Assessing family planning service denial and its outcomes

A mixed method cohort study in Malawi

Jill M. Peterson

Thesis for the degree of
PhD in Global Studies

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Mat á skertu aðgengi að fjölskylduáætlun með getnaðarvörnum og afleiðingar þess

Hóprannsókn með blönduðum aðferðum í Malaví

Jill M. Peterson

Ritgerð til doktorsgráðu í hnattrænum fræðum

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Ágrip

Inngangur. Þrátt fyrir að vera alþjóðlegt forgangsverkefni tengt því að binda enda á sára fátækt í heiminum eru fjölskylduáætlanir (e. family planning) með getnaðarvörnum enn vannýttar, að hluta til vegna hindrana á aðgengi að þjónustunni. Algengar hindranir eru fjarlægð, kostnaður, viðhorf heilbrigðisstarfsmanna, langur biðtími og birgðaskortur á getnaðarvörnum. Margar af þessum hindrunum eru afleiðingar ójafnræðis þegar kemur að félagslegum áhrifaþáttum á heilsu, eins og menntun, atvinnustöðu og tekjum. Þrátt fyrir alþjóðlegar yfirlýsingar um að ryðja skuli úr vegi takmörkunum á aðgengi að fjölskylduáætlunum með getnaðarvörnum, eins og til dæmis Þúsaldarmarkmið Sameinuðu þjóðanna árið 2000 og Heimsmarkmið um sjálfbæra þróun árið 2015, eru hindranir enn til staðar fyrir þá sem leita sér þjónustunnar.

Markmið. Rannsóknin miðaði að því að skýra skert aðgengi að fjölskylduáætlunum með getnaðarvörnum í Malaví. Notast er við enska hugtakið "turnaway", þ.e. að kona er send heim án þess að orðið sé við beiðni hennar um getnaðarvörn. Markmið rannsóknarinnar voru að: (1) gera grein fyrir því að hve miklu leyti konur fengu aðstoð við hefja notkun getnaðarvarna og lýsa félags-, efnahags- og lýðfræðilegum bakgrunni þeirra með áherslu á jafnræði til þjónustunnar; (2) finna, lýsa og greina ástæður þess að konur voru sendar heim án þess að fá úrlausn og hversu mikið samræmi er á milli þeirrar þjónustu sem er í boði og viðmiðunarreglna um veitingu hennar í landinu; (3) Kanna og greina hlut heilbrigðisstarfsfólks í því að konur voru sendar heim án þess að fá getnaðarvörn og hvað sé hægt sé að gera til að minnka líkur á að það gerist; og (4) ræða og meta afleiðingar þess að vera vísað frá þegar þær fyrst óskuðu eftir að hefja notkun getnaðarvarna.

Aðferðafræði. Við rannsóknina var beitt blönduðum aðferðum og tilgangsúrtaki opinberra heilbrigðisstofnana í þremur héruðum í Malaví, það er í Kasungu, Machina og Zomba, þar sem hægt er að sækjast eftir getnaðarvörnum. Hún var fyrst og fremst þversniðsrannsókn, sem var framkvæmd á fyrirfram völdum heilsugæslustöðvum, meðal þeirra sem leituðu sér þjónustu og veittu hana. Einnig var hópi kvenna sem fékk ekki þá getnaðarvörn sem þær óskuðu sér fylgt eftir í 6 og 12 vikur og höfð viðtöl við þær og heilbrigðisstarfsfólk.

Niðurstöður. Rannsakendur töluðu við 2,246 konur sem yfirgáfu deild fjölskylduáætlana á viðkomandi heilbrigðisstofnun. Af þeim voru 562 (25%) sem sóttust eftir því að hefja notkun getnaðarvarna í fyrsta sinn eða vildu byrja á nýjan leik með þær og uppfylltu því skilyrði fyrir þátttöku í rannsókninni. Af þessum 562 konum hafði 83 (15%) þeirra verið vísað frá þjónustunni þann dag sem þær komu þangað. Konurnar gáfu upp 12 mismunandi ástæður fyrir því hvers vegna þær fengu ekki þá úrlausn sem þær óskuðu eftir. Þrjár algengustu ástæðurnar voru að sú getnaðarvörn sem þær óskuðu

eftir var ekki í boði á heilbrigðisstofnuninni (34%), heilbrigðisstarfsmaður sem gat veitt þjónustuna var ekki á staðnum (17%) og þeim snúið til baka og sagt að mæta á tilteknum degi sem væri frátekinn fyrir fjölskylduáætlanir (15%).

Rannsakendur framkvæmdu megindlega rannsókn meðal 57 heilbrigðisstarfsmanna. Á þremur heilbrigðisstofnunum var eingöngu einn heilbrigðisstarfsmaður að sinna fjölskylduáætlunum þann dag sem rannsóknin fór fram. Auk þess voru djúpviðtöl tekin við átta heilbrigðisstarfsmenn. Megindlega rannsóknin leiddi í ljós að heilbrigðisstarfsmönnum fannst óþægilegast að veita getnaðarvörn til kvenna sem höfðu ekki fætt barn, óháð aldri þeirra eða hjúskaparstöðu. Í djúpviðtölum komu í ljós menningarbundnar hindranir á að veita þeim þjónustu sem óskuðu eftir getnaðarvörnum, sérstaklega unglingsstúlkum. Heilbrigðisstarfsmenn höfðu áhyggjur af því að með því að veita þeim getnaðarvörn væru þeir að ýta undir að stúlkurnar tækju áhættu í kynlífi sem gæti haft neikvæð áhrif á líf þeirra, eins og að þær smituðust af kynsjúkdómum, yrðu ásakaðar um að vera vændiskonur eða neyddust til að hætta í skóla ef þær yrðu þungaðar. Heilbrigðisstarfsmenn lýstu einnig áhyggjum sínum af því að veita getnaðarvörn konum sem áttu ekki barn, í ljósi þess mikla gildis sem móðurhlutverkið hefur í Malaví.

Til viðbótar megindlegum niðurstöðum rannsóknarinnar kom fram í hópviðtölum við konur sem óskuðu eftir fjölskylduáætlun með getnaðarvörnum að þeim hefði verið meinuð þjónusta vegna þess að þær hefðu komið of seint, vegna kostnaðar eða neitun heilbrigðsstarfsmanns um að veita þjónustuna. Ástæða neitunar heilbrigðisstarfsmanns gat verið sú að hann væri þreyttur, væri í hádegismat eða hefði öðrum skyldum að sinna á stofnuninni. Auk þess kæmi fyrir að þeir neituðu að veita endurnýjun á getnaðarvarnasprautu á dögum sem ekki væru fráteknir fyrir getnaðarvarnarþjónustu.

Ályktanir: Skert aðgengi að fjölskylduáætlun í Malaví hefur minnkað miðað við fyrri rannsóknir. Það getur þó enn valdið skaða fyrir þær konur sem sækjast eftir getnaðarvörnum og það er nánast alltaf hægt að koma í veg fyrir hann. Betri skilningur á áhrifum starfsumhverfis heilbrigðisstarfsmanna myndi hjálpa skipuleggjendum þjónustunnar að styðja starfsmenn í að ná góðum árangri í störfum sínum. Til að koma í veg fyrir skert aðgengi að getnaðarvörnum–jafnvel útrýma því og tryggja jafnræði í þjónustunni–þarf öfluga heilsugæslu. Það fæli meðal annars í sér betri mönnun og þjálfun heilbrigðisstarfsmanna í viðmóti og heðgun við þá sem sækja þjónustu þeirra, öruggt aðgengi að þeirri getnaðarvörn sem óskað er eftir og tryggja að nægar birgðir þeirrra séu ávallt til staðar á heilbrigðisstofnunum. Einnig þarf að fræða almenning um getnaðarvarnir og hvernig þær virka. Niðurstöður rannsóknarinnar styðja við stefnumótun í málaflokknum í Malaví, heilbrigðisstarfsmenn og þá sem á alþjóðlegum vettvangi sinna málflokknum til að bæta gæði þjónustunnar og tryggja að allir sem óska getnaðarvarna fái óskir sínar uppfylltar.

Lykilorð:

Getnaðarvörn, Hindrun á getnaðarvörn, Jafnræði til heilsu; Afríka sunnan Sahara

Abstract

Introduction. Despite being an international priority linked to eliminating extreme poverty, family planning remains underutilized, partially due to barriers to access. Common barriers to family planning include distance, finances, provider bias, long waiting times, and stockouts of the contraceptive methods themselves. Many of these barriers arise from inequities in the social determinants of health such as education, employment status, and income. Despite global declarations to remove major barriers to family planning, including the 2000 United Nations (UN) Millennium Development Goals (MDGs) and the 2015 Sustainable Development Goals (SDGs), barriers persist.

Objectives. This research aimed at a better understanding of family planning barriers in Malawi resulting in female clients being turned away from a facility without an effective method, termed "turnaway" in the thesis and publications. The research objectives were to (1) Outline the extent women received a method during a family planning initiation visit and describe their socioeconomic and demographic background with a focus on equity, (2) Identify, describe, and analyze the reasons for turnaway and the degree of alignment between facility services and national service delivery guidelines, (3) Explore and analyze the role of the provider in turnaway and what can be done to reduce it, and (4) Discuss and appraise the short-term family planning outcomes of women turned away at the initiation visit.

Methodology. A subset of Ministry of Health and Population-supported family planning clinics in three districts in Malawi (Kasungu, Machinga, and Zomba) were included as part of the purposive-sample for this mixed-methods study. It was primarily a cross-sectional study conducted in purposively selected clinics with clients and providers, with a longitudinal follow-up of a subset of turnaway clients at six and 12 weeks, followed by a qualitative component with both clients and providers.

Results. Data collectors screened 2,246 women exiting family planning service areas. Of those screened, 562 (25%) were new or re-starting users and were thus eligible for primary analysis of turnaway. Of these 562, 83 (15%) reported having been turned away from receiving a family planning method on the day they sought it. Clients cited 12 different reasons for turnaway—the three most common were that the method was not available (34%), the provider was not available (17%), and they were told to come back on a family planning day (15%).

Data collectors conducted quantitative surveys with 57 family planning providers; three facilities had only one family planning provider present on the day of the surveys.

In addition, in-depth interviews (IDIs) were conducted with eight providers. The surveyed providers reported being most uncomfortable providing contraception to nulliparous women, regardless of age or marital status. During IDIs, they also noted cultural constraints in providing family planning, especially to adolescents. Providers worried that by providing adolescent girls with contraception, they were encouraging or enabling them to take sexual risks with potentially negative consequences, such as sexually transmitted infections, being accused of being prostitutes in the community or having to drop out of school if they did become pregnant. Providers also have their fears about providing methods to nulliparous women, given the strong value placed on motherhood in Malawi.

Besides the reasons cited in the quantitative survey, during focus group discussions, clients also discussed being turned away due to arriving late, financial constraints, or provider refusal. Provider refusal included circumstances such as a provider being tired, about to take a lunch break, or having other responsibilities to tend to. Providers also turned away clients coming for reinjection on a non-family planning day.

Conclusions. Client turnaway for family planning may not be as widespread in Malawi as it once was but still has the potential to harm clients, and is nearly always preventable. A better understanding of the influences of the provider ecosystem would help program implementers to set providers up for success. In a strong primary health care system, with better staffing and training of providers grounded in behavioral change, a reliable supply of methods and supplies, and community education on how methods work, methods could be more equitably available and turnaway could be nearly eliminated. The results of this research will support national policymakers, healthcare providers, and the global family planning community to improve the quality of family planning services and address unmet contraceptive needs.

Keywords:
Contraception, Method denial, Barrier, Health equity, sub-Saharan Africa

Acknowledgments

This thesis and the published research within could not have been possible without my co-authors. The research idea came from conversations with John Stanback, who encouraged me for years to pursue a PhD and who taught me there was always a solution to whatever obstacle might present itself. Jaden Bendabenda was there with me from the beginning as we conceptualized the implementation of the research over many cups of coffee in Lilongwe. Mario Chen provided his always sage advice with endless patience, as he guided me on all things statistical and ensured our methodology was strong. Coming to the project when I needed him the most, Alex Mboma swept in and applied his knowledge of the local health system, ability to command respect and collegiality from data collectors, and logistical and organizational skills, all the while staying in constant communication with me and my never-ending questions and requests. Geir Gunnlaugsson guided me in elevating my research skills to the next level as a doctoral student at the University of Iceland, never letting me off easy and never letting a professional development opportunity pass me by. I greatly appreciate his teaching, guidance, support, encouragement, and friendship. If we all had even a tenth of my co-author's knowledge, work ethic, and passion, the world would be a much better place.

Rounding out my doctoral committee, along with John Stanback and Geir Gunnlaugsson, is Þóra Steingrímsdóttir who strengthened the thesis through her technical and professional expertise as a medical doctor and professor in obstetrics and gynecology, and for whom I have great professional respect. I thank the committee for reviewing drafts of this thesis, for the constructive criticism and thoughtful comments, and for making me a stronger researcher.

Through incredible good fortune, I was able to join forces with extraordinary minds on the WHO Bulletin paper on equity in family planning, including Sara Stratton, Karen Hardee, Erika Houghtaling, Shawn Malarcher, Ian Askew, Maria Carrasco, Venkatraman Chandra-Mouli, Rodolfo Gomez Ponce de Leon, Jennie Greaney, Baker Maggwa, Donna R McCarraher, and Laura Raney. Many of these individuals, along with some new ones, were collaborators of mine on the strategic planning guide titled, *Creating equitable access to high-quality family planning information and services*. Those not already mentioned include Arsene Binanga, Sarah E.K. Bradley, Shiza Farid, Mariama Gado, Kaja Jurczynska, Amanda Kalamar, Mahesh Karra, Ilene Speizer, Petrus Steyn, Michelle Weinberger, and Baker Yiga. Thank you all for the opportunity to collaborate.

