability to pay for products needed as a result of these from a private pharmacy or chemist also influenced whether a woman had access. Shortages and variety of supply of family planning methods were only described in general terms:

And the other problem about this hospital, most of the time we go short of medicine. It always takes time before medicine comes in, there's another problem.

Ian,
other family influencer,
rural area, MBP

When I go to the chemist or pharmacy 'I feel like how, why do they send us here. They send us here to buy it.' But then I think of my own side/circumstance and I say 'It's ok. I still have to buy it.'

Larina,
married current FP user,
age 18 to 24 years,
rural area, EHP

Other HCWs spoke specifically of supply, and the ability to ensure adequate supplies of different family planning methods required by women as a particular issue:

I think it is the supply that is giving us problem to our health centre because sometimes mothers come for combined pills, especially combined pills we don't have stock in our health facility. Okay now we are having problems, not only this year but those previous years, so I think the problem is supply, that's all, like individual to me.

Female,
health care worker,
rural area, MBP

In urban areas of EHP, HCWs reported engaging with large international NGOs to refer women for family planning counselling for informed choice. HCWs also referred women to international NGOs for service and supply when there are family planning stock shortages:

Female,
nurse,
urban area, EHP

So a lot of mothers we send them down there to [large international NGO] and give them effective counselling where they can make their own decisions and help themselves, and when we have shortage of supplies. At times we will come to them [large international NGO] at times, to get some (small amount of supplies).

In rural areas of EHP, HCWs also reported partnerships with a large international NGO as a means to somewhat alleviate these shortages in a number of instances:

Female,
nurse,
rural area, EHP

So our supply it doesn't come very often, since last year until now, that's why we are short. So with the help of [large international NGO] they supply us with stock of these methods. Wherever we are short, they come and help us so that our stock figure goes up.

At times, women were also blamed by HCWs for missing appointments and placing stress on them and the already overburdened system. Instances where women who missed appointments and arrived on the wrong day for service placed more pressure on available staff to adequately administer family planning services, including fair allocation of available supply amongst women. This also created tension between the women seeking family planning services:

Female,
health care worker,
urban area, MBP

They (women attending the clinic) all rushed, even to the extent of they had have to little bit of like sort of like an argument because they were some who were supposed to come, and they were some who had their dates already past. But they all rushed, so those who were supposed to be receiving the Depo on that day were served last and the ones that had their dates that had past came earlier, so they were sort of like had are little bit of arguments. They might miss out, yeah.

Regardless of what family planning method stock shortages occur or why they occur, it makes the family planning journey difficult, sometimes, causing women to stop using a method which can result in unintended pregnancies:

Stanley,
other family influencer,
rural area, MBP

That's very true what he's saying, because of the ladies getting the tablets and Depo, it depends on the month. Sometimes when the medicine is delayed, and the husband and wife already sleeping together, and they got pregnant anytime because the medicine was late, shortage.

Finance and logistics

Health service provision constraints result in associated financial pressures that were expressed by both HCWs and women. Financial pressure can directly influence women's willingness and decision-making regarding family planning services and use and/or continuation of contraceptive use.

Underfunded health care sector

Family planning was reported by a small number of service providers and community leaders to be underfunded, both in terms of the facilities that provided services and with respect to the human resources available to deliver services. The capacity of health care centres does not meet the needs of the users due to the large geographic and population coverage. The lack of human resources identified was identified as one of the main problems limiting family planning services.

Okay now, seeing that the sub health centre in [village] has been opened [name] health centre, then the workload, it has helped us to relieve us from [names another] Health Centre but before that hundreds of mothers come into [names the other] health centre, so it's a workload.

Female,
health care worker,
rural area, MBP

We only have one aid post, serving four wards from this aid post here, which is not enough – there are so many sicknesses.

Ron,
community leader,
rural area, MBP

Under-resourced health facilities were described by HCWs when discussing the need to use their own money to buy general supplies for their facilities and in the practise of needing to charge women to access services:

Ah, our clinics that are charging fees, but I can see that they are charging fees because they want to buy Omo (laundry powder brand) and Protex (brand of soap) for the clinic because they are not getting support from their immediate bosses so, that's why that do this at the clinic, yeah that's what they are doing.

Female,
health care worker,
urban area, EHP

The public sector providing family planning services to the women in PNG was also reported to be stretched and beyond capacity. For some, they felt invisible, requiring immediate government intervention which was currently absent:

Eddie,
husband of current FP user,
age 15 to 24 years,
urban area, MBP

Government is not looking into this rural area to deliver services to them so that they can see and understand ... There is no help from the NGOs, no help from government like in this area ... like government is not looking after us living in a community ... the company [where I work and has a health care centre] isn't giving us any good information about family planning, no services, nothing. So that's why we need the government to come and do some practices to help us believe and understand.

Female,
health care worker,
urban area, EHP

District facilities do not get support from the immediate district health officers so their district nurse officers will support with cleaning items, that is what they are doing, buy yeah, when they do not have supplies (are out) they will do that.

Enoch,
community leader,
rural area, MBP

Suggestions to improve family planning services for women were clear in the minds of community leaders and included additional health facilities and human resources. They should give us more health facilities.

Larry,
community leader,
rural area, MBP

They should build more aid posts within the community because we have the second highest ward (population) within [our] LLG.

HCWs feel the pressure to provide service with limited resources, and there is acknowledgement that although collaboration with partners such as NGOs exist, public sector provision should be at the forefront in providing services for family planning users:

Male,
health care worker,
urban area, EHP

But government departments must support our NGOs, we should not be seeking support from NGOs to help our own people.

Personal and family finances

Direct costs of family planning services can restrict women's access to family planning. However, indirect and associated opportunity costs can also inhibit women's access to family planning services and products. These costs might include transportation, or the opportunity cost of loss of sales or wages, as well as the debt cost to others who might care for and/or support the household. The direct cost of family planning methods whilst discussed was more commonly expressed in relation to competing financial priorities,

such as paying for family planning on limited or no incomes. Women's need to prioritise family finances and resources, directly influencing women's decisions to discontinue use:

It is very expensive for me because I could buy my rice with that amount. 5 Kg rice with that money and I can also buy my protein.

Celia,
unmarried non-FP user,
age 25 to 34 years,
urban area, MBP

For other women, financial considerations related to family planning use were contrasted against the financial impact of having unplanned or unwanted pregnancies:

Sometimes I don't want to buy the medicine they tell me to get. Sometimes I'm not faithful to go and buy it too, like if I have the money then I'll buy it. Single dose of the medicine is K25, so we go and buy it. I think that if I'm not using the medicine and my child is still breastfeeding and I get into trouble (pregnant) again, because my man is not a good man.

Leni,
married non-FP user,
age 18 to 24 years,
peri-urban area, EHP

The cost of certain family planning methods was also reported by HCWs as a barrier to provide and/or advise certain family planning methods. The high cost of family planning directly impacts women's decisions to discontinue use:

Depo from the chemist or pharmacy and that's around K60, K50 for a vial or K60 so why introduce the family planning and we cannot cater for the clients.

Female,
health care worker,
urban area, MBP

The cost is ok, but we need to consider those who are financially broke. Sometimes they don't have the money to pay for. Yes, that's what I think.

Sohpia,
unmarried non-FP user,
age 18 to 24 years,
urban, MBP

Sometimes if I don't want to buy the medicine (pills) that they tell me to buy, this medicine, and I'm not faithful and I go and buy it too, like it's a lot of money to buy it. We pay K25 for the single medicine.

Renita,
married non-FP user,
18 to 24 years,
peri-urban area, EHP

Transport

Access to transportation in urban, peri-urban and rural areas was an influential factor in family planning decision making. This barrier was characterised by commute time, distance to the health care service, and trans-

5 Key Findings

portation cost, which impact women's family planning journeys at specific points in time, and across the life course:

Jacob,
husband of current FP user,
age 25 to 34 years,
urban area, MBP

We live far away. Far away so it takes long to go to town.

Larina,
married current FP user,
age 18 to 24 years,
rural area, EHP

Sometimes I don't have bus fare so I go and ask for credit from my in-laws so that I can go and come.

Female,
health care worker,
urban area, MBP

There are mothers who want to get their own family planning, but they cannot afford to come to the health centre.

Female,
health care worker,
rural area, MBP

The problem to transport for mothers is mostly due to financial side of it that most of the Kiriwina people are subsistence farmers and finance will be a reason to why transport coming to the health centre.

Nancy,
married current FP user,
age 18 to 24 years,
peri-urban area, EHP

That's the main factor why we do not visit the hospital much. Because when we go up there we need bus fare.

HCWs and other service providers in MBP and EHP also spoke of the impact that both access and cost of transport had on family planning choices, as they restricted and excluded women's ability to access health services:

Female,
health care worker,
rural area, MBP

We have collected a number of mothers who want to have TL (tubal ligation); they cannot afford to go to Alotau. The provincial team have told us to collect the names of mothers for TL and they will come to us, but maybe there is problems and not funds to enable them to come here. And some of the mothers are already getting pregnant because they have been waiting, so they are pregnant.

Female,
health care worker,
rural area, MBP

Because our aid post they don't insert implant, so they are the ones struggling for transport to come to the health centre.

Female,
health care worker,
rural area, MBP

Now we are introducing this insertion of implants, the mothers want to come here but there is no transport for them to come here.

We explain to them that when the supply is not here and the time and distance or you do not have bus fare, these are contributing factors where they cannot come on time so if you get something you must go for long-term methods, like implant or IUD, we tell them this.

Female,
health care worker,
rural area, EHP

The difficulty in accessing services due to distance and terrain was described by a woman in EHP as a barrier that results in death for women giving birth:

The road is bad we feel a lot of pain/hardship when we give birth so we just stay in the village and give birth ... we think about going to the hospital but then we think about the road for the car and then we stay in the village and some women die.

Willow,
married non-FP user,
age 25 to 34 years,
rural area, EHP

Maintenance and continuation of family planning

The impact of side effects on uptake and continuation

Side effects were spoken about in detail by women who experienced them. While the value and motivation for family planning was clear, the action taken to limit family size and spacing of children came at a cost for some women.

This cost included side effects such as increasing and decreasing appetite and associated weight gain or loss; reducing and stopping bleeding during menstruation; pains and dizziness.

For some women, the side effects interfered with the ability to participate in everyday life. Negative side effects of different modern methods that were experienced were discussed with women they trusted (see next section). These perceived or real side effects directly impacted women's motivation to start, continue or discontinue use.

Appetite and weight changes

Gaining weight or losing weight were commonly reported side effects for implants and for Depo. Weight gain was reported to make women feel fat and saggy, which led to discontinuation by some women, and for others not to start use based on what they had heard from other women.

Fear of side effects is a barrier for women with no history of use. Many women who discontinued use of modern methods due to side effects would choose not to use an alternative modern method and would switch to one or a combination of traditional methods, i.e. ovulation, withdrawal, customary practices to continue their family planning journey:

Jaren,
married current FP user,
age 18 to 24 years,
urban area, MBP

Yeah, sometimes I hear ladies say, “I’m getting Depo so I’m eating a lot, I’m going fat”; and others say, “I’m getting Depo so I used to go thin and I’m not putting on weight” ... Sometimes they complain that, “I’m eating too much and I’m not putting on weight”.

Sha,
unmarried non-FP user,
age 18 to 24 years,
urban area, EHP

Like the implant I put in, it gave me a heavy flow and continuous and I got really skinny and lost weight and my skin was yellow and my eyes went white, that kind of thing, I didn’t like it.

The experience of side effects was also influential in women’s decisions to switch their modern family planning methods. The side effects, such as appetite and weight gain, were reported as some of the reasons for the discontinuation of Depo, a choice that in at least one case was supported by health professionals:

Jaren,
married current FP user,
age 18 to 24 years,
urban area, MBP

First I tried Depo, but I grew really fat and I had a saggy stomach. So the nurses told me not to take Depo. So now I am on the pills

In few cases, the impact of weight gain from the discontinuation of Depo was a reason for restarting the method:

Frank,
husband of non-FP user,
age 15 to 24 years,
urban area, MBP

When she stopped Depo, she started putting on weight. So she went and got it again and she was losing weight.

Felicity,
unmarried current FP user,
age 18 to 24 years,
rural area, EHP

I told them, yes, please, I need this injection (Depo). I missed one. That was the last one. In the tenth month I was supposed to get it, but I did not get it, I missed it and then came, saw my period again ... When I got the injection, it’s like. I did not have much weight. But when I got the injection, the clothes I used to wear with a belt, I wore them, and I could see that I did not need the belt anymore. So I don’t put a belt on when I started using the injection. I left the belt and wore my clothes without them.

Bleeding and menstruation

Different family planning methods were also reported to impact the typical menstrual cycle by increasing blood flow, decreasing blood flow, and stopping blood flow altogether. For implants, this experience ranged from low blood flow to increased blood. Cultural beliefs around cessation of menstruation as a negative sign also influenced use and method choice.

For both current users and non-users who had a history of family planning use, the experience and/or fear of irregular menstrual cycles also reinforced a decision to use traditional methods such as ovulation, withdrawal and/or customary practices:

Like when I got this implant, like I use to have my monthly flows but sometimes no, I do not have my flow.

Dani,
unmarried non-FP user,
age 18 to 24 years,
urban, MBP

I was facing a lot of problems, usually bleeding, a lot of bleeding ... I usually bleed the whole month until the beginning of the next month.

Talia,
unmarried current FP user,
age 18 to 24 years,
urban, MBP

The other thing is that some women put the rubber (implant) and they lose a lot of blood when they have their period.

Iris,
married non-FP user,
age 18 to 24 years,
urban, EHP

Because when they talk about you won't see your period, that scared me too. So I also wanted to stop using so that I could see my period again.

Felicity,
unmarried current FP user,
age 18 to 24 years,
rural, EHP

Contrasted to modern methods, such as Depo, where women were concerned about their menstruation (period) stopping, traditional methods ensured regular cycles. Menstruation without blood was described as 'bad', 'not good', 'frightening', 'scary' and 'a worry' and was not considered 'normal menstruation':

But the thing is like, I haven't seen my monthly period ... Yeah, like I want to be like normal, like other girls huh? Like the first, first time, I was normal? I want to be like that, I don't like this, like I don't have my period? I don't like that.

Wendy,
unmarried current FP user,
age 18 to 24 years,
urban, MBP

I stayed for something like eight years, I stayed on the injection (Depo). I was like a man I didn't see my period.

Glenda,
married current FP user,
age 25 to 34 years,
peri-urban, EHP

A lack of blood during menstruation also created concern and the belief that this blood (rubbish) accumulated in the woman's body, leading to infection (spoiling):

Rosi,
married current FP user,
age 18 to 24 years,
urban, MBP

Depo is good but [pause] one thing from my past experience is I don't see my period for like some time ... Sometimes like, I don't feel good, sometimes I feel like [pause] as if there is rubbish still inside of me. Like we are girls, so we need to remove them. You know? The more we keep them inside, the more they spoil us inside. But I haven't come for the second one yet. I've just recently started. I just recently started, so next month on the 14th I'll be coming back again ... my periods just stop.