In addition, I was blessed to have an exceptional team of both quantitative and qualitative data collectors, any of whom I would be thrilled to work with again. They showed great respect for the clients with whom they interacted and were professionals from beginning to end, working as a team to achieve the research goals. I also wish to thank the women who shared their stories with the data collection team, and by extension, with all of us. I have highlighted in the research how long a day at a health facility can be; yet, the women we interviewed took extra time to respond to our questions, for which I am extremely grateful.

I have the great privilege of working for an organization of strong technical experts in FHI 360 who are as kind as they are talented, and provided me with analytical advice, technical and graphics support, and copy-editing of the published research. A few personal friends lent their time and skills as well, including Sue-Lyn Erbeck, Mary DeBoer, Alexandra Yingst, Elizabeth Lay, Katie Wheeler, and Eva Jörgensen.

Lastly, thank you, my family. Scott, Teo, and Toby endured many weekends of me in the home office, coming out only for food, coffee, and morale boosting. Thanks to my sister and best friend for always being there for me. And thanks to my parents who gave me a strong foundation for learning and for teaching me not to take the easy way out of things. This thesis is dedicated to my mom, Carolyn Peterson, from whom I inherited my life-long love of learning.

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Prologue

I was, perhaps, not a typical young girl in that I did not dream of motherhood. I dreamed of traveling the world, seeing sights, and meeting interesting people. I was able to do just that when in 2010 I moved to Rwanda and began my global health career, providing monitoring and evaluation support to an HIV-services project. I visited health facilities to see what it was like to receive health care in Rwanda, as I would come to do again when I lived in Senegal and Malawi, and various other countries where I lived or worked. I was struck by the remoteness of those sites and the lengthy walks it took clients to get to them, along with the long lines they encountered once they arrived. I saw mothers sitting under trees or benches, with infants strapped to their backs or toddlers playing by their feet, and I wondered how they would keep those children entertained for the next several hours. I also saw, for the first time in my young, sheltered life, skinny babies–babies whose mothers were struggling to feed themselves and in turn, their little ones. In some cases, they were orphaned babies being fed porridge rather than breast milk, or prohibitively expensive formula. As I learned more about cultures in sub-Saharan Africa, I came to know about some commonalities they shared. Motherhood was often the greatest role a woman could play. Women faced enormous pressure to have children, and many children, to the point of sacrificing their own health and that of their children.

I had always believed in a woman's right to choose the timing and spacing of her children, but when I lived in the U.S., I took for granted the easy access women and girls had to contraception. What I saw at health facilities throughout sub-Saharan Africa was a need that far surpassed what the supply side was offering. I thought about how much better life might be for those women and their children if they could control the number of children they had and the interregnum between them.

Then, my husband and I decided it was time for us to make our own family. I got pregnant, and I was miserable. I was nauseated from the moment of implantation all the way until delivery. I felt as if I had the flu that would never go away. It was severe enough that I was prescribed anti-nausea medicine intended for chemotherapy patients, which helped a bit, but not enough for me to ever leave the house without a plastic bag. All I could think of was the women who did this over and over again, without necessarily even wanting the life they were sustaining inside. I could not imagine nine months in this condition, let alone the years that some women spend being pregnant with multiple children, and I really could not imagine doing it for an unwanted

pregnancy. As my pregnancy dragged on, my resolve to bring family planning to every woman who wanted it strengthened.

A few years later, while living in Malawi, John Stanback (my work supervisor at the time) told me about some interesting research done in Malawi in the 1990s, involving women who had been denied contraception at family planning facilities. When this was playing in my mind, one afternoon, a nanny who worked for a friend of mine was at my house chatting with my children's nanny. She had her newborn daughter with her whom I knew to have resulted from an unplanned pregnancy. Admiring the baby, I asked the nanny whether she had been able to start some family planning and she told me she had gone to the facility twice, and both times they had told her to come back after her menstruation had returned. With that, I knew the problem of turnaway was still alive and kicking, and the research presented here had to be conducted.

Table of Contents

List of Abbreviations

AOR	Adjusted Odds Ratio
AU	African Union
CI	Confidence Interval
COC	Combined Oral Contraceptive Pills
CPR	Contraceptive Prevalence Rate
DHIS	District Health Information Software
FDA	Food and Drug Administration
FGD	Focus Group Discussion
HIP	High Impact Practices
ICPD	International Conference on Population and Development
IDI	In-Depth Interview
IUD	Intrauterine Device
LAM	Lactational Amenorrhea
LARC	Long-Acting Reversable Contraception
LNG IUS	Levonorgestrel intrauterine system
mCPR	Modern Contraceptive Prevalence Rate
MDG	Millennium Development Goals
MOHP	Ministry of Health and Population
NHSRC	National Health Sciences Research Committee
OCP	Oral Contraceptive Pills
POP	Progesterone Only Oral Contraceptive Pills
RHD	Reproductive Health Directorate
SAM	Short-Acting Method
SDG	Sustainable Development Goals
SRHR	Sexual and Reproductive Health and Rights
TAG	Technical Advisory Group
UI	Uncertainty Interval
UN	United Nations
UNDP	United Nations Development Program
UNFPA	United National Population Fund
WHO	World Health Organization

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List of Original Papers

This thesis is based on the following original publications, which are referred to in the text by their Roman numerals (I, II, III, and IV):

I. Peterson J. M., Bendabenda J, Mboma A, Chen M, Stanback J, and Gunnlaugsson G. Turned away and at risk: Denial of family planning services to women in Malawi. *Studies in Family Planning*, 2022; 53 (281–299). https://doi.org/10.1111/sifp.12192

II. Peterson J. M., Bendabenda J, Mboma A, Chen M, Stanback J, and Gunnlaugsson G. The provider role and perspective in the denial of family planning services to women in Malawi: A mixed-methods study. *International Journal of Environmental Research and Public Health*. 2022;19(5). https://doi.org/10.3390/ijerph19053076

III. Peterson J. M., Bendabenda J, Mboma A, Chen M, Stanback J, and Gunnlaugsson G. Turned away and sleeping apart: Women's perspectives on and experiences with family planning denial in Malawi. *Submitted for publication.*

IV. Stratton, S., Hardee, K., Houghtaling, E., Malarcher, S., Askew, I., Carrasco, M., Chandra-Mouli, V., de Leon, R., Greaney, J., Maggwa, B., McCarraher, D. R., Peterson, J. M., and Raney, L. (2021). Expanding equity measurements of family planning beyond wealth status and contraceptive use. *Bulletin of the World Health Organization*, 99(10), 747–749. https://doi.org/10.2471/BLT.20.279604.

Supplementary Material 1. High Impact Practices in Family Planning (HIP). Creating equitable access to high-quality family planning information and services: A strategic planning guide. Washington, DC: HIP Partnership; 2021, Aug. Available from: www.fphighimpactpractices.org/guides/creating-equitable-access-to-high-quality-family-planning-information-and-services

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Declaration of Contribution

The doctoral candidate, Jill M. Peterson (JMP), wrote this doctoral thesis under the guidance of Geir Gunnlaugsson (GG), supervisor, and the thesis committee, John Stanback (JS) and Þóra Steingrímsdóttir (ÞS). The Committee has read and commented on earlier versions of the thesis and approved the final version for defense.

Collaborators on the manuscripts based on the work in Malawi were Jaden Bendabenda (JB), Alexander Mboma (AM), and Mario Chen (MC).

The contribution of each to the study is as follows:

JMP—Conception and design of the research, implementation of data collection, analysis and interpretation, and drafting of the manuscript. Final approval of the version to be published and agreement to be accountable for the work.

JB—Conception and design of the research, analysis, data interpretation, and reviewing and revising of the manuscript. Final approval of the version to be published and agreement to be accountable for the work.

AM—Conception and design of the research, implementation of data collection, analysis and interpretation, and reviewing and revising the manuscript. Final approval of the version to be published and agreement to be accountable for the work.

GG—Conception and design of the research, analysis, data interpretation, and reviewing and revising the manuscript. Final approval of the version to be published and agreement to be accountable for the work.

JS—Conception and design of the research, analysis, data interpretation, and reviewing and revising the manuscript. Final approval of the version to be published and agreement to be accountable for the work.

MC—Conception and design of the research, analysis, data interpretation, and reviewing and revising the manuscript. Final approval of the version to be published and agreement to be accountable for the work.

ÞS – Revision of the thesis and final approval of the version to be published and agreement to be accountable for the work.

I am also grateful for the collaboration with Sara Stratton (SS) and Karen Hardee (KH), who took the lead on drafting the WHO Bulletin paper, with input from all co-authors, including Erika Houghtaling (EH), Shawn Malarcher (SM), Ian Askew, Maria Carrasco (MC), Venkatraman Chandra-Mouli, Rodolfo Gomez Ponce de Leon, Jennie Greaney, Baker Maggwa (BM), Donna R McCarraher (DRM), JMP, and Laura Raney. In addition to them, I want to acknowledge the assistance of the following persons with

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Table 1. Socio-economic indicators for Malawi.

Population, million (World Bank, 2021,)	19.6
• *0–14 years (%)*	43
• *15–64 years (%)*	55
• *65+ years (%)*	3
Surface area (km2) (Lake Malawi excluded)	94,080
People per km2 (Lake Malawi excluded)	165
Urban population (%) (2020)	17.4
Gross Domestic Product (GDP) per capita (PPP US$) (2021, World Bank)	643
Education	
• *Males with at least some secondary education (% ages 25 and older) (2019)*	26.1
• *Females with at least some secondary education (% ages 25 and older) (2019)*	17.6
Literacy, average (2018) (%)	62.1
Water and sanitation (%) (2020)	
• *Population using at least basic sanitation*	26.6
• *Population using at least basic drinking water sources*	70.1
Expenditure on health, public (% of GDP) (2019)	7
Total fertility rate (births per woman) (2020)	4.1
Adolescent birth rate (2015, births per 1,000)	137.6
Maternal mortality (*per 100.000 live births*) (2020)	381 [269, 543]
Modern contraceptive prevalence rate (mCPR) (%)	
• 2000	26.1
• 2015-2016	58.1
○ *Injectables*	*30.0*
○ *Implants*	*12.0*
○ *Pill*	*2.0*
○ *IUD*	*1.0*
○ *Female sterilization*	*11.0*
Demand for family planning satisfied with modern methods (%) (2016)	73.9
Contraceptive prevalence rate (2020)	59.2
Unmet need for family planning (2020)	18.7
Life expectancy at birth (years) (2020)	64.3
Mortality rates per 1000 live births (est. 2019)	
• *Neonatal*	19.8
• *Infant (< 1 year)*	30.9
• *Under-five*	41.6
Moderate and severe malnutrition among under-fives (2003–2009) (%)	
• *Wasting*	1
• *Under-weight*	9
• *Stunting (moderate and severe)*	37
HIV-seroprevalence (urban %/rural %) (15–49 years)	
• *1985*	2
• *1995*	30/12–14
• *2005*	9.8
• *2009*	7.5
• *2021*	1.9
Human Development Index 2020 rank	169/191

*Compiled from diverse sources, see *Human Development Report 2022 (UNDP, 2022), State of the World's Children 2021 (UNICEF, 2021), World Health Organization (2023)* and *the World Bank DataBank.*

1. Introduction

Global development efforts initiated at the end of World War II with the establishment of the United Nations (UN), immediately recognized the need for a global health organization as a strategic component of the development agenda (World Health Organization, 2022c). The World Health Organization (WHO) constitution was ratified in 1948, and maternal and child health was named, along with malaria, tuberculosis, venereal diseases, nutrition, and environmental sanitation, as a "top priority" (World Health Organization, 1958). Over time, family planning has been recognized for its significant role in reducing unsafe abortion and maternal and child mortality, as well as for its high cost-benefit ratio in development efforts (Ahmed, Li, Liu, & Tsui, 2012; Bishai et al., 2016; Starrs et al., 2018). Even so, contraception has been historically difficult for some to access, particularly in low-and-middle-income countries (Starrs et al., 2018). For example, research on women having their contraceptive needs met based on 64 national Demographic Health Surveys (DHS) showed inequities by economic status, area of residence, and education, with the biggest disparities in sub-Saharan Africa (Ortayli & Malarcher, 2010).

These factors, along with employment status, social inclusion and non-discrimination, food insecurity, early childhood development, and access to affordable, quality health care, are some of the "social determinants of health," which are "non-medical factors that influence health outcomes," as defined by the WHO (Marmot, Friel, Bell, Houweling, & Taylor, 2008; World Health Organization, 2022d). While social determinants of health exist in countries of all income levels, they can be harder to overcome in low- and middle-income countries, where resources and alternatives are more limited (World Health Organization, 2022d). Overcoming or minimizing the impact of social determinants of health is a key element in helping the world to meet the 17 Sustainable Development Goals (SDGs) set by the UN in 2015 for achievement by 2030, and achieving equity in health (United Nations, 2015).

The research highlighted in this thesis sought to examine family planning access in Malawi, a low-income sub-Saharan country. Specifically, the research aimed to better understand circumstances that result in women being turned away from a facility without receiving a method of family planning on the day it was sought, and the resulting outcomes for those women. Were they eventually able to start a method, and if so, how long did it take? Or did they become pregnant in the meantime? Lastly, it sought to understand provider and client perspectives on client turnaway.