Bonnie,
married non-FP user,
age 18 to 24 years,
peri-urban, EHP

Because when we have our period it's the dirty blood in the body so it goes out. But they story about when you stop the dirty, you will see your period will go small or something like that, because the dirty will be sucked backed into our bodies so we might get or something like that.

Shantel,
unmarried current FP user,
age 18 to 24 years,
peri-urban, MBP

I told my mother about this one here – How many months I didn't get my month period ... I told my Mommy I want to go up and tell them to get [the implant] out, because I didn't get this month period.

Celia,
unmarried non-FP user,
age 25 to 34 years,
urban, MBP

I got Depo and I do not see my period and I use to get frighten. My mother's friend who is a nurse] told me not to be scared or do not be worried, Depo is always like that.

Bleeding and changes in menstruation were factors that influenced women, specifically current and past family planning users that had discontinued use, in their decision making about method preference and choice. This decision informed by experience was in respect to the most appropriate and suitable method for women:

I saw that my flow was too much, so I stopped using this family planning implant.

Traci,
unmarried non-FP user,
age 18 to 24 years,
urban, EHP

It's dirty, it has to be removed every month. It is not good if we are totally dry and stay ignorant. What if it makes me sick at a later time? This is what made me scared so I said I don't want to get family planning again and I stopped altogether.

Sha,
unmarried non-FP user,
age 18-24 years,
peri-urban, EHP

Other physical side effects

Women commonly reported that all family planning methods caused physical side effects, such as aches and pains, tiredness, and feeling weak, side effects that were narrated strongly in women's decision making. Physical side effects were also reported to affect 'laziness,' as these side effects negatively impacted their ability to work and tend to their gardens. The experience of physical side effects is a barrier for current users who may discontinue use and for younger/young women who may resist uptake:

Side effects are backaches, especially when you're about to have your monthly period, headaches, dizziness, we don't work [laziness]. Most villagers need to work and do things like chopping firewood, cutting [grass], and making gardens. Those are the side effects. We can't work. We have shoulder pains, the area around the ribs hurt as well ... But implant is worse than all of them. It makes us lazy and feel sick where we can't move around. That's the side effects of implant.

Joan,
unmarried current FP user,
age 25 to 34 years,
urban, MBP

Some side effect about Depo is laziness, you will just want sleep and you will not feel like going to the garden ... Only some of the women experience this but some they say that they feel good and they are active in doing their work ... When I got Depo I always feel lazy to go to the garden and do some work.

Dani,
married current FP user,
age 18 to 24 years,
rural, MBP

The other thing is that they said that if you get the injection (Depo) and then stop your belly will, like your hands will swell up your skin, will swell up a lot and when you want to have a child you will have a lot of problems.

Iris,
married non-FP user,
age 18 to 24 years,
urban, EHP

Dizziness with the use of implants, Depo, and the pill by women with family planning experience was reported and this experience was also shared with other women who were not using family planning. These physical side effects directly influenced these women's decision-making about use or discontinuation of family planning:

Daphne,
married non-FP user,
age 18 to 24 years,
urban, EHP

I felt weak and wanted to throw up, and it made my body cold when I drank the medicine (pills). It made me dizzy and I could not sleep.

For one older woman using Depo, these side effects were resolved on their own. This singular example suggests that women have varied and subjective experiences of the side effects of family planning use:

Joan,
unmarried current FP user,
age 25 to 34 years,
urban, MBP

After one night and I started to feel like dizziness type and pain, my hand was swollen ... And then after two weeks, everything was like you know, back to normal ... yeah you know, for the first time, it was like, it took me like um, two weeks, you know, dizziness type.

Death

A number of young men and women in rural and urban areas of Milne Bay Province reported hearing and sharing stories and experience of women dying from modern family planning methods. This was reported as a reason that some women continue to use the ovulation method to prevent pregnancy and others discontinue the modern methods believed to put them at risk:

Vashti,
unmarried current FP user,
age 18 to 24 years,
rural area, MBP

No (I have not thought about these other modern FP methods) ... This other methods, I already heard the effect, that's why I really surprise or whatever for going to get these other type of methods ... (The stories stop me wanting to get it) Yes ... Because some girls told me about this implant method ... They told me some girls are dying from this method. That's why I say, oh me, I don't want to go to get this method. That's why I really, not thinking to get this type of method.

The reason why I stopped my wife from taking family planning is because of the side effects of the injection. Some women have given birth to babies with defects. Some were born with only one eye while others have died during birth. Thirdly, when I heard the story from my own niece who died in 2007, the injection was inside the arm of my niece, my sister's daughter and she died as a result of that. The injection was broken inside her tissue and she felt sick as a result of that. I don't know what medicine was inside that injection. She lost weight and when I spoke to her about it, she told me that the injection had broken. So, I asked her, "Why didn't you go to the hospital so they could pull it out?" She said, "No, I'm scared because I can't speak English." So I took her to the clinic and they pulled it out. The injection was broken I saw it with my two own eyes. We got back home but she passed away after a month.

Warick,
husband of non-FP user,
age 25 to 34 years,
urban area, MBP

Fear as an emotional response to living with side effects

Side effects experienced by women, and the stories communicated to them by others, directly impacted their decision to use family planning. Fear was an influential factor in women's decisions to use, continue, or discontinue family planning methods:

*I am scared [of family planning]
because it has side effects.*

Rebecca,
married non-FP user,
age 25 to 34 years,
urban area, MBP

One time I was sitting at home and I heard some mothers talking about family planning. They said that after they get family planning, some of them sometimes feel pain where the injection was being injected after returning from the garden ... That is why my wife is scared of family planning.

Thomas,
husband non-FP user,
age 15 to 24 years,
urban area, MBP

I usually get scared of coming to the health centre to get medicine ... I'm scared because of what I heard from people about the side effects of family planning. That's why I don't want to come and get family planning ... They are my mothers, who told me about the side effects of family planning ... My mother advised me to come and get family planning in order to space my children. And also to protect myself, but because I'm scared I didn't come and get it.

Joan,
married non-FP user,
age 18 to 24 years,
rural, MBP

Loretta,
married non-FP user,
age 18 to 24 years, rural, MBP

I heard the stories because that sometimes when they go and they will take the implant out, sometimes they won't find the implant inside them and that is why I get scared.

While concerned about side effects, there is an ongoing belief and fear that family planning can lower women's sexual inhibitions and increases sexual activity with men. This links to the cultural belief that family planning use leads to promiscuity in younger/young women, as reported earlier:

Delia,
other family Influencer,
rural area, MBP

But for implants I found out now that there are a lot of young girls suffering side effects ... The contraception the others could be better but with the implant is a very side effected ones. There are some women that bleed, continuous bleeding which is very not very good. Weight, they either gain weight or they lose weight. With that implant it comes out that some women happen to have twins or triplets and that is fact. So also, that implant some women with their sex active is high, like they just don't care. Especially when they are putting implant from grade 8 and upwards that is very dangerous, very dangerous for our young girls today. So, their sex activities you know, go so high that for their normal hormones growing, is not good for them.

One man in rural EHP suggested that because women are scared to use modern family planning, it might be best for women to return to more customary practices, such as natural medicines:

Robert,
husband of current FP user,
age 15 to 24 years,
rural area, EHP

You know it is that talk because we are in the village we are scared to go and get family planning and for myself, if you are in the village you should get nature medicine.