Recognizing the inequities that plague access to health care services, this research is grounded in the WHO's *Priority public health conditions analytical framework,* which highlights three activity dimensions: measure, analyze, and intervene (Blas, Sivasankara Kurup, & World Health Organization, 2010). The framework considers differing health outcomes, vulnerabilities, and exposures for individuals, population groups, and societies, often based on the social determinants of health. The research is intended to provide outputs and recommendations that can be used to improve programming and equity in family planning, thus maximizing the societal impact of the research.

1.1 History of Family Planning

While women's need to be able to achieve their reproductive goals and preferences has long existed, recognizing family planning as a component of primary healthcare and as a human right has taken a long time to emerge and is the outcome of many international conferences and gatherings of world leaders (Table 2) (Starrs et al., 2018). Pledges and commitments made at these gatherings shone a light on the importance of health and well-being for the development and progress of individuals, communities, and societies. As this research is focused on Malawi in sub-Saharan Africa, it is important to consider the progression of health care and family planning in this context, intertwined with the history of colonialism, post-colonialism, and the current donor-recipient development relationships (Büyüm, Kenney, Koris, Mkumba, & Raveendran, 2020; D. S. Lawrence & Hirsch, 2020).

In pre-colonial times, and before the advent of modern family planning, fertility in sub-Saharan Africa (and elsewhere) was controlled through such traditional practices as lengthy breastfeeding and postpartum abstinence from sexual relations (Mbacké & Council, 1994). In post-colonial times, however, many traditional practices changed. For example, girls spent more time in school and less time on domestic activities, which had afforded an opportunity for elder female family members to pass on knowledge to younger women and girls, such as traditional methods of family planning and the importance of child spacing (Mabogunje, 1981). These ideas were also not being taught in schools. In addition, changing agricultural practices that emphasized cash crops, and therefore a need for more workers, and the increased mortality rates that followed early colonialism, both also possibly contributed to post-colonial increases in fertility rates (Fetter, 1989; Mbacké & Council, 1994).

International support for modern family planning programs in low and middle income countries did not begin until the 1960s when the idea of legally allowing women to control their fertility was gaining popularity in the U.S. and Europe (Cleland et al., 2006). First approved for use as contraception by the Food and Drug Administration (FDA) in 1960, the oral contraceptive pill quickly became popular in the U.S. Other

methods popular in the U.S. in the 1960s and 1970s were IUDs, sterilization (both male and female), and condoms (Mosher, 1982). Contraception became legal in Britain for married women in 1961 and unmarried women in 1967.

In 1968, 84 member states of the UN came together for the International Conference on Human Rights in Tehran, Iran, from which the Proclamation of Tehran, emerged which declared, among other things, that "The protection of the family and the child remains the concern of the international community. Parents have a basic human right to determine freely and responsibly the number and the spacing of their children" (United Nations, 1968). Although the resolution was non-binding, framing family planning as a human rights issue enabled more funding for family planning initiatives and provided the basis for removing legal obstacles to contraceptives still in place in many countries worldwide.

Shortly thereafter, in 1970, the U.S. Congress passed the *Population Research and Voluntary Family Planning Programs,* commonly known as Title X (U.S.C., 1970). Research from the U.S. in the mid-1960s showed that women, low-income women in particular, were having more children than they wanted (Benson Gold, 2001). Other findings demonstrated the economic hardship that resulted from unintended pregnancies and the health implications for women and infants when children were born close together (Benson Gold, 2001). Consensus grew that there were both economic and health benefits to making contraception available to all women, including those with low-income (Benson Gold, 2001). Enacted as a part of President Richard Nixon's *War on Poverty*, and still current, this U.S. policy marks the beginning of the recognition of the connection between the economic and health struggles that can result from an inability to achieve one's reproductive goals (Benson Gold, 2001; U.S.C., 1970).

Ideas about health and healthcare continued to evolve and in 1978, the International Conference on Primary Health Care took place in what is Kazakhstan today. Bringing together 134 countries, it emphasized the need for equitable access to primary health services and had a goal of "Health For All" by the year 2000 (UNICEF & World Health Organization, 1978). The conference resulted in the Alma-Ata Declaration of 1978, which outlined eight essential components of primary health care, including maternal and child health, and mentioned family planning as an important component of maternal and child health. Forty years after Alma-Ata, its commitments to primary health care were reaffirmed in Astana, Kazakhstan. Sexual and reproductive health was included again in the comprehensive list of primary health services to be provided (Global Conference on Primary Health Care, 2018).

Table 2. Summary of International Gatherings of importance for family planning services.

Year	Conference/Summit/Meeting	Main Outcome
1968	International Conference on Human Rights, Tehran	Family planning declared a human right
1987 1989	Safe Motherhood Initiative, Kenya Safe Motherhood Initiative, Niger	Call for action to reduce maternal mortality
1994	International Conference on Population and Development (ICPD), Egypt	Established reproductive rights as human rights
1998	Safe Motherhood Technical Consultation, Sri Lanka	10 safe motherhood messages
2000	United Nations Millennium Summit	8 Millennium Development Goals
2006	African Union	Maputo Program of Action
2012	London Summit	FP2020
2015	UN General Assembly	17 Sustainable Development Goals
2018	Global Conference on Primary Health Care, Kazakhstan	Reaffirmed Alma-Ata Declaration of 1978

*Compiled from diverse sources.

In 1987, a decade after Alma Ata, however, several African countries realized they were unlikely to meet the goals of health for all due to economic recession and debt. A meeting of African ministers took place in Mali in 1987 at the WHO Regional Committee Meeting (Asila Pangu, 1997). Encouraged by the good health results seen in regional projects, ministers adopted the Bamako Initiative, which included a focus on community ownership of their proximate health centers, decentralizing decision-making and management to the local level (Knippenberg et al., 2003). The initiative also included community cost-sharing through patient payments for services and pharmaceuticals, including family planning commodities, with the fees intended to be reinvested in primary health care activities and services (Knippenberg et al., 2003).

In the same year, 1987, another conference was held in Africa, this time in Nairobi, with a focus on safe motherhood. Realizing that women were dying at alarming rates from complications of pregnancy and childbirth and that existing maternal and child health programs were heavily focused on the child and not the mother, United Nations Population Fund (UNFPA), the World Bank, and WHO-sponsored the international Safe Motherhood Conference (Starrs, 2006). A sister conference was held in Niamey, Niger in 1989. In 1998, on the 10th Anniversary of the Nairobi Safe Motherhood Conference, at a technical consultation in Sri Lanka, ten safe

motherhood messages were developed, several of which stressed the importance of family planning, including delaying marriage and first birth, and addressing unwanted pregnancy and unsafe abortion (Pregnancy is special – let's make it safe. Special feature – safe motherhood facts, 1998).

Perhaps the best-known international meeting to advance sexual and reproductive health and rights (SRHR) was the one in Cairo in 1994. The International Conference on Population and Development (ICPD) had a central goal of achieving universal access to reproductive-health services, including family planning (Ali, Cleland, & Shah, 2012; Starrs et al., 2018). Importantly, it conceptually shifted family planning from being a means of controlling overpopulation to an important aspect of women's empowerment and reaffirmed reproductive rights as human rights (McIntosh & Finkle, 1995). At this meeting, world leaders came together to define SRHR to include the rights of all to "decide freely and responsibly the number, spacing and timing of their children and to have information and means to do so"(United Nations Population Fund, 2004).

In 2000, the UN held a "Millennium Summit," in which eight Millennium Development Goals (MDGs) with time-bound targets were agreed on in support of its comprehensive development efforts for ending extreme poverty by 2015 (Figure 1) (United Nations, 2000). The MDGs embodied basic human rights for every human being, irrespective of setting and socioeconomic status, to enjoy equitable access to health, education, shelter, and security. The original objectives, written in 2001, did not include family planning or reproductive health services out of concerns that more politically conservative countries, such as the U.S. (which had recently come under the control of the George W. Bush administration), and others (including the Holy See—the government of the independent city-state of the Vatican and the Catholic Church—and several conservative Muslim countries), would not approve the goals if they were included (Hulme, 2010; Shiffman & Quissell, 2012). When the world was not on track to achieve its goals, achieving universal access to reproductive health care services was subsequently added in 2007 as a target under MDG 5: Improve Maternal Health (Hulme, 2010).

Figure 1. Millennium Development Goals (United Nations, 2000).

Around the same time, after prolonged efforts, in 2006 the African Union's (AU) Maputo Program of Action was adopted by 48 ministers of health. It called upon AU member states to advocate and increase access to reproductive health services and ensure universal access to reproductive health by 2015, in alignment with MDG 5 (Oronje, Crichton, Theobald, Lithur, & Ibisomi, 2011; Tsui, Brown, & Li, 2017).

In 2012, the Bill & Melinda Gates Foundation and the UK Government co-sponsored a summit in London, in partnership with the UNFPA, national governments, other donors, civil society, and agencies from other sectors. The summit called for national commitments to enable 120 million more women and girls to use contraceptives by 2020, an initiative known as FP2020 (Tsui et al., 2017). Specifically, the participants aimed to achieve this through expanded access to and demand for family planning, as well as improvements in supply chains and greater accountability through monitoring and evaluation of family planning programs. After the summit, 49 governments, including 39 from Africa, made commitments to contribute to the overall goals (Tsui et al., 2017). In 2020, the initiative was updated to FP2030, which builds on the achievements of FP2020 and continues to support investments in family planning (FP2030, 2021).

The world assembled again at the UN General Assembly in 2015 to consider what should follow the MDGs, set to expire that year. The resulting 17 SDGs (Figure 2) are intended to be achieved by 2030 and continue to emphasize the notion of equity put forth under the MDGs (United Nations, 2015). Family planning appears in two SDG indicators under Goal 3, Good health and well-being, and Goal 5, Gender equality. The indicators measure the proportion of women whose family planning needs are satisfied with modern methods, as well as the proportion of women aged 15–49 who make their

own informed decisions regarding sexual relations, contraceptive use, and reproductive health care (United Nations, 2015). Family planning also contributes to the success of several other SDGs, including those concerning the elimination of extreme poverty, ensuring quality education for all, and minimizing the impact of climate change (Starbird, Norton, & Marcus, 2016; United Nations, 2015).

Figure 2. Sustainable Development Goals (United Nations, 2015).

Although the language of the ICDP shifted the tone from that of population control to women's autonomy, concerns about coercion of women in relation to family planning were much debated in advance of the gathering (Chesler, 1994; Holt et al., 2023; Westhoff, 1994). The aggressive goals set forth by the MGDs, SDGs, and FP2020/30 have also raised concerns of coercing women to use contraception when that may not be their true desire (Senderowicz, 2019). This "upward" coercion is in contrast to the "downward" coercion used to restrict access to women desiring to use family planning (Senderowicz, 2019). While upward coercion is no less important, this thesis and the presented research have their focus on barriers and access to family planning.

1.2 Why is Access to Family Planning Important Today?

What the organizers and participants of the long list of international summits and gatherings (Table 2, page 3) recognized was the importance of family planning to human rights, development, and advancement. The benefits of family planning, however, extend beyond women to children, families, communities, and societies and can be linked to nearly all areas of development (Cates, 2010).

When women are allowed to control their fertility, both maternal and infant mortality are reduced. A 2006 report on strategies to reduce maternal mortality gave priority to family planning, noting that without pregnancy, there can be no maternal mortality (O. Campbell & Graham, 2006). Increased use of contraception not only lowers the total fertility rate but is also often targeted at what would otherwise be high-risk pregnancies, such as women younger than 20 or older than 40 (Ganatra & Faundes, 2016; Stover & Ross, 2010). Research in 2010, looking at 146 Demographic Health Surveys (DHS), showed that the increased use of contraception from 1990 to 2005 resulted in 1.2 million fewer maternal deaths (Stover & Ross, 2010). Another research modeling the use of contraception revealed a 44% reduction in maternal mortality (Ahmed et al., 2012).

Contraception also contributes to healthy birth intervals and improved fetal outcomes. Allowing women to have an interpregnancy interval (measured from birth to subsequent conception) of 24–36 months reduces the rates of pre-term births, low birth weights, fetuses being small-for-their-gestational-age, and stillbirths, and is recommended by the WHO (Conde-Agudelo, Rosas-Bermúdez, & Kafury-Goeta, 2006; İmamoğlu et al., 2022; World Health Organization, 2007a; Sanni Yaya, Uthman, Ekholuenetale, Bishwajit, & Adjiwanou, 2020). In addition, there is evidence to show an association between intervals of less than six months and maternal morbidity, and possibly mortality (World Health Organization, 2007a).

Unsafe abortions also contribute to maternal mortality. A 2014 systematic analysis suggested that 7.9% (95%, uncertainty interval [UI] 4.7–13.2) of maternal deaths globally were due to abortion (Say et al., 2014). The figure rises to 9.7% (UI 5.1–17.2) in sub-Saharan Africa where safe abortions are harder to obtain (Say et al., 2014). Given the illegal status of abortion in many places, and the resultant secrecy surrounding it, these figures possibly underestimate the actual impact significantly. Other research estimated that the increased use of contraception could reduce the impact of unsafe abortion on maternal mortality by 13–15% (Tsui, McDonald-Mosley, & Burke, 2010). Unsafe abortions can also have long-term effects on the surviving women. WHO estimated that unsafe abortions lead to secondary infertility in 1.7 million women in the developing world every year (World Health Organization, 2007b). In sub-Saharan Africa, 80% of unsafe abortions concern women under 30, many of whom may want

children in the future (World Health Organization, 2007b). Research in Nigeria found an association between secondary infertility and a history of unsafe abortion (adjusted odds ratio [AOR] = 9.4, confidence interval [CI] = 3.8–23.2) (Emmanuel, Olamijulo, & Ekanem, 2018).