Returning to traditional family planning methods

Women relied on other family planning methods, such as traditional herbs or ovulation, due to side effects of modern family planning. Additionally, women believed that these traditional methods were more appropriate and would have fewer side effects than modern family planning because they were natural:

Depo's were being introduced, our women had side effects because of that, the Depo. Well, that did control the births in the community, but Depo had some side effects. For example, when my wife was using Depo, she fainted for bleeding for a week and so I had to rush her up and the doctors checked her, and we admitted that she was using Depo. So, they stopped her from using Depo and now she has completely stopped by using our own traditional herbs.

Bernard,
community leader,
urban area, MBP

*It works (ovulation method)
so I have not gone for family planning.*

Doreen,
unmarried non-FP user,
age 18 to 24 years,
peri-urban area, EHP

The herbs [generically described] are helpful, they say it's good. It doesn't have any side effects to it, no added chemicals, no nothing. Just natural.

Nancy,
married current FP user,
age 18 to 24 years,
urban area, MBP

When women experience side effects from modern family planning methods, they consider discontinuing that method and taking up alternate traditional methods. Women who did so believed that this choice was the most suitable for them:

Depo gave me problems such as feeling sleepy and also numbness of my legs and my hands. So, I decided to stop getting Depo. I have three children and I did not get any family planning method, so for the three children I went on to use the ovulation method.

Rita,
community leader,
rural area, MBP

There are a lot of village mothers that do not come for family planning. They use village (traditional) things ... when they use these herbs, still they will sleep with their man and they will not get pregnant. They see it working just like the family planning things from the hospital. When their children get big, they think about having another child then they leave the herbs and they sleep with their man and have another child.

Doreen,
unmarried non-FP user,
age 18 to 24 years,
peri-urban area, EHP

Women also discontinued the use of modern methods of family planning because of a lack of confidence in the effectiveness of such methods. Traditional methods were presented as suitable, effective, and natural alternatives:

If she don't want to get implant sometimes mothers use bush medicine to "implant" themselves.

Nancy,
married current FP user,
age 18 to 24 years,
urban area, MBP

Magnus,
other family influencer,
urban area, MBP

Before modern way of family planning came in, before they were using bush herbs, our ancestors were using bush herbs. When we say bush herbs, they were not much of an effect-taking place within our mothers. Like you were accurate, so when they go and they want to have a child and then they will stop having that bush herbs, so that the mothers will expect a child and then after breastfeeding the mother comes back in to use the bush herbs

Rachael,
unmarried non-FP user,
aged 18 to 24 years,
peri-urban area, EHP

When they use these herbs, they still sleep with their men but do not get pregnant. They see it works like family planning that comes from the hospital. Their children get bigger and they think about having another one, so they'll leave the herbs and then sleep with their man and then get pregnant.

Less commonly reported by women was the acknowledgement that traditional methods, including traditional methods used for abortion, were not always effective, were unsafe, and could result in maternal death:

Wendy,
married non-FP user,
age 18 to 24 years,
peri-urban area, MBP

From the village. Most people say that they use herbs. They drink some kind of leaves. It works for some while it doesn't work for others. They use it and later find out that they are pregnant again.

Jerome,
husband of non-FP user,
age 15 to 24 years,
rural area, EHP

Custom way exists. Some women will take this grass and things from the bush to stop getting pregnant. They eat this grass ya, things from the bush. They mix it with water and drink it ... Custom way to kill babies or stop pregnancy it damages women's bodies. They get sores in their womb/uterus. When these sores come up and the woman is in pain, they (brother and sister in-law) will think to go and get help. They will get bark and drink to strengthen themselves enough until they might need to go to the hospital.

6

Mapping the Family Planning Journey

Irrespective of whether women reside in MBP or EHP, or in urban, peri-urban or rural locations, the family planning consumer journey for married and single women in PNG is complex and intersects with several critical influences. These influences can be of the individual woman, within relationships across and between people (including marriages, extended families, health care worker and patient dyads, peers, and communities and the Church), and from the institutional or national level. The pathway to family planning is anything but equal or uniform for women.

Women were not all afforded equal access to family planning information, education, or services. This was influenced by access to and level of education, geographic location to services, resourcing of these services and perhaps most importantly their individual context in relation to community and cultural norms and individual beliefs. These were enacted by HCWs, community leaders, couples, partners/spouse, parents, and frequently the young women themselves, restricting their access to and their decision-making power in relation to family planning services.

These included strongly held beliefs regarding the role of men in their wives' decision making, the importance of reproduction for cultural reasons, and that access to family planning should be limited to women who have given birth to at least one child, women and girls over the age of 18, and those who are married.

The formal and informal, yet parallel sources, of information that women obtain their knowledge about family planning are at times in conflict with each other, issues around introduction of family planning, frequency of contact with information, behaviour of HCWs in delivery of services served to reinforce the choices women make in which are trusted sources of information.

Where women were able to access services, their ability to choose a preferred family planning method was frequently denied by others and influenced by cultural beliefs of family, community, and health workers.

These restrictions denied young women the ability and human right to make decisions about their own family planning needs. Transgressing these cultural norms to access and take up family planning methods had significant impacts of stigma and discrimination, including interpersonal sexual and physical violence, and influenced perspectives of self-worth.

The options for women to access family planning services that provided choice about methods was rarely straightforward. Rather, women's choices were frequently governed by the type of family planning method available, a result of supply-side issues of methods that were in stock. Often, the preferred choice of family planning method was not available throughout the women's time on family planning, and she was forced to use various methods based on availability or at times discontinue use.

Limited or absence of training of HCWs in certain methods also impacted the type of family planning methods offered to women. Other barriers associated with access included access to and cost of transport, distance to health facilities, and opportunity cost of a woman's time required to travel were recurring issues that limited women's access to family planning services. These factors were compounded when service delivery was not available upon presentation or required the woman to obtain secure stock of her chosen method elsewhere prior to service delivery.

Despite the challenges, HCWs in a number of instances sought to overcome these many supply-side issues with the facilitation of provision of alternative family planning methods and support. Although these alternatives may not have been acceptable to the women themselves, HCWs were proactively facilitating access and continuation of family planning in an environment where these HCWs equally had no control in the health system, particularly with respect to supply-side barriers.

Discussions, gossip, and stories about the side effects of different family planning methods were influential in women's decision making and served as an informal way to obtain family planning information. This information was at times accepted in lieu of formally delivered family planning information, delivered through official communication channels. Other women's negative experiences had led them to become negative advocates for method choice, use, non-use, and discontinuation.

This issue can be mitigated with improved method availability and education on the perceived negative side effects. The many reported and experienced physical side effects had other social impacts, including blaming family planning for women's suffering, creating fear among women, and casting family planning as foreign and not culturally appropriate. This meant that decisions were not biomedically or clinically informed but were instead based on stories and rumours.

The woman, the consumer does not hold the power to make free and informed decisions about her family planning needs and about access to services she desires. An important finding of this research was that many women turned away from modern contraception to take up traditional methods and herb-based contraception.

Interviewees reported a diversity of experiences in the way that family planning was discussed among women and partners, family members, and HCWs. Where these discussions were silenced, shyness and embarrassment were influential in decisions around family planning. In contrast, other women spoke of the impact of discussions they had with HCWs, discussions that started within school at a younger age, and support from trusted HCWs facilitating information about method choice. Trust was also reported as an influential factor for modern and traditional family planning methods. There was mistrust in modern family planning methods, which encouraged the use of mixed methods and the diversion to traditional family planning use. Issues of trust and confidence in informal communication channels and in traditional methods can be seen to directly impact women's decisions to use modern family planning methods.