The impact of maternal mortality stretches beyond the mother herself, and into the often-forgotten suffering of her surviving children. Both the newborn child and its older siblings may face vulnerabilities related to health, nutrition, and education after the death of their mother (Bazile et al., 2015; E. R. Lawrence et al., 2022; Molla, Mitiku, Worku, & Yamin, 2015; Yamin, Boulanger, Falb, Shuma, & Leaning, 2013). For example, research in Malawi examined the intergenerational impact of maternal mortality and shared examples of surviving children going without breastmilk or access to an appropriate, balanced diet (Bazile et al., 2015). The research also described older children being forced to put their education on hold or abandon it altogether, with increased pressure to work to support the family (Bazile et al., 2015). Research in Tanzania and Ethiopia explained that motherless children often miss out on a home-cooked lunch, making it difficult to concentrate at school, and lack assistance at home with schoolwork, leading to their falling behind in their studies (Molla et al., 2015; Yamin et al., 2013). Older children may need to entirely drop out of school, with girls, in particular, having added responsibilities of caring for younger siblings and performing more household chores after the loss of their mothers (Molla et al., 2015; Yamin et al., 2013). Children whose mothers have died often become the responsibility of a grandmother or aunt. When new family arrangements are formed, surviving children are reported to often receive second-class treatment in their new families (Bazile et al., 2015; Molla et al., 2015; Yamin et al., 2013). Surviving girl-children, who may be considered a burden to their new families, may be married off early, thus restarting the cycle of high-risk pregnancies at a young age (Molla et al., 2015; Yamin et al., 2013).

Child marriage is associated with lower rates of education, younger age at first pregnancy, and higher rates of overall fertility (United Nations Children's Fund, 2022; Wodon et al., 2017). Child brides can also suffer from inequitable access to health care and higher rates of interpersonal violence (Wodon et al., 2017). The World Bank estimated $566 billion in benefits worldwide by 2030 had child marriage been eliminated in 2015, resulting from reduced population growth (Wodon et al., 2017). An additional $82 billion in benefits could be counted from reduced under-five mortality.

Breaking the cycle of early marriage and motherhood can lead to the economic empowerment of women. Girls and women who can delay marriage and motherhood are more likely to stay in school, thus leading to greater economic opportunities in the future (Omoeva & Hatch, 2020). Limiting the number of children for whom they are responsible also limits their financial responsibilities and frees women to pursue other

productive and emancipating goals (Cleland et al., 2006). The causality can also go in the other direction—empowering women also increases their use of contraception (S. Yaya, Uthman, Ekholuenetale, & Bishwajit, 2018). When women have options open to them beyond motherhood, they often avail them, resulting in lower parity rates and decreases in maternal mortality (S. Yaya et al., 2018).

Maternal mortality is almost entirely preventable and even under the best of delivery conditions, modern contraception is most often safer than pregnancy and delivery (O. Campbell & Graham, 2006; United Nations, 2014). Increased access to family planning and reproductive health information is the first step in reducing maternal and infant mortality, along with economic empowerment, access to safe abortion, good antenatal care, and skilled birth attendants.

1.3 Commonly Available Family Planning Methods and How They Work

Modern contraceptive methods are categorized as short-acting methods (SAM), long-acting reversible contraception (LARC), and temporary, or permanent methods. Methods commonly used in sub-Saharan Africa and how they work are listed in Table 3.

Table 3. Common methods of modern contraception and how they work.

Method	How it is administered/used	How it works	Type
Injectable Contraception	A shot of the hormone progestin in the hip, arm, or thigh. Given every three months. Generally, should not be used until six weeks after delivery if breastfeeding, to ensure proper milk production.	The injection contains the hormone progestin which prevents ovulation. It also thickens cervical mucus to keep sperm from reaching the egg.	Short-acting
Implants	A thin rod or rods inserted under the skin of a women's upper arm by a trained healthcare provider. Can be used immediately after delivery.	The rod contains progestin that is released into the body over 3 years. It also thickens cervical mucus to keep sperm from reaching the egg and makes the lining of the uterus less receptive to implantation.	Long-acting
Bilateral-tubal ligation	A woman's fallopian tubes are closed or tied, preventing fertilization. It is an outpatient procedure and can be done at the time of a cesarean section, within a week of delivery, or after 6 weeks post-delivery.	Eggs are blocked from meeting sperm.	Permanent
Combined Oral Contraceptive Pills (COCs)	A pill that is taken by a woman at the same time each day. Should not be used until six weeks after delivery if breastfeeding, to ensure proper milk production.	The pill contains the hormones estrogen and progestin and prevents ovulation.	Short-acting
Progesterone only Oral Contraceptive Pills (POPs or "mini-pill")	A pill taken by a woman at the same time each day. Can be used immediately after delivery.	The pills contain the hormone progestin which prevents ovulation. It also thickens cervical mucus to keep sperm from reaching the egg and makes the lining of the uterus less receptive to implantation.	Short-acting

Method	How it is administered/used	How it works	Type
Copper T intrauterine device (IUD)	A small T-shaped device placed inside the uterus by a doctor or specially trained midwife/health care professional. Depending on the brand, it can stay in the uterus for up to 10 years. Can be inserted within 48 hours of delivery or abortion or 4 weeks or longer after either.	The copper component damages sperm and prevents it from meeting the egg. It also makes the lining of the uterus less receptive to implantation.	Long-acting
Levonorgestrel intrauterine system (LNG IUS)	A small T-shaped device placed inside the uterus by a doctor or specially trained midwife/health care professional. The LNG IUS can stay in the uterus for up to 3 to 6 years, depending on the device. It can be inserted within 48 hours of delivery or abortion or 4 weeks or longer after either.	It continuously releases small amounts of progestin which thickens cervical mucus to keep sperm from reaching the egg and makes the lining of the uterus less receptive to implantation.	Long-acting
Lactational amenorrhea (LAM)	Happens naturally for women who have recently given birth and are breastfeeding. Can be used as birth control when three conditions are met: 1) amenorrhea 2) fully or nearly fully breastfeeding, and 3) less than 6 months after delivering a baby. Another birth control method must be used when any of the three conditions are not met.	High levels of prolactin, the breastfeeding hormone, prevent ovulation	Temporary
Emergency contraception	Pills taken by a woman to prevent pregnancy up to 5 days after unprotected sex	Prevents or delays ovulation. It also thickens cervical mucus to keep sperm from reaching the egg and makes the lining of the uterus less receptive to implantation.	Temporary
Vasectomy	The male vas deferens are cut and tied or sealed so ejaculate no longer has any sperm in it that can fertilize an egg. It is an outpatient procedure with a recovery time of less than one week.	Keeps sperm out of ejaculated semen.	Permanent

*Compiled from diverse sources. See (*Ba, Ssentongo, Agbese, & Kjerulff, 2019; Centers for Disease Control and Prevention, 2022; Kleinman, 1990; World Health Organization, 2015, 2020*)

1.4 Barriers to and Inequities in Accessing Family Planning

Despite the recognition of family planning as a human right and the great emphasis on it through declarations, policies, and funding, in 2019, 218 million women in low- and middle-income countries were estimated to have an unmet need for family planning (Sully et al., 2020). In many cases, the unmet need can be attributed to the various barriers women face in accessing family planning (Bertrand, Hardee, Magnani, & Angle, 1995; Starrs et al., 2018). Barriers may impact both demand for, and supply of, contraception. For example, messaging around the benefits of family planning may not reach potential clients, or the supply may be restricted to clients who are seeking them. These barriers often result in inequitable access for women and can be related to social determinants of health, such as education, employment, and discrimination (Blas et al., 2010; CSDH, 2008; World Health Organization, 2022d).

In 1992, a short commentary in *The Lancet* titled "Medical Barriers to Access to Family Planning," drew much-needed attention to the topic of access to contraceptive services and highlighted the problem of medical barriers imposed on clients, defined as "practices, derived at least partly from a medical rationale, that result in a scientifically unjustifiable impediment to, or denial of, contraception" (Shelton, Jacobstein, & Angle, 1992).

In the decades following the Shelton et al. (1992) article, researchers documented the scope and scale of medical barriers to contraception. Bertrand et al. (1995) article characterized six types of medical barriers based on (1) contraindications, (2) medical eligibility, (3) process hurdles, (4) provider bias, (5) inappropriate management of side effects, and (6) regulation. Examples of medical barriers studied and reported in the literature include providers requiring negative pregnancy tests or direct observation of menstruation (i.e., a soiled menstrual pad) as a means for ruling out pregnancy at the time of a visit (Brunie, Tolley, Ngabo, Wesson, & Chen, 2013; Stanback, Thompson, Hardee, & Janowitz, 1997; Tumlinson et al., 2022), and requiring HIV tests or vaccinations before being allowed to initiate or continue the use of a method of family planning (Hazel et al., 2021; Tumlinson et al., 2022).

As noted by Bertrand et al. (1995), providers play a major role in deciding who gets contraception, when, and at times, exhibit their own biases. For example, providers have been found to be partial in the method dispensed to the client, having preferences for easier-to-deliver methods like injectables, over more complicated methods like IUDs, which necessitate a pelvic exam (Solo & Festin, 2019; Tumlinson et al., 2022). Providers may also tell women it is time for them to have another child, restrict or deny contraception for various types of women including adolescent girls, single or nulliparous women, or women who have had fewer than the culturally expected number of children (Burke & Ambasa-Shisanya, 2011; M. Campbell, Sahin-Hodoglugil,

& Potts, 2006; Schwandt, Speizer, & Corroon, 2017; Sidze et al., 2014; Stanback & Twum-Baah, 2001; Tavrow, 1999; Tumlinson et al., 2022; Tumlinson, Okigbo, & Speizer, 2015).

The reasons behind provider bias are complex. Providers operate within a provider ecosystem, where they are accountable to and influenced by their direct supervisors and community leaders, extending up to national policies and policymakers (Breakthrough Action, 2022). At the same time, they exist as members of a community and are influenced by other community members through their interpersonal relationships, as well as social norms and their own beliefs (Breakthrough Action, 2022). Navigating these myriad expectations can help to explain their behavior and why they sometimes operate contrary to their professional training.

Besides medical barriers and provider bias, clients can face financial, geographical, and social barriers based on social norms for women or adolescent girls (Bertrand et al., 1995; M. Campbell et al., 2006). Women may also lack a clear understanding of how contraceptive methods work or their side effects, which may lead to delays or avoidance in seeking family planning services (M. Campbell et al., 2006; Mathe, Kasonia, & Maliro, 2011). These factors, besides social determinants of health, proximity to the health facility, socio-economic status, educational status, and cultural and social norms, can result in inequitable access to family planning for those who are disadvantaged in one or more ways. The types of barriers can also be overlapping, for example, a provider in a community where sexual relations prior to marriage are not accepted, may require an unmarried, non-menstruating client to purchase a pregnancy test before providing her with a method. This example has elements of provider and social bias, as well as medical and financial barriers.

There is evidence that the many barriers to and inequities in accessing family planning have decreased since the 1990s, as global and national-level service delivery guidelines have helped remove restrictive policies such as denial of IUDs to nulliparous women and changing the minimum age requirements (Bornstein, Huber-Krum, Kaloga, & Norris, 2020; Hardee, Janowitz, Stanback, & Villinski, 1998; Solo & Festin, 2019; Stanback, Griffey, Lynam, Ruto, & Cummings, 2007). Success has also been found in using a WHO-endorsed checklist to rule out pregnancy in many cases, in the absence of a pregnancy test, although such job aids are often underutilized (Stanback et al., 2005; Tumlinson, Hubacher, Wesson, & Lasway, 2010). Little research has been done more recently, however, to understand the extent to which these barriers persist or the emergence of new barriers that may have unintentionally resulted from policy or other changes.

1.5 Background of the Study

The term "turnaway" was used in research on abortion in the U.S., comparing women who desired, but were denied abortions due to the gestational age of the fetus being just beyond facility limits to those who received the procedure (Biggs, Upadhyay, McCulloch, & Foster, 2017; Foster, 2021). Similarly, Tavrow, Namate, and Mpemba (1995) attempted to better understand the circumstances leading to women being turned away from a facility when seeking family planning services in Malawi in the 1990s, in a study on the quality of care given to family planning clients. In their research, they examined the issue from the provider perspective, including exploring provider attitudes and client-provider interactions. It is, however, important to explore the clients' perspectives on family planning and turnaway as well.

The decision to use family planning is not an easy one for many women in Malawi. Unmarried women risk being seen by others as "prostitutes," while married women risk their fidelity being questioned by their husbands or other members of their community who may find out they are using contraception (Bornstein, Huber-Krum, et al., 2020; Stanback & Twum-Baah, 2001). The methods themselves are often misunderstood, with many women believing or fearing that the use of a contraceptive method can lead to sterility or cancer. For nulliparous women, the fear of sterility can be particularly difficult to overcome, given the strong emphasis on motherhood in sub-Saharan Africa, including Malawi (Bornstein, Gipson, Failing, Banda, & Norris, 2020; Caplan et al., 2018; Cui, 2010; Dyer, 2007).

Having decided that family planning is indeed the right decision for them, women in Malawi must often put in considerable time, resources, and effort to visit public family planning facilities. Starting a new method can take the better part of a day, including travel time, attending a group counseling session, waiting to see a provider, and finally obtaining a method from a pharmacy, which may not be located at the health facility where services are provided. Travel expenses and lost wages for the day must also be considered. If a woman is trying to conceal her use of family planning, she may decide to travel to a facility a bit further from her home to maintain her anonymity, which can increase the length and cost of her travel. After coming as far as deciding to use family planning and the time, expense, and effort to travel to the facility, being turned away without a method is not without consequences. These challenges can be exacerbated, depending on a woman's social determinants of health and for women struggling with inequities.

2. Objectives of the Study

The research presented in this thesis aimed to understand changes in family planning practices in Malawi since the research of Tavrow et al. (1995). Additionally, it aims to estimate the proportion of women turned away from facilities, the reasons therefor, provider perspectives on client turnaway, and what happened to the women turned away. Do they return on a different day? How difficult or easy is it for them to return? Is it so difficult they do not return, and if so, do they become pregnant as a result?

The research objectives were to:

i. Outline the extent to which women received a method during a family planning initiation visit and describe their socioeconomic and demographic background
ii. Identify, describe, and analyze the reasons for turnaway and the degree of alignment between facility services and national service delivery guidelines
iii. Explore and analyze the role of the provider in turnaway and strategies for reducing it
iv. Discuss and appraise the short-term family planning outcomes of women turned away on the initiation visit

An overriding theme of the research is to contribute to equitable and timely access to family planning for all. WHO defines health equity as

> The absence of avoidable, unfair, or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, geographically, or by other means of stratification. 'Health equity' or 'equity in health' implies that ideally, everyone should have a fair opportunity to attain their full health potential and that no one should be disadvantaged from achieving this potential (World Health Organization, 2022b).

Whether a woman's family planning needs are being met or not is possibly impacted by one or more dimensions of equity. For the study of inequity, this research is influenced by the framework on inequity in family planning, as presented by a group of experts in family planning policy, research, program implementation, and donor agencies. The group, known as the High Impact Practices Technical Advisory Group—or HIP TAG—published a Discussion Paper in 2019 exploring the issue of equity concerning family planning service provision in lower- and middle-income countries (High Impact

Practices in Family Planning (HIPs) Partnership, 2019). In this thesis, an additional aim was to examine inequities in access to family planning, analyze therefor, and suggest possible interventions for improving the situation.

The research also considers the three activity dimensions of WHO's *"Priority public health conditions analytical framework,* i.e., measure, analyze, and intervene (Figure 3) (Blas et al., 2010), where the inequities and their solutions falling within the structure of society are represented in the levels, beginning at the bottom of the figure with an individual, and progressing to a population group, social and physical environment, and finally, at a societal level.

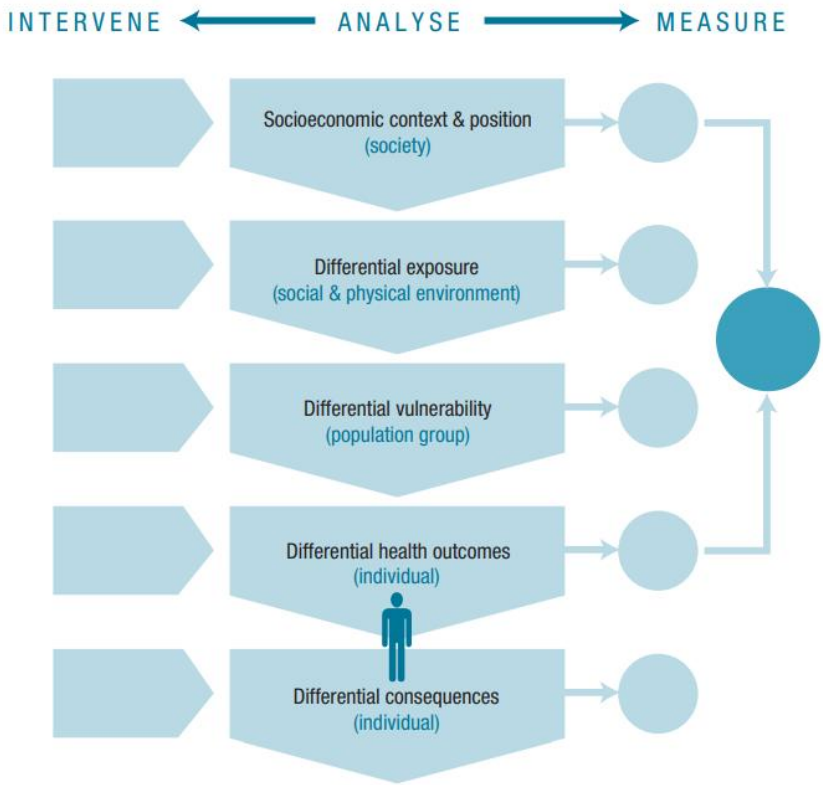

Figure 3. Priority public health conditions analytical framework.

(*Reprinted from* Equity, social determinants and public health programmes / *editors Erik Blas and Anand Sivasankara Kurup, Introduction, p12, Copyright (2010).*

"Differential consequences" refer to how people at various places along the social and economic spectrum may experience the consequences of poor health. For example, economically disadvantaged persons may not be able to afford health care and

medicines, thus compounding the consequences of any illnesses or injuries they encounter.

Relatedly, "differential health outcomes" acknowledges that not everyone will experience the same health outcomes from the same health inputs.

"Differential vulnerability" reminds us that risk factors may be cumulative in some population groups.

"Differential exposure" highlights the inverse relationship between most risk factors and social position—a higher social position comes with fewer risk factors.

And lastly, "Socioeconomic context and position" refers to the stratifications found at a societal level in political and market forces; social class, gender, ethnicity, and other factors all dictate a person's position within society.

By focusing the research on the end goal of offering recommendations to improve access to family planning, the research was based on a framework that prioritized social impact. The research was conducted in collaboration with the Ministry of Health and Population (MOHP) in Malawi, based on the agreement that the results would provide useful information for improved service delivery.

Figure 4 outlines the conceptual framework of the problem of turnaway and the expected variables under consideration in this research.

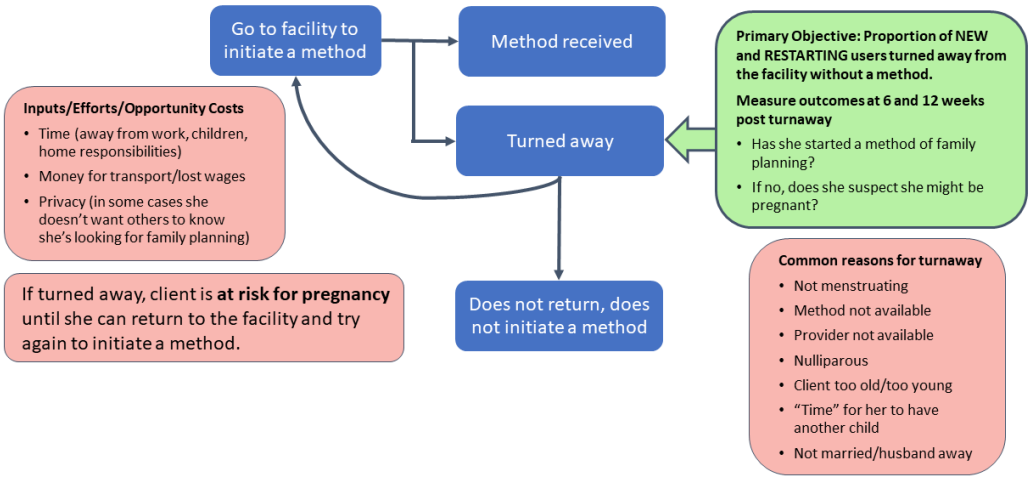

Figure 4. Turnaway conceptual framework.

3. Methodology

3.1 Research Setting

Malawi is a country of approximately 20.8 million people as of 2022, located in southern Africa (Central Intelligence Agency (CIA), 2022). Present-day Malawi was colonized by the British and achieved its independence from the British territory known as Nyasaland in 1964 (Central Intelligence Agency (CIA), 2022). It is landlocked, but home to Lake Malawi, one of the great lakes of Africa, which provides an important source of food for much of the country in the form of freshwater fish (Government of Malawi, 2019). Malawi is divided into three regions and 28 government districts. Approximately 82% of the population lives in rural areas, and the economy is largely agriculture-based (Central Intelligence Agency (CIA), 2022). Christianity is the most common religion, with 86% of the population practicing some type of Christian religion. Muslims account for 12% located mostly in the Southern Region (Central Intelligence Agency (CIA), 2022).

Malawi has shown considerable improvements in key health indicators since the early 1990s. While the modern contraceptive prevalence rate (mCPR) among married women rose from 7.4% in 1992 to 58.1% in 2015–2016, the total fertility rate in Malawi has decreased from 6.7 in 1992 to 4.2 in 2017 (Malawi National Statistics Office, 2017; National Statistical Office Malawi & Macro International, 1994). The infant mortality rate dropped from 135 deaths in the first year of life per 1,000 in 1992 to 42 in 2015–16 and was estimated at 19.8 in 2019 (Malawi National Statistics Office, 2017; National Statistical Office Malawi & Macro International, 1994; UNICEF, 2021), while the estimated mortality rate in children under 5 also declined substantially from 247 deaths per 1,000 live births in 1990 to 71 in 2013 (Kanyuka et al., 2016). The maternal mortality ratio dropped from 573 [463, 723] per 100,000 in 2000, to 381 [269, 543] in 2020 (World Health Organization, 2023) and the unmet need for family planning dropped from 36.5% in 1992 to 18.7% percent in 2015–16 (Malawi National Statistics Office, 2017; National Statistical Office Malawi & Macro International, 1994). The literacy rate for women rose from 56.5% in 2000 to 72.1% in 2015–16 but dropped slightly in 2017 to 69.6% (ICF International, 2018; Malawi National Statistics Office, 2017; National Statistical Office Malawi & O. R. C. Macro, 2001). It is one of few sub-Saharan African countries to reach MGD 5, to lower child mortality, which included

among other activities, general health system strengthening (Gunnlaugsson & Einarsdóttir, 2018).

Improvements in maternal and child health indicators resulted perhaps partly from family planning policy changes in Malawi (Bornstein, Huber-Krum, et al., 2020). From 1982 to 1992, Malawi had a conservative family planning policy in place whereby women needed to be married and have permission from their husbands to initiate family planning (Devlin, Pandit-Rajani, & Farnham Egan, 2017; Tavrow, 1999). In addition, they were required to undergo a full physical exam and were subject to age and parity restrictions. Family planning services were offered only once a week (Tavrow, 1999). In 1992, the MOHP put forth a new family planning policy relaxing many of these restrictions (Tavrow, 1999). They eliminated the requirements related to age, parity, and permission of the husband, and allowed family planning for limiting births, rather than just birth-spacing. They also set the expectation that family planning services should be offered daily at MOHP facilities. In the early 2000s, Malawi also expanded the method mix available, focused efforts on reaching adolescents, and strengthened the financing of the family planning system (Bongaarts & Hardee, 2019).

As the numbers above demonstrate, however, there is still considerable room for improvement in health outcomes, including those related to family planning and maternal and infant mortality. Barriers to family planning exist in Malawi, as they do throughout sub-Saharan Africa. Tavrow, Namate, and Mpemba (1995) documented instances of the "three D's" during client family planning visits—delay, denial, and discouragement. For denial alone, Tavrow and colleagues showed that more than a third of new clients seeking family planning were denied services. Providers in the study expressed their particular discomfort in providing contraception to adolescents and divorced women—examples of social exclusion and discrimination. In addition, there is evidence that women in Malawi may delay their first antenatal care visit, often due to barriers imposed by the facilities and providers charging indirect fees for services. Examples include requiring women to bring cloth wraps for the baby (called '*chitenje*') to their visits, or private facilities charging for visits (Mamba, Muula, & Stones, 2017). Health providers may also require women unaccompanied by their husbands to bring a letter from the village chief (to whom she must often pay a fee for the letter) attesting to the unavailability of the husband (Mamba et al., 2017).

Today, trained community health workers (Health Surveillance Assistants, HSAs) in Malawi are allowed to initiate women on oral contraceptive pills (OCPs) and injectable contraception, but facility-based services remain an important source of family planning for many women (Government of Malawi Ministry of Health, 2009; Gunnlaugsson & Einarsdóttir, 2018; Lemani et al., 2018). Facility-based family planning services generally start with a group counseling session for prospective clients, held in the mornings. After enough clients gather, or after providers have finished other early

morning activities, the group counseling session begins. During the session, various family planning methods are explained to clients, including their possible side effects. After the end of the session, clients speak with providers individually to decide on and receive a method, as appropriate and available. Clients are asked to arrive with their personal health book, where providers keep records of past visits, including any methods used and when last initiated.

3.2 Study Approach

A subset of MOHP-supported family planning clinics in three districts of Malawi (Kasungu, Machinga, and Zomba) was included as part of the purposive sample for this study. The selection was done by a research team comprised of a primary investigator (the doctoral candidate), two successive research coordinators, multiple data collectors, a biostatistician, and two supervising researchers. The selection criteria included the feasibility of data collection, characteristics of districts and facilities, and client volume. The list of clinics was obtained from the Reproductive Health Directorate (RHD), a division of the MOHP in Malawi, through their District Health Information Software (DHIS2) database. With permission from the RHD, the study team used aggregate-level data available through the DHIS2 to identify high-volume sites based on recent data of new users and those re-starting after a break of six months or more. The team selected ten of the highest-volume facilities from each of the three more highly populated districts for a total of 30 public-sector healthcare facilities. These districts were considered to represent variation in religious affiliation of their populations and mCPRs. The eligibility criteria for family planning clinics in selected districts included willingness on the part of the district and clinic officials to participate in the study, and the offer of family planning services daily. All approached districts and facilities agreed to participate. No other criteria for the selection of the family planning clinics were applied.