In this study, most women had some level of primary schooling. Women from urban areas were more likely to go beyond primary school, but often stopped at year 10 due to pregnancy, inability to pay school fees, or a combination of both. There were a limited number of women interviewed that

had tertiary education and conversely, a limited number of women had no education at all. There were differences between women's education levels in EHP and MBP. Some women with no education resided in both urban and rural areas in the EHP, whereas women in MBP generally had some formal education – even if only through grades 1 or 2.

Religion was found to support women's decisions to uptake and use family planning while at the same time asserting competing values that children are part of God's plan and that it is women and men's duty to have children. These beliefs were reported more prominently in rural MBP, although the sentiment exists to varying degrees in both MBP and EHP.

While much of the knowledge generated by the study highlights the barriers and constraints in women's family planning consumer journey, this was not the entire story. Participants reported acceptance of family planning for young, single, childless women. Young, unmarried women that accessed family planning services readily had inclusive and informative family planning education at school, and had supportive relationships with family, HCWs, the Church, and male partners, or a selection of these factors, which facilitated their access to family planning education and services. These important and positive influences appeared to be based on love, support, and trust, influencing the ability of women to freely make their own decisions without fear of discrimination, coercion, or violence. These issues will now be discussed with reference to the family planning journey and specific time points for women aged 15 to 17 years and women aged 18 to 24 years.

Family planning journey time points

Initial access to family planning

Where, when, how and from who women first became aware and received information on family planning varied among women. For some, awareness of family planning occurred in school or college and included modern and traditional methods. Educated women were more likely to have received awareness of family planning earlier than women who were not educated. For most young, unmarried, childless women, other women were the primary source of information on family planning. Generally younger/young women were also less interested in awareness of family planning being provided, as it was not seen as particularly relevant to them and their time of life, despite the existence of need for contraception if sexually active.

Although the family journeys were different among women in this study, a common theme was the family journeys beginning when women first received family planning information and advice. The beginning of these women's consumer journeys in terms of need appears to have two entry points:

- 1) for married and unmarried women after childbirth or the point of maternal care
- 2) for young women when they become, or expected to become, sexually active.

The research shows, however, there is a significant difference in the acceptance and facilitation of each of these entry points, with denial of provision of family planning for sexually active young women supported strongly.

The entry to the family planning market highlighted agency based on women's needs and choices being supported by family, peers, husbands/spouse, community, and HCWs.

On the other hand, for some women this was a decision that resulted in significant barriers from husbands/partners, family, HCWs, and providers. These barriers were rooted in cultural norms about who was entitled to family planning – such as family planning being only for married women or for women waiting until having a child to access to family planning. These barriers crossed gender, age, province and urban, peri-urban, and rural locations.

Young women aged 15 to 17 years

The family planning journeys for women aged 15 to 17 years were discussed retrospectively, with additional insights from the experience of key influencers. Common across these young women's family planning journeys was a lack of acceptability for young women to access services. In many instances, young, childless women were denied services, influenced by the belief that family planning access is for people who are married and have had children. This belief was enforced by family, communities, and HCWs. Transgressing these cultural norms and beliefs to access services in MBP and EHP could have significant social consequences, including the labelling of these young women as prostitutes and as promiscuous. Fear of stigma and discrimination from the community and at the point of service prevents many women, but particularly young women, from engaging family planning services.

There was some acceptance of the need for young women aged over 16 years to access family planning services, support that appeared influenced by the acceptance of young people having sex and the need to prevent unwanted pregnancies. In these instances, young unmarried women were encouraged to take up and use family planning from the advice of parents, other family members, peers, and service providers. However, a distinct disinterest in formal and informal channels of reproductive health and family planning by young women was reported across all provinces and sites, which directly influenced uptake, limited understanding, and perpetuated cultural norms of acceptability and entitlement of family planning use. Where young women were supported to access family planning services, restrictions in the choice of method was commonly reported, which may not fully meet the needs of the young women. Service providers in MBP and EHP acknowledged the difficulty engaging young unmarried women, identifying an unmet need in family planning service provision. Motivating factors of agency and choice are vital to addressing barriers and engaging these young women.

Women aged 18 to 34 years

Women aged 18 to 34 years were the most diverse in the family planning market, including current users, non-users, and discontinued users of family planning. Married women in MBP and EHP reported initial uptake of family planning at the point of maternal health care, attendance at antenatal appointments, and attendance at immunisation clinics. Unmarried women may take up family planning after the birth of a child or when a partner has left. Similar to the experiences of young women aged 15 to 17 years, childless, unmarried women of 18-34 years of age face stigma, discrimination, and fear when considering family planning uptake and use, as these women are perceived to have less ‘right’ to use family planning and can be denied services.

Women aged 18 to 24 years were more likely to identify land scarcity and financial hardship as motivators for family uptake and use, and were more likely to perpetuate the cultural norm that family planning use should be considered after the birth of a child. Women's decisions to engage in family planning at this point is to give enough space between children and manage family size, directly alleviating pressures of a growing population. Barriers such as side effects and husbands' control of decision making directly influence women's decisions to discontinue family planning use. Gossip and stories about side effects of different family planning methods is influential in women's decision making. These women exerted varying degrees of agency throughout their family planning journey experiences. Some women acted individually and made their own decisions about family planning uptake and use, whereas other women acted with the support, approval and/or permission of partners/husbands and other family, particularly parents. Older women were more likely to identify their needs to access family planning and be able to negotiate this with others, holding a power in their relationships that is not common for women under the age of 18 years.



7

The Challenging Family Planning Journey of Women in PNG

Steps within the family planning journey

The family planning journey of women in Papua New Guinea can be outlined as a series of four steps:

- Awareness
- Decision
- Uptake
- Continuation

Each of these steps in the journey is further detailed below in the context of Papua New Guinea and, in some cases, notes the experiences of entitled and unentitled women.

Entitled

Women who are considered entitled to family planning are women who are married and who have had at least one child.

Unentitled

Women who are considered unentitled to family planning are unmarried, childless, and younger (<18yrs) women. Unentitled women they face additional social barriers to access.

Awareness

Awareness of family planning is low, and comes from inconsistent sources and may be out-dated. Some girls learn about family planning in school, but often may not learn about this until college (if they are able to attend).

Entitled women can often rely on healthcare workers as a trusted source of information, often introduce women to options related to family planning during antenatal care visits or after the birth of a child.

The experiences of girls and women who are unentitled include:

- Awareness is hindered by a culture of silence around family planning.
- Silence is driven by the shame/shyness of older, less-educated male family members who feel family planning discussions are inappropriate.
- Family planning does not feel relevant among young women, resulting in low levels of interest among unentitled women.

In general, family planning is positioned for married women who want to space or limit births after their first child.

Decision

The decision to use family planning may be driven by a desire for a limited family size and/or spacing of children, and financial security, which is sometime related to land scarcity.

The decision to use family planning may also be driven by

- the desire to continue education,
- the desire not to shame their family with pregnancy out of wedlock, or
- the perceived risk of unintended pregnancy due to forced sex.

Despite having limited knowledge of family planning, **husbands or male partners are the key gatekeepers** of the decision to use family planning.

The influences, particularly for unentitled girls and women, on decision making include:

- Older community members discourage use of modern family planning and consider it **foreign and culturally inappropriate**.
- Christian beliefs discourage use of family planning, as it is unacceptable, with abstinence as the alternative. **Menstruation and family size are in God's hands.**
- **Community gossip and discrimination** and the labelling of unentitled women as promiscuous or prostitutes, negatively influences young women's willingness to access family planning.