Figure 5. Districts of Malawi included in the research.

3.3 Study Design

This was a mixed-method study, primarily cross-sectional, conducted in purposively selected clinics with clients and providers. Additionally, it included a longitudinal follow-up of a subset of turnaway clients at six and 12 weeks, followed by a qualitative component with both clients and providers. The mixed-method approach enabled integration at the design, methods, data interpretation, and reporting phases of the research. For example, the data were connected through the sampling frame (clients who participated in the survey were selected for qualitative participation) and merged for confirmation of quantitative findings. Client focus group discussions (FGDs) and provider in-depth interviews (IDIs) were used to following up on trends identified during the quantitative survey analysis to better put them into context and understand the "whys" behind the quantitative survey data, including the standing within some of the social determinants of health and potential inequities. The combined results are reported together for a richer understanding of the evidence (Fetters, Curry, & Creswell, 2013).

The work on the strategic planning guide and perspectives paper on equity was a collaborative effort that included a literature review, interviews with key informants, and two virtually held technical consultation meetings, along with group writing and revising of numerous drafts.

3.3.1 Quantitative

Data collectors were recruited based on previous experience collecting family planning or health related data and previous use of electronic tablets used in data collection. Recruited candidates participated in a week-long training prior to data collection and were required to have passed an online course in research ethics by the end of the week. Surveys were translated into the predominant local language (Chichewa), and translations were reviewed with data collectors during data collector training for agreement on the final translation and understanding of the questions. Data collectors were individually supervised by a member of the study team and had access to him by phone throughout the study if questions arose. They were sent to sites in groups of two or three, and came together at the end of each day with the supervisor to discuss any questions in procedure or unique circumstances that arose through the day so the teams could learn from each other. One high-performing data collector (as determined by the supervisor) was retained to conduct the follow-up phone surveys and received further training to do so.

Data collectors approached all women they estimated to be of reproductive age exiting a facility where family planning services were provided, approaching and leaving a closed clinic, or leaving from registration without having received services. They

explained they were conducting research and asked whether they could have a few moments of the woman's time. If she agreed, they used electronic tablets to guide the women through a series of screening questions. Inclusion criteria were being at least 18-year-old or 16-17-year-old and married (and thus considered a mature minor in Malawi). Their responses provided researchers with the proportion of women seeking a method who received one.

Clients and prospective clients seeking/obtaining a contraceptive method or procedure from the selected family planning clinics in the three districts over four days provided evidence through exit surveys on the proportion of women who did not obtain an effective method on the day of their visit. In addition, turned-away clients who shared phone contact details were asked to participate in 6- and 12-week follow-up phone surveys. Of those participating in the follow-up surveys, some were invited to participate in FGDs to further understand their experiences and outcomes with turnaway.

After completing client interviews, so as not to bias provider treatment of clients, surveys were conducted with providers. The survey was designed to assess provider knowledge of the provision of family planning services, comfort in providing family planning services, and their ability to do the job according to national guidelines. The aim was to interview two providers per site. Where more than two were available, two were randomly selected using a Kish grid method (Lavrakas, 2008). Inclusion criteria were being a family planning provider present on the day of the survey and willingness to participate in the survey.

Client and provider surveys were administered using electronic tables and ODK open-source data collection software, formerly called Open Data Kit. The data were downloaded from ODK as .csv files and uploaded into SPSS software, version 26.0 and Stata version 15 for data analysis (IBM Corp., 2019; StataCorp, 2017). Both the client exit and follow-up surveys, as well as the provider survey, included limited open-ended questions. Two project staff performed coding of the open-ended responses and compared and discussed the differences to reach a consensus. When they could not reach a consensus about whether to re-code into a new or existing response category, the response was left as "other." Any coded responses were merged into the final analysis datasets.

Analysis was performed using a 95% Clopper-Pearson binomial proportion confidence interval to estimate the proportion of clients not provided a method on the day they sought one (i.e., those turned away) and the proportion of turned-away clients who initiated a family planning method within six weeks of being turned away. The exit survey and follow-up survey results were linked using unique identifiers. Analysis was also performed to assess how turnaway might be associated with different characteristics of the women seeking family planning. A t-test, Fisher's exact, or the

Freeman-Halton extension test was used, as appropriate, to explore the association between turnaway and age, method sought, district, and whether turnaway occurred on a designated family planning day. Among women who completed six- or 12-week follow-up surveys, similar analyses were performed to explore the associations between having started a method by 12 weeks post-turnaway and clients' age, years of education, income, the reasonableness of time to arrive at the facility, reasonableness of cost/effort to arrive at the facility, number of living children, and income type. The research team also performed a descriptive analysis of services received as well as the cost, effort, mode of travel, and time to arrive at the facility, based on the exit survey. Significant results were assessed at the level of 0.05 for two-sided comparisons.

3.3.2 Qualitative

Two of the quantitative data collectors with previous experience in qualitative data collection, were selected to conduct the provider IDIs and client FGDs. The IDI and FGD guides were developed after preliminary review of the quantitative results from both providers and clients to follow-up on particular subjects. The guides were translated into Chichewa, and translations were reviewed with the qualitative data collectors during their two-day qualitative training for agreement on the final translation and understanding of the questions. Qualitative data collectors audio recorded their role play of data collection in English and the recordings were reviewed by the primary investigator, who provided feedback to the data collectors on follow-up and clarification of important points raised in the discussion. Data collectors were trained to ensure all members of FGDs participated in the discussions.

FGDs are recommended to follow up on quantitative data, as also when the information sought is to understand opinions, behaviors, or motivation, as is the case of the clients turned away (Krueger & Casey, 2000). While in some cultures, participants may feel too shy to share personal information in a group setting, in Malawi, local researchers advised that clients would feel more comfortable sharing personal information in an FGD than an individual interview, as in a group setting, they know that others too are sharing. This can give them the courage to share their own stories.

Providers at the same facilities contributed evidence through surveys and IDIs regarding the services they provide. Providers' perspectives on their role were sought and in addition, how their personal opinions might play a role in how they perform their work. IDIs involve in-person interactions between a data collector and the research subject and is "directed toward understanding informants' perspectives on their lives, experiences, or situations as expressed in their own words" (Taylor, Bogdan, & DeVault, 2015). While providers are knowledgeable about the services expected of

them, the focus of the research was on how their service provision played out in the "real world" situations they experience with clients and in light of the potential for bias, given the pressures to conform to social norms and their own beliefs. Here, one-on-one conversations might draw out that information better than a group discussion, where they might be embarrassed to admit before their peers that they did not always follow training guidance if that was the case.

Provider IDIs and client FGDs were audio recorded and transcribed directly into English by the lead interviewer. FGD transcriptions were reviewed by the note-taker present at the FGDs. Transcriptions of both IDIs and FGDs included bracketed notes from the transcriber/lead interviewer to add context to comments where necessary. Further context was provided by the Malawian members of the research team during interpretation. The transcripts were imported into NVivo (QSR International Pty Ltd., 2018) and analyzed using grounded theory, which uses inductive reasoning from qualitative data to develop a theory. It begins with open coding to find similarities and differences in results, then using axial coding to establish connections between categories and subcategories, and finally, selective coding to establish core categories, themes, and the grounded theory (Priest, Roberts, & Woods, 2002). Researchers performed inter-coder agreement checks with two coders and discussed any discrepancies until an agreement was reached. Demographic information for the FGD participants was based on follow-up surveys conducted 6 and 12 weeks post-turnaway. Specific comments made during FGDs were not linked to the demographic details given at the time of the initial client survey. Researchers used a grounded theory approach to analyze general themes that emerged from the thematic analysis and the frequency of responses based on the coded responses to the IDI questions. Researchers then assessed the data for thematic saturation using the method outlined by Guest et al. (2020) with a threshold of ≤5% new information to indicate saturation in responses had been reached.

3.3.3 Technical Consultations

The work on the strategic planning guide was done through key informant interviews through which we used snowball sampling to assemble a group of technical experts in equity and family planning. This group met twice in virtual technical consultations through which the strategic planning guide outline was developed, and content began to be drafted. The final product was reviewed and comments were provided by the technical consultants.

3.4 Ethics

As per U.S. policy on the protection of human subjects (U.S. Department of Health and Human Services, 1991), the study protocol was reviewed and approved on February 25, 2019, by FHI 360's Protection of Human Subjects Committee at Durham, NC, USA (Project #1372763). In Malawi, it was approved on October 25, 2019, by the National Health Sciences Research Committee (NHSRC) (ref. no. Med/4/36c)). On April 24, 2020, the Ethics Committee of the University of Iceland was informed about the study without seeking further ethical review by the Committee. All study staff completed training on research ethics, the protocol, and informed consent administration before the start of data collection. All participants provided their informed consent, including a brief verbal consent at the time of screening, a full signed consent before beginning the survey, and a brief verbal re-consent on the phone at the time of follow-up (as applicable). All providers gave informed consent prior to participating in the survey and the IDIs. Clients were not reimbursed for their participation in exit surveys or follow-up calls but were compensated with 7,000 Malawian Kwacha, or approximately US$10 for their time at the FGDs. Although COVID-19 had not yet been detected in Malawi when the FGDs were held, rates were rising throughout the world. To accommodate social distancing in their transportation to and from the FGDs, participants were offered transportation reimbursement besides the compensation for their time and encouraged to use transportation that could best ensure social distancing (motor taxi in place of a minibus, for example). Those needing reimbursement for transportation received between US$2 and US$15, depending on the distance traveled and means of transportation used. Providers were not compensated for their participation in surveys as the surveys took less than 30 minutes to complete and were completed at the facilities. They were compensated with 7,000 Malawian Kwacha, or approximately US$10, for their time participating in IDIs.

The key informant interviews conducted for the strategic planning guide received a non-research determination from FHI 360's Protection of Human Subjects Committee.

4. Results

4.1 Client Quantitative

As reported in Paper I, data collectors screened 2,246 women exiting from family planning service areas (Figure 6). Of those screened, 562 (25%) were new or re-starting users (150 in Kasungu, 164 in Zomba, and 248 in Machinga) and were thus eligible for primary analysis of turnaway. Their average age was 24.9. Of the 562 new or re-starting family planning clients, 83 (15%) reported having been turned away from receiving a family planning method on the day they sought it. Of this 83, 60% were attempting to initiate injectable contraception.

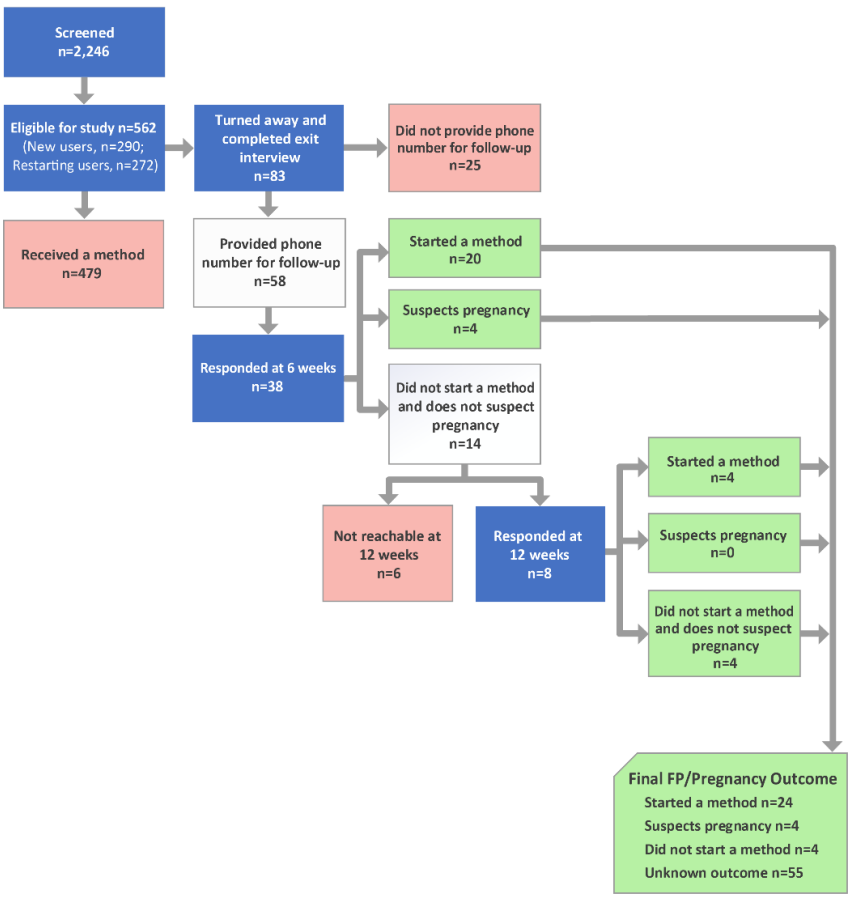

Figure 6. Turnaway Prisma for study participants who sought family planning services in three districts in Malawi.

Clients cited 12 different reasons for turnaway (Table 4). The three most common reasons were that the method was not available (34%), the provider was not available (17%), and being told to come back on a family planning day (15%). Only 2% were told there was a medical contraindication to their initiating family planning.

Table 4. Reasons for not starting family planning on the day of the exit survey (n = 83).

Reason for not starting family planning on the day of the exit survey (n = 83)	n (%)
The method I wanted was not available	28 (34)
Provider not available	14 (17)
Told to come back on a family planning day	12 (15)
The wait was too long	6 (7)
Did not have health book	5 (6)
Pregnancy test required but not available	3 (4)
Not currently menstruating	3 (4)
Told to return on a different day without explanation	3 (4)
Told there was a medical reason I couldn't start (headaches, high blood pressure, other medication I'm taking)	2 (2)
I am breastfeeding/told I needed to wait longer after giving birth	3 (4)
I decided I didn't want to start family planning or couldn't decide on a method	3 (4)
Told I was too old	1 (1)

As seen in Table 4, many of the reasons were related to structural issues within the health system.