Uptake

For women, in particular entitled women, who decide to use family planning, there may be options to select a modern method in consultation with their providers. Women are also influenced by recommendations from the women around them.

Personal preference drivers for family planning (contraceptives) may lead to the uptake of different options:

- **Implant and injectable contraceptives (IC)**: desire discretion and infrequent re-supply
- **Oral contraceptives (OC)**: partner buy-in, ability to manage compliance
- **Condom**: partner buy-in, post-natal, non-use method associated with prevention of HIV/AIDS and promiscuity
- **Permanent contraception methods**: done childbearing

Method preference can be influenced by **gossip and myths** shared by female relatives and friends as well as cultural beliefs on menstruation related to side effects of some methods.

Healthcare workers may offer women limited product options based on their stock, comfort with the product, and perceived appropriateness for the women.

Unentitled women are often **denied access to any family planning** method by healthcare workers, driven by claims such as it may encourage promiscuity, they are too young to be using family planning, or that it will hinder future reproductive health.

Continuation

Continuation of desired family planning methods is very challenging. Many women are forced to **discontinue use or use an undesired mixture of methods** at some point during their reproductive journeys.

Those hiding family planning use from their partners are at risk of gender-based violence if discovered and may be pressured to discontinue use.

Experience of negative side effects or the experiences that they have heard about from other women often dissuades women from continuing family planning.

Less educated and illiterate women **feel less self-efficacy in their ability to ask questions** and may have difficulty understanding how to properly use and follow the schedule for their method and supply.

Costs – direct cost and opportunity costs – often result in women needing to make a decision to use or not use family planning due to conflicting financial priorities.

Supply-system challenges often result in preferred methods being out of stock for long periods, forcing women to discontinue or switch from their preferred method of family planning.

Key insights within the family planning journey

This study was designed to gather insights from a consumer perspective on where the family planning market is failing the women of PNG. Employing qualitative approaches, this study sought to understand the factors that influence women's uptake of modern methods by gathering insights on their knowledge, perceptions and experiences while also understanding their interactions with influencers and the roles they play in the decision-making process which subsequently defines the women's pathway to family planning/contraceptive use.

Entitlement

Strong held beliefs on who is considered 'entitled' and who is 'not entitled' to family planning is arguably the most significant barrier facing young unmarried, unmarried or childless women with need in PNG. The belief of who is 'entitled' is reinforced by HWCs, communities, influencers, peers and women themselves. Findings show there are numerous moderating beliefs and factors for this:

- Perceived impact of using modern family planning methods on 'childless' women's future fertility
- Perceived side effects of modern methods on young or childless women's bodies
- Belief that the use of modern family planning methods increases promiscuity
- Belief that women must be married before needing family planning
- Belief that unmarried women using family planning are promiscuous or prostitutes
- Christian leaders actively discourage family planning use
- Belief about age of acceptance for family planning use – reinforced by all
- Positioning of family planning for women who want to limit or space children after their first child

Education, literacy, awareness and community beliefs limit informational support

Informational support, education and literacy directly influence women's decision-making capacity and self-efficacy to uptake a contraceptive method. This is rooted in people's understanding and perception of the term 'family planning'; people often did not know what it meant and what services were available to them. A lack of 'prior to service' information limited women's ability to learn about suitable options. Older community members and elders lacked knowledge to act as initial information sources, and HCWs were often limited by the community belief on "who was entitled" as well as the terminology of 'family planning'. Some young women, in the face of all barriers, acted as their own agents and sought out information to meet their needs. There is a need to exponentially increase community awareness and knowledge of what family planning is, and the various options available and their benefits.

Informal channels are important sources at all stages of the family planning journey

Peers, family and other women with live experience are trusted sources of information. Information communicated through these informal channels is influential on women's decision making throughout their family planning journeys and they can either be positive or negative advocates. There is value in these trusted sources as facilitators and, therefore, in using male and female advocates to drive an alternative positive narrative to break down the barriers.

Silence, stigma, shame and risk of violence

A 'silence' around family planning is driven by shame and stigma for some young women and their first entry point to awareness can well after they become sexually active. Silence among women who use family planning and find the need to hide this use from their spouse/partner, places them and the service providers that support them at risk of violence if discovered. This can lead to discontinued use and in some cases this violence is extreme, for example resulting in forced removal of implants by a spouse/partner.

Relevance of family planning to young women

Currently, relevance of family planning for young women is a key barrier to uptake. Family planning does not feel relevant among young women, resulting in low levels of interest among “unentitled” women – who have the most need. Need is driven by different motivators for different women and is influenced by a range of moderating factors. Young, unmarried women require a different health and marketing approach to those of both young and older married women.

Relevance of family planning to men

In order for men to be able to positively engage in the reproductive health choices of his spouse/partner, consideration of how to make the service delivery environment more enabling for male engagement is a gap. The focus of the family planning message within the community, at school and among HCWs seems to be on the act of reproduction itself and its outcome, and deliberately excludes men, yet male spouses and partners are often the key decision makers in the family journeys of women.

Relevance of terminology and positioning of reproductive health to young men and women

The relevance of the term ‘family planning’ to both young women and young men is a moderating factor for this cohort. Positioning of reproductive health services as ‘family planning’ contributes to the barrier of entitlement of access in multiple ways including influencing how HCWs approach access for unmarried or married childless women, as this group is often considered as unentitled to family planning, which further reinforces contraception as not relevant to sexually active young people. This positioning occurs at all levels and within all providers (private, public and NGO). The level of reinforcement of sexual reproductive health services as ‘family planning’ vs. contraception for sexually active people during school education, training curriculums and service delivery is a barrier.

Religious beliefs

Religious acceptance of family planning is a significant barrier that influences women's decisions about acceptability, uptake, and access to service provision. Christian leaders actively discouraged the use of family planning methods, a view that is often supported by HCWs, denying service for unmarried women based on religious beliefs. These findings are of significance given the role church health services play in the delivery of health care in PNG, particularly in rural areas where unmet need is highest.

Cultural context and beliefs in supporting a woman's decision making

The cultural context of each woman plays a key role in her and her partner's motivation and decision to use family planning. Understanding these localised cultural barriers and facilitators for entitled and unentitled women is identified as important in the PNG context, especially due to the diversity of cultural beliefs and practices between and within provinces.

Role of health care workers as both a barriers and a facilitators

Beliefs of HCWs on entitlement can lead to denial of 'unentitled women' at a point of service. This presents a significant barrier that may result in continued non-use of family planning due to stigma – compounded by the potential experience an unentitled woman has already had to overcome by being denied at a point of service.

Support for consent for sexually active young people with need

For unmarried women and unmarried mothers, using family planning was viewed as an encouragement to have sex. There was a belief that denying them access to services will prevent them from being promiscuous. Acknowledgment that young people are sexually active and have needs is in direct conflict to the belief that they are not entitled to access family planning. Policy and law reform related to consent for young women under the age of 16 years sits within the context as a potential facilitator to the barrier preventing parents from supporting access to family planning for their sexually active daughters.

Men and women as joint decision makers

Men appeared to have significant decision-making control over women's family planning choices, as women were expected to seek permission and/or approval from a partner/spouse to take up family planning. Some women reported hiding the use of family planning from their partner, often at great risk to themselves due to pressures to discontinue use. While women may defer decision-making to their partner, men are also under-informed about family planning and this lack of information contributes to their perceptions toward family planning, which impacts the support and the decision to use. It is however important to note that in some cases men, as joint decision makers, were related to women's understanding of their own agency in decision-making, which was often tied into (negotiated or not) the wishes of men, and therefore, the alignment of women to men affords them confidence, i.e. proximal power. This is considered an important point that could be further explored in future study questions.