4.2 Providers

As reported in Paper II, data collectors conducted quantitative surveys with 57 family planning providers; three facilities had only one family planning provider present on the day of the surveys. In addition, they conducted IDIs with eight providers. Survey results showed that of the methods commonly available at their facilities, condoms were the only one reported available in the past week by all providers. Stockouts of implants and injectables were most common, reported by 27% and 23% respectively of the providers, who said these methods were normally available. In addition, nearly half of the providers (47%) reported at least one day in the past week when pregnancy tests were not available, affecting 20 of the 30 facilities. An alternative to pregnancy tests, the *reasonably sure not pregnant checklist* included in the providers' preservice training manual, was familiar to only 28% of the providers.

Reported in seven of eight provider IDIs, making it the most frequently mentioned reason for turning away clients seeking contraception, was the client either testing positive for pregnancy, or showing signs of pregnancy. Two providers each reported turning away women who had either missed their last period or who were not currently menstruating. One provider explained that some women seek family planning with the hope that initiating contraception while pregnant will induce an abortion. For this reason, providers said they needed to have negative pregnancy tests for anyone with a missed period before dispensing a method. There was also a fear expressed among providers that women who were unknowingly already pregnant would initiate a method and then conclude that family planning does not work, leading to more widespread mistrust of family planning in the community.

During the IDIs, providers noted other structural constraints to how they provide services when asked what they would need to reduce client turnaway. Most frequently mentioned was a need for more training, a reduction in stockouts of methods and supplies, and their workload. Nearly 90% of the surveyed providers reported seeing more than 10 clients per day on family planning days.

The surveyed providers reported being most uncomfortable providing contraception to nulliparous women, regardless of age or marital status, due to the strong value placed on motherhood in Malawi. While during IDIs providers recognized their training taught them that the use of SAM or LARC would not impact future fertility, they sometimes worried that it would. In particular, they worried (with some justification for injectable users) that it would take longer than expected for fertility to return and that this might have serious social repercussions for their clients. During IDIs, they also noted cultural constraints to providing family planning to adolescents. Providers worry that by providing contraception to adolescent girls, they were encouraging or enabling them to take sexual risks that may have negative consequences, such as sexually transmitted infections, being accused of prostitution in the community, or having to drop out of school if they did become pregnant.

4.3 Client Perspectives

As reported in Paper III, three FGDs were conducted in two districts (Kasungu and Zomba) with a total of 16 participants chosen from those who had participated in past follow-up surveys. Using thematic analysis, researchers categorized the reasons for turnaway discussed by the participants into eight categories (Figure 7).

Besides the reasons cited in the quantitative survey, clients also discussed being turned away due to arriving late, financial constraints, or provider refusal. Provider refusal included circumstances such as a provider being tired, about to take a lunch break, or having other responsibilities to attend to. Some clients described situations in

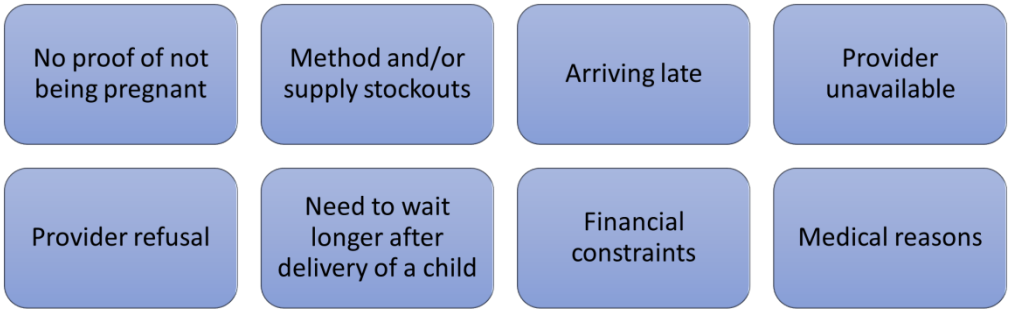

Figure 7. Reasons for turnaway discussed by FGD participants.

which clients with a higher perceived socioeconomic status received preferential treatment, such as clients who arrived in the facility in cars being put in the front of the line, before methods had run out. Providers also refused clients coming for reinjection on a non-family planning day.

Financial constraints were cited despite contraceptive methods and services being offered free at public facilities. Participants explained that sometimes providers sold the methods either out of the facility or out of their houses. In another example, clients were asked to make donations to help pay for a new hospital in the community.

Participants coped with having been turned away by sleeping apart from their husbands and going "everywhere" to look for help. As explained by one participant, "You get stressed when turned away. You go everywhere. You ask friends, neighbors, and [health surveillance assistants] for help."

Participants also described having been turned away more than once. Sometimes, when they returned to the facility, the method was still stocked out. At other times, when the method became available, other supplies were then missing. Participants admitted to taking a second-choice method and being turned away more than once.

Participants explained that sometimes they understood why they were turned away, but not always. For example, they could understand being turned away for a stockout, but not when they saw other women coming after them getting the method.

While none of the FGD participants discussed getting pregnant due to being turned away, they knew of other women to whom it had happened. The participants noted that turnaway adds stress to their lives.

4.4 Equity in Family Planning

Whether a woman's family planning needs are being met or not is possibly impacted by one or more dimensions of equity. In Paper IV, a perspectives paper, the aim was to define equity in family planning and to understand the existing evidence relating to the successful incorporation of equity into family planning programs. Unlike equality, when

all people are given the same resources or access to the same resources, equity recognizes that some people may need additional resources or assistance to access the same services (Blas et al., 2010). This concept is depicted in Figure 8 and elaborated on in Supplementary Material 1 to Paper IV. The orange boxes in Figure 8 depict the extra assistance some people may need to overcome a barrier (shown as a fence in the figure). True justice, shown in the third panel of the figure, would however be removing the barrier altogether.

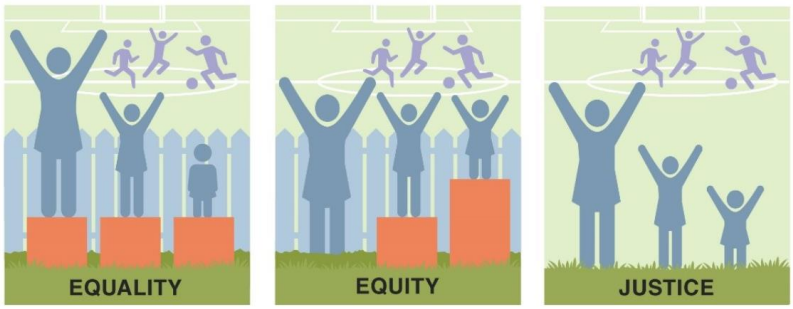

Figure 8. Equality, Equity, and Justice.

(Graphic adapted with permission from King County, WA.)

The research conducted in Malawi and presented in this thesis gives several examples of potential inequities leading to the turnaway of family planning clients. Some of the questions raised from the results are whether providers gave preferential treatment based on perceived socioeconomic status, whether stockouts were true stockouts or a way to withhold methods, and whether all clients were given an equal opportunity to understand how methods work, including that they are not abortifacients. As reported in Paper IV, further examination of the definition of equitable access to family planning in a program is encouraged and as well as how equity can be evaluated. It highlights the need for a more expansive characterization of inequities and how they are measured. Most specifically, researchers and program implementers are encouraged to look beyond wealth as a measure of inequity and CPR as the primary indicator for measuring programmatic success (Stratton et al., 2021).

CPR is calculated thus:

> Contraceptive prevalence = (Women of reproductive age (15–49) who are married or in a union and who are currently using any method of contraception/Total number of women of reproductive age (15–49) who are married or in a union) x 100

While sometimes mistakenly equated with unmet demand for family planning, the "unmet *need* for family planning" serves as an attributed measure of contraceptive need and is calculated using a complex formula involving over 15 different DHSs questions (Bradley, Croft, Fishel, & Westhoff, 2012). It divides married women into four groups: 1) those using contraception; 2) those who are pregnant or were recently pregnant; 3) those who are infecund; and 4) those who are fecund. Various survey questions within each of these groups are then used to determine whether the women have a met or unmet need for family planning based on their personal need and desire to have (a)nother child, rather than based on the idea of one rate of contraceptive use being appropriate for all women across a particular population.

Unmet need, however, does not account for a woman's desire to use contraception nor ask her directly about access to various methods, and has thus been criticized as an overestimation, although it does offer standardization and comparability across countries (Senderowicz et al., 2023). Senderowicz et al. advocate for asking women directly if they are interested in using contraception and if they have access to various methods, rather than relying on proxy indicators to construct the same information (2023). Another suggestion has been to measure whether a person's fertility management needs are being met—whether those needs are to use or not use contraception (Holt et al., 2023). The "preference-aligned fertility management" approach put forth by Holt et al. could reduce the risk of upwards coercion by allowing for choice of non-use as a part of the measurement. Other means to measure equity in family planning that account for supply and demand side barriers are discussed in Paper IV and include unintended or mistimed pregnancy or childbearing, ability to achieve preferred number of children, and women's agency to make decisions, including about voluntary contraceptive use.

The ideas proposed in Paper IV are further supported by the strategic planning guide on equity in family planning (Supplementary Material 1), designed to assist policymakers and program implementers to ensure that their programs detect inequities in family planning service delivery and when detected, have a plan for making improvements (High Impact Practices in Family Planning (HIPs) Partnership, 2021).

5. Discussion

This thesis aims to summarize the results of the research conducted in three districts of Malawi to understand the extent to which women received a method of family planning at a facility-based visit on the day they sought one. The thesis also aims to describe and analyze the reasons for turnaway, the provider's role in turnaway, and the outcomes for women who were turned away. The results showed that fifteen percent of clients in the study were turned away without a method on the day they sought one. The reasons for turnaway were numerous, but in nearly all cases, avoidable. Several reasons for turnaway were structural and highlighted by providers and clients alike, such as method stockouts and inadequate availability of trained providers. Some clients described inequitable treatment based on provider perceptions of clients' lower socioeconomic status. While many clients were able to start a method within a few weeks of the initial turnaway, some were not, and study participants reported the process of finding a method or living without one to be stressful and disruptive. The results show inequities present in family planning service provision on both the supply and demand sides of the equation.

5.1 Provider Training and Knowledge

Well-trained providers are an important element of quality family planning services. Yet, all too often, providers lack sufficient training in one or more contraceptives (Cordero et al., 2019; Kriel et al., 2021; Mugisha & Reynolds, 2008; Mwafulirwa et al., 2016; Pleaner et al., 2017; Tumlinson et al., 2022). This was also seen in our research, where inadequate training of providers was mentioned by both clients and providers as a reason for turnaway. Clients became frustrated when a provider trained on the desired contraceptive method was not available on the day of their visit to the facility. Providers themselves were frustrated when only a single provider at a facility was trained in the provision of a particular method. It is also possible that some of what clients reported to be "stockouts" of a particular method could have been inadequately trained providers or providers who lacked confidence in their skills on a particular method, refusing to offer that method to a client. This gap between knowledge and action has been termed the "know-do gap," and has been noted in various studies (Hoffman et al., 2016; Karki, Chappell, Johns, & Bradley, 2022). Based on client reports of reasons for turnaway, providers also appeared to be inadequately trained in methods available to clients immediately after delivery, such as IUDs, implants, or POPs. Many

clients were turned away and told to come back after their babies were older. It is not entirely clear whether clients were offered IUDs, implants or POPs at the time of delivery or in the early days thereafter, a practice that could reduce turnaway for postpartum women (World Health Organization, 2015). Few providers reported familiarity with the *reasonably sure not pregnant checklist*, despite its inclusion in their pre-service training manual and having proved successful in reducing method denial (Ministry of Health and IntraHealth International, 2010; Stanback et al., 2005).

A lack of awareness of the grace period and menstruation requirements for reinjections is evident in several countries in sub-Saharan Africa (Baumgartner et al., 2007; Burke & Ambasa-Shisanya, 2011; McKenna et al., 2014). Our results reflected this, as providers lacked knowledge of the grace period for administering injectable contraception, as well as the time it takes for many women to return to menstruation after using injectable contraception or IUDs. Better training on injectable contraception, in particular, is highly important, as it is the method most commonly used in Malawi (Malawi National Statistics Office, 2017). Requiring current injectable users who miss their reinjections by a few days to wait for menstruation to return for ruling out pregnancy is not grounded in science and, in a worst-case scenario, may lead to an unplanned pregnancy in the meantime (Baumgartner et al., 2012; Steiner et al., 2008).

5.2 Community-held Beliefs

Providers explained that their reasons for wanting to ensure a woman is not pregnant before initiating (or continuing) her contraception sometimes involved the community-held belief that injectables, pills, and implants could be abortifacients. Some women may come to the facility, knowing or suspecting they were pregnant, hoping to induce an abortion through the initiation of a method of family planning. This confusion between family planning and abortifacients has been seen elsewhere too, including Kenya and Ghana (Agula et al., 2021; Mwaisaka et al., 2020; Tumlinson et al., 2022). Other women may not realize they are pregnant, leaving open the possibility that without a careful diagnosis of pregnancy by a provider, they may be initiated on a method. While providers reported knowing that methods such as OCPs, injectables, and implants are not abortifacients, they feared that if a woman is initiated in a contraceptive method when already pregnant, when the pregnancy advanced, clients would blame method failure for their pregnancy, thus causing the community to lose faith in the efficacy of modern contraception.