Sexual and gender-based violence influenced women's decision to use

Women and service providers are exposed to the risk of and had experienced violence in regard to family planning uptake. Intimate partner violence included sexual, psychological, and physical violence and can be more extreme if women have hidden use of contraceptives. This directly influenced married and unmarried women's willingness to use contraceptives. Perceived risk of sexual violence is also reported to influence women's willingness to use contraceptives this included female condom use. The research supports considering approaches that bring men into the discussion and decision-making process.

Provider belief and bias often limit access of family planning to young, unmarried and childless women

HCWs were described as an important information source that allowed women to understand different modern contraceptive methods and their use. Their knowledge and training directly impacted their ability to deliver family planning services and choices to women.

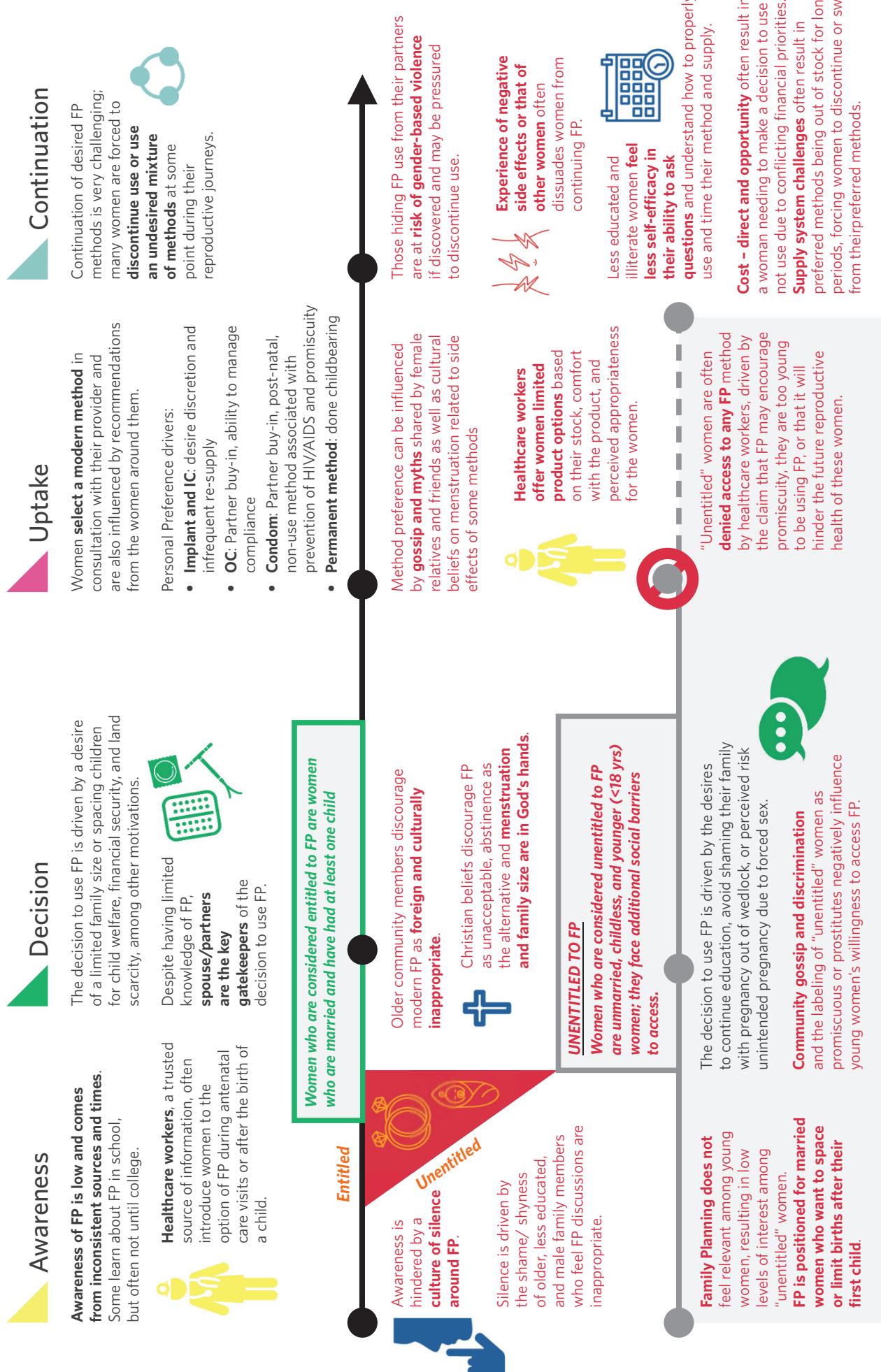
However, HCWs support for specific family planning methods and their suitability for younger/young women appeared strongly influenced by their beliefs and own experiences. HCWs advice also seemed to be influenced by potential or perceived side effects of certain methods. Suggested methods that were seen to be less detrimental to young bodies that have not yet reached sexual maturity or yet had a child were proposed, in some cases denying access to other methods for young, unmarried or childless women.

Addressing provider biasness and knowledge gaps could help improve women's access to various contraceptive methods and improve quality of service provided by HCWs.

Cost of uptake and continuance

The direct and indirect opportunity costs associated with uptake and continuance of family planning is a particular barrier for rural women, which is compounded by potential non-service on arrival due to supply issues or denial due to health care workers own beliefs. Bringing the service closer to the consumer and putting the power of reproductive health in the hands of the consumer, with the factual information needed to make a knowledgeable decision, could help reduce numerous barriers related to stigma and denial of service, and access to method choice.

The Challenging Family Planning Journey of Women in Papua New Guinea





8

Concluding Remarks

Each of the moderating factors in a woman's family planning journey detailed throughout this report must be researched and understood locally in order to better understand the specific context and impact they have on a woman's journey. Such research, as we have done here in urban and rural areas of MBP and EHP, allows for family planning approaches to be informed and designed based on contextually rich evidence of the experiences of women as they navigate their family planning journey over their life course.

This study has highlighted that the consumer experience throughout the family planning journey is varied – there are many moderating factors in women's family planning journeys that are neither uniform nor unique; however, this diversity of experience, once understood, can be used to inform locally designed user-centred health solutions that sit within the framework of national and provincial systems and structures. This focused research will provide critical information to provincial health authorities to inform the creation of policies, programmes, and communications that mitigate the barriers to use and address the motivations for non-use and discontinuation of use of family planning for women who want to be able to plan and prevent a pregnancy. It is important that the consumer is placed at the centre of the design of all family planning programmes to ensure they are informed by and meet the needs of the consumer they serve, in this case the women and girls of PNG.

Furthermore, where there was an observed overlap and convergence of informal community and formal education and awareness on family planning, these factors facilitated and motivated women's decisions of uptake and continued use of family planning. Given this observation, the design of any family planning and contraceptive programmes for women and girls in PNG must recognise and leverage both formal and informal channels of information, as informal sources in some settings are deemed as the most valued and trusted sources. It is important to identify and create advocates within informal channels that can remove barriers and create a positive narrative for women, taking into consideration the local and cultural context, both to facilitate access to contraception for younger/young women and to support women as they encounter the various influences identified in this study that may challenge their use or uptake of family planning.

It is also important to highlight that this research was undertaken prior to the COVID-19 pandemic. As a result, the operational context in which the consumer family planning journeys were observed and existed is likely to change. Despite this, the findings of this research, alongside the need to adapt health care service delivery in the context of COVID-19, further emphasizes the need to design consumer-powered solutions and grant women control of their health care needs, including family planning.

The research insights provide rich evidence for informing public sector-supported, community-based, delivered health care. This should include the integrated use of tele-medicine and digital delivery methods for awareness and education activities (i.e. interactive chat bots and using social media platforms). These adaptations have the potential to ensure access of family planning for all women, while also playing a necessary role in the new operational health system environment in the face of COVID-19. We recommend further research into the effectiveness of digital health solutions to resolve the barriers identified throughout women's family planning journeys.

Findings make available critical insights that can be used to inform the execution of the National Department of Health's Strategic Plan 2021-2030 – that recognises in order to facilitate greater health impact, we need to bring health care closer to the community and to the individual consumer, especially in terms of family planning. To do this, further complementary research regarding service provision solutions that are tailored appropriately and adequately to the local realities of women in PNG, including that of young women that are under the age of 18 years.

In summary, this research was designed with the aim to inform the design of family planning programmes to better meet the needs of the women and girls of PNG including those furthest behind, and in doing so support the Government's progress toward reaching the SDGs and MTDP III economic, population, gender, and health targets, including reduction of maternal mortality, reduction of fertility rates and increase of use of modern family planning methods. It is equally important to recognise the impacts that increasing population pressures continue to place on economic development indicators. If PNG is to make progress, then it is time to re-imagine the positioning of family planning in the market from a consumer perspective.

9

References

1. Ayala T, Caradon L. Declaration on population: the world leaders statement. *Studies in Family Planning.* 1968;1(26):1-3.
2. Petchesky RP. Negotiating reproductive rights: women's perspectives across countries and cultures. *Reproductive Health Matters.* 1998;6(11):186-9.
3. Freedman LP, Isaacs SL. Human rights and reproductive choice. *Studies in Family Planning.* 1993;24(1):18-30.
4. Hunt P. The right of everyone to the enjoyment of the highest attainable standard of physical and mental health: report of the Special Rapporteur. 2004 1 March 2004. Report No.: E/CN.4/2004/49/Add.1.
5. Ali M, Folz R, Farron M. Expanding choice and access in contraception: an assessment of intrauterine contraception policies in low and middle-income countries. *BMC Public Health.* 2019;19(1):1-6.
6. Freedman R. The contribution of social science research to population policy and family planning program effectiveness. *Studies in Family Planning.* 1987;18(2):57-82.
7. Bohren MA, Hunter EC, Munthe-Kaas HM, Souza JP, Vogel JP, Gürmezoglu AM. Facilitators and barriers to facility-based delivery in low-and middle-income countries: a qualitative evidence synthesis. *Reproductive Health.* 2014;11(1):71.
8. National Statistical Office [Papua New Guinea]. National Population and Housing census 2011: Count me in. Port Moresby PNG2011.
9. UNDP. About Papua New Guinea. https://www.pg.undp.org/content/papua_new_guinea/en/home/countryinfo.html2020

10. UNFPA Papua New Guinea. Population Matters.
<https://png.unfpa.org/en/topics/population-matters-102020>
11. PNG Department of National Planning & Monitoring. Papua New Guinea's (Government of Papua New Guinea) Medium-Term Development Plan III (2018-2022). Port Moresby PNG2018.
12. UNFPA Papua New Guinea. Young People. <https://png.unfpa.org/en/topics/young-people-8>: UNFPA Papua New Guinea; 2020.
13. National Statistical Office [Papua New Guinea], ICF. Papua New Guinea Demographic Health Survey 2016-2018. In: NSO and ICF, editor. Port Moresby, Papua New Guinea, and Rockville, Maryland, USA, 2019.
14. United Nations Department of Economic and Social Affairs Population Division. Family Planning and the 2030 Agenda for Sustainable Development: Data Booklet. (ST/ESA/SERA/429). Geneva2019.
15. World Health Organization. Maternal Health: Maternal health in the Western Pacific 2020 [Available from: <https://www.who.int/westernpacific/health-topics/maternal-health/2>
16. World Health Organization. World Health Organization: Western Pacific (Adolescent Health) 2020 [Available from:
<https://www.who.int/westernpacific/health-topics/adolescent-health>
17. WHO, UNICEF, UNFPA, World Bank Group, United Nations Population Division. Maternal mortality rate (modelled estimate, per 100,000 live births) – Papua New Guinea. In: Databank Microdata Data Catalogs, editor. 2019.
18. Mola G, Kirby B. Discrepancies between national maternal mortality data and international estimates: the experience of Papua New Guinea. Reproductive Health Matters. 2013;21(42):191-202.
19. Byrne A, Hodge A, Jimenez-Soto E. Accelerating maternal and child health gains in Papua New Guinea: modelled predictions from closing the equity gap using LiST. Maternal and child health journal. 2015;19(11):2429-37.
20. Demir I, Hou X, Khan M, Pulford J, Saweri O, Haider MR, et al. Service delivery by health facilities in Papua New Guinea: report based on a countrywide health facility survey 2018.
21. International Women's Development Agency. Papua New Guinea & Bougainville. <https://iwda.org.au/papua-new-guinea-and-bougainville/>: International Women's Development Agency; 2020.
22. Department of Foreign Affairs and Trade. Papua New Guinea country brief. <https://www.dfat.gov.au/geo/papua-new-guinea/Pages/papua-new-guinea-country-brief2020>

23. World Health Organization. Papua New Guinea: actions for scaling up long-acting reversible contraception. In: WHO Regional Office for the Western Pacific, editor. Manila; 2017.
24. Lepani K. Islands of love, islands of risk: Culture and HIV in the Trobriands: Vanderbilt University Press; 2012.
25. Dickson-Waiko A. Finding Women in Colonial Papua: Gender Race, and Sex in Papua New Guinea History. *South Pacific Journal of Philosophy and Culture*. 2010;10.
26. Strathern M. The gender of the gift: problems with women and problems with society in Melanesia. Berkeley: University of California Press; 1988.
27. UNICEF. Children in Papua New Guinea. In: UNICEF, editor. <https://www.unicef.org/png/children-papua-new-guinea2020>
28. Government of Papua New Guinea. National Education Plan 2015-2019. 2015.
29. Dickson-Waiko A. Women, Nation and Decolonisation in Papua New Guinea. *The Journal of Pacific History*. 2013;48(2):177-93.
30. Westermarck G. Clan Claims: Land, Law and Violence in the Papua New Guinea Eastern Highlands. *Oceania*. 1997;67(3):218-33.
31. PNG BA. Land ownership in Papua New Guinea explained. <https://www.businessadvantagepng.com/landownership-in-papua-new-guinea-explained/2020>
32. Wardlow H. The making of global and local modernities in Melanesia: Humiliation, transformation and the nature of cultural change: Routledge; 2016.
33. Aime A. The institution of the men's house and making of men. *Contemporary PNG studies*. 2017;27:1-7.
34. Government of Papua New Guinea. National Sexual Reproductive Policy. 2014.
35. Hukula F. Kinship and relatedness in urban Papua New Guinea. *Journal de la Societe des Oceanistes*. 2017;144-145(1-2):159-70.
36. UNDP. Human Development Reports. 2019. <http://hdr.undp.org/en/composite/GII>
37. Ascroft, J., Sweeney, R., Samei, M., Semos, I., & Morgan, C. Strengthening church and government partnerships for primary health care delivery in Papua New Guinea: Lessons from the international experience. *Health Policy and Health Finance Knowledge Hub*. 2011;(16). <https://pdfs.semanticscholar.org/593a/d3d92b3dd13cbf0843754e88f075c251601e.pdf>