While research in other countries has shown providers denying methods to nulliparous women (Burke & Ambasa-Shisanya, 2011; M. Campbell et al., 2006; Schwandt et al., 2017; Tumlinson, Speizer, Archer, & Behets, 2013), the quantitative

data presented here did not reflect that, nor did women report it in the FGDs. Still, providers described their hesitancy to provide contraception to nulliparous women, apprehensive of its leading to infertility, with potentially serious consequences. Other qualitative research in Malawi showed infertile women considered "desperate, incompetent, or lazy" and excluded from employment and leadership opportunities (Bornstein, Gipson, et al., 2020). Additionally, infertile women in Malawi are not uncommonly divorced in favor of a wife who can bear children (Bornstein, Gipson, et al., 2020). A literature review focused on the motivations for parenthood and consequences of infertility found results for 12 countries in sub-Saharan Africa with infertility described as "humiliating," with consequences for marriages and putting women at risk of stigmatization, abuse, and loss of social status (Dyer, 2007). Again, though providers knew from their training that OCPs, injectables, implants, and IUDs were all temporary and reversible, they still worried about the "what ifs."

Women and girls, especially unmarried girls starting new family planning methods, must often overcome fears of side effects and stigmatization by communities (Bornstein, Huber-Krum, et al., 2020; Kaur & Blumenthal, 2021). This was supported by the research presented here as well, as providers expressed a desire for better community education on how methods work. Besides educating the community that most methods will not induce an abortion, they would also like to dispel other myths to prevent clients from overreacting to rumors about methods—that they cause cancer, for example. The fear of cancer and sterility, in particular, has been noted in other research in Malawi and elsewhere (Jonas et al., 2020; Kaur & Blumenthal, 2021; Mugisha & Reynolds, 2008; Mwafulirwa et al., 2016; Sedgh, Ashford, & Hussain, 2016). Providers in our study also reported they would feel reassured knowing that adolescents seeking family planning would not be mistreated in the community, labeled as prostitutes, or lose focus on their studies.

These provider perspectives give us a fresh insight into their motivations. Rather than trying to exert control over or coerce their clients, the providers represented here appear to have genuine concern for their clients.

5.3 Provider Workload

A low caregiver-to-patient ratio is seen throughout sub-Saharan Africa; based on the most recent data available, there were just seven nurses or midwives per 10,000 people in Malawi, compared to 157 in the U.S. and 168 in Iceland (World Health Organization, 2022a). This was noted by providers in this study who expressed a desire for more providers and more exam rooms. Providers reported seeing large numbers of clients on family planning days, and clients noted that they were sometimes turned away because the providers needed a lunch break or had become tired from the workload—a disappointing and frustrating way to end the visit for the turned-away client. Other

qualitative research in Malawi has also shown providers frustrated by understaffing (Mwafulirwa et al., 2016). Health provider shortages have been found to lead to suboptimal patient care and burnout among healthcare workers in Malawi and elsewhere (Dubale et al., 2019; Kim et al., 2018).

5.4 Informal Fees and Preferential Treatment

Other problems seen in the literature on health services in sub-Saharan Africa include evidence of providers charging informal fees to clients and giving preferential treatment to clients perceived to be wealthier. These informal fees and preferential treatment have been seen before, for example, in Kenya, Tanzania, Uganda, and Sierra Leone and Malawi (Busse, Onyango, & Tumlinson, 2022; Hunt, 2010; Mamba et al., 2017; Pieterse & Lodge, 2015; Tumlinson, Britton, Williams, Wambua, & Otieno Onyango, 2021; Tumlinson et al., 2013). Clients in our study also reported some questionable actions of providers who were selling methods, either at the facility or their homes, as well as charging clients a base amount for services as a contribution to the construction of a new facility. Some clients reported providers offering preferential treatment to women who appeared financially advantaged by allowing them to avoid long waits or bringing them to the front of the line to receive service earlier in the day when methods were still in stock. This could lead to inequitable numbers of stockouts amongst certain types of clients. Providers showing preferential treatment were clearly not acting with the best interests of clients in mind and perpetuating inequities in service delivery.

5.5 Impact of Turnaway

Previous research on the denial of family planning has observed that the denied women are often asked to return to a facility at a later date to start a method when supplies are back in stock, when menstruation has returned, or when a provider is available (Baumgartner et al., 2007; Brunie et al., 2013; M. Campbell et al., 2006; Stanback et al., 1997; Tumlinson et al., 2013). Clients in our study described the harm resulting from being turned away. Turnaway causes considerable stress to women, who "go everywhere" looking for a method and often sleep separately from their husbands until contraception can be initiated. Several FGD participants described how they made multiple attempts to initiate family planning, including making several trips to the facility and in some cases, settling for a second-choice method due to the unavailability of providers or methods. Some clients went to private facilities, where stocks are more reliable but where they had to pay for methods, to ensure they could start it on the day of the visit. These coping methods have not been greatly studied and are underrepresented in the literature, but could certainly lead to higher rates of discontinuation and unintended pregnancies as a result.

5.6 Equity

The findings of this research demonstrate the many elements of (in)equity at play in the denial/delaying of family planning. While none of our turned-away clients reported the reason as their being too young, providers shared their hesitations to dispense contraception to young, nulliparous girls still in school. Clients believed that they were treated differently if perceived to be lower class. Members of communities with less access to accurate information about family planning, such as those who communicate in a lesser used language or who have limited literacy skills, may be less likely to use or continue to use, particular methods out of fear of side effects. They may also find it more difficult to access to methods, given the providers' concerns that clients with limited information about how the methods work may underestimate the effectiveness of modern family planning by blaming early pregnancies on method failure. Women with easy access to the local facility, or the means to pay for a private facility, have an easier time accessing family planning. These inequities fall throughout the individual, population, and societal levels discussed in the *"Priority public health conditions analytical framework,* (Blas et al., 2010).

As emphasized in Paper IV and the associated Supplementary Material 1, the strategic planning guide for equity in family planning, there is a need to look beyond common measures of inequity in family planning (Stratton et al., 2021). Rather than focusing solely on contraceptive prevalence, analysts and policymakers should focus on both supply and demand side barriers. Outcome measures such as demand for family planning satisfied, unintended or mistimed pregnancy or childbearing, ability to achieve preferred number of children, and agency to make decisions, including about voluntary contraceptive use, measured against various social determinants of health (e.g., age, proximity to a health facility, or literacy) may shed a brighter light on who is able or unable to access family planning methods and services and could be of greater societal impact. While the mCPR increased in Malawi from the time of Tavrow's work to more recently (Table 1), this single statistic does not allow us to see if it increased for everyone equally, or more so for more advantaged women and girls, and if so, which ones.

The strategic planning guide was the result of a recommendation made in the HIP discussion paper of 2019 (High Impact Practices in Family Planning (HIPs) Partnership, 2019). Intended "to guide program managers, planners, and decision-makers through a process to identify inequities in family planning and interventions to reduce them," the guide is an example of the social or societal impact potential of research (Bornmann, 2013; High Impact Practices in Family Planning (HIPs) Partnership, 2021). It also aligns with a call to universities and other research institutions to put research into practice (Van den Akker, Spaapen, & Maes, 2017). The

HIP TAG discussion paper and the resulting strategic planning guide are examples of collaborative research involving diverse stakeholders that have the potential to produce outputs with greater social impact (Ozanne et al., 2017).

5.7 Strengths and Limitations

The mixed method approach to this research is a strength, along with the examination of the issue from the perspectives of both clients and providers. It gives a comprehensive view of the complicated issue of family planning turnaway. It is another strength that the research adds to the evidence base on barriers and inequities to family planning, an area not closely examined since the 1990s and early 2000s. Further, the outcome of turnaway has not been studied longitudinally nor have the consequences for women been considered.

It is a limitation that the presence of outsiders as researchers at each site could have contributed to the so-called Hawthorne effect. It might have resulted in modified behavior due to the subjects' awareness of being observed (Eckmanns, Bessert, Behnke, Gastmeier, & Ruden, 2006). The research collectors addressed this potential weakness by not divulging to providers that they were there to examine issues related to turnaway. Alternative methods such as simulated clients or direct observation of client-provider interactions come with their own drawbacks, including client privacy and recall issues, and would not enable studying the outcomes of the turnaway. Additionally, IRB approval for simulated clients has proven difficult.

The study lacked funding to fully investigate inequity. For women who were not turned away, we did not have enough time to fully consent them to the study to ask a range of questions to determine whether there were differences in elements of equity beyond age, marital status, method sought, and district in which they sought the service. For feasibility of implementation we were also unable to speak with girls under the age of 18 unless they were emancipated minors. This may have impacted our findings and generalizability to all women of reproductive age, and especially for those who were younger, unmarried, and nulliparous.

A lower-than-expected turnaway proportion, as well as difficulties in reaching women for follow-up, challenged the study's ability to determine client outcomes with statistical significance. While all but one of the 83 turned-away clients agreed to be contacted to provide follow-up information, many clients reported not knowing the number of the shared phone to which they had access, a common practice in the sub-Saharan region (Gunnlaugsson et al., 2020; James, 2014; Marron et al., 2020; Shava & Chinyamurindi, 2018). Clients often took the data collector's number promised to call later with the phone number for follow-up, but usually failed to call back. Even where numbers were given, some participants could not be reached. As a result, clients

reached for the 6- and 12-week follow-up surveys were likely skewed toward those not attempting to conceal their use of family planning, and those who owned a phone, rather than sharing one with someone else. Still, the research was able to capture descriptive data on the consequences of turnaway.

6. Conclusions

Client turnaway for family planning may not be as widespread as it once was in Malawi but is still stressful and potentially harmful to clients who are turned away, and it is nearly always preventable. A better understanding of the influences of the provider ecosystem would help program implementers to set providers up for success. In a stronger primary health care system, with better staffing and training of providers grounded in behavioral change, a more reliable supply of methods and supplies, and community education on how methods work, family planning services and methods could be more equitably available and turnaway could be all but eliminated. Reducing turnaway and increasing the equity of access to family planning, in turn, would help the country achieve its SDGs, leading to a healthier Malawi for all Malawians.

This research gives health authorities in Malawi important information on some of the strengths and weaknesses of its national family planning program. The findings of the first three papers, along with the more global recommendations in Paper IV as well as the associated strategic planning guide, can contribute in a socially responsible way by giving clear recommendations to policymakers and program implementers for putting research into practice. With due attention bestowed on the equity of service provision, the research has the clear potential to make a social impact on the improvement of family planning services in Malawi and other similar settings.

7. Recommendations

The results presented in the thesis prompt the following recommendations, specifically for Malawi but with potential implications elsewhere too. By strengthening the existing healthcare system through the following means, client turnaway for family planning could be greatly reduced.

Ensure adequate staffing of providers available at health facilities. Reliable availability providers would reduce turnaway resulting from a high client load, including providers turning away clients who come late, or when providers are too tired to see any more clients.

Implement comprehensive provider training. All providers should be trained in all methods, or at the very least, no fewer than two providers per facility should be trained on particular methods. Providers should also receive regular refresher training on *the reasonably sure not pregnant checklist*, as well as on the schedule for injectable contraception, given its popularity in Malawi. Lastly, providers should be trained and encouraged to cultivate a client-centered attitude.

Offer family planning daily. Family planning services should be offered daily to reduce turnaway on non-family planning days. At a minimum, reinjections and resupplies should be offered daily. The daily provision of such services will have the added benefit of reducing stigma to those visiting a facility on a known family planning day.

Improve the reliability of the supply of commodities. The supply chain system must be further studied and improved to ensure that all methods are available every day, thus eliminating the resultant turnaway. Malawi may want to look to other countries or different systems for supply chain management, such as the informed push model.

Focus on community-level education. By working in communities to educate about how methods work and dispel myths and rumors, providers may find efficiencies in the time spent with clients who would come to the facility with a better idea of what to expect from family planning methods. Community discussions on how to better support adolescent girls may also prove beneficial.

8. Future Research

Several areas of future research can shed greater light on and potentially reduce, client turnaway. One possibility would be to conduct similar research in other countries that would allow us to put the Malawi data in context and encourage countries to learn from each other's best practices in reducing client turnaway. Standardizing the methodology for measuring turnaway would allow for more direct comparisons across countries. Additionally, future research and analysis should measure issues of equity and better understand whether women with different social determinants of health were more or less likely to experience turnaway and if so, why, so that solutions therefor can be developed. This research was unable to collect extensive demographic information from women who were not turned away (and thus were not consented into the research) for the purpose of closely examining inequity related to turnaway. Most large-scale demographic surveys, such as the DHS, contain indicators that could be used to examine equity in family planning at a district or national level.

In addition, providers are at the center of this family planning ecosystem. They are the link between the health system and the clients. But they can find themselves caught in between their professional training and the social norms of their communities, as well as the structural limitations of the healthcare delivery system. A better understanding of the experiences of providers and how best to support them would help to optimally focus future resources where they have the greatest chance of success.

Lastly, research into the elasticity of method choice for clients would allow Ministries of Health, policymakers, and funders to see why some clients are willing to accept a second-choice method and if so, which method and why. Examining the issue at a population-level would help to quantify the potential impact of stockouts and undertrained, underconfident, or absent providers. If future turnaway from a first-choice method cannot be avoided, a better understanding of how to counsel clients on a second-choice method until their first choice is available can reduce turnaway and its resulting stress and potential harm to clients, including method discontinuation and/or unwanted or unplanned pregnancies.

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Original Publications

Paper I

Turned Away and at Risk: Denial of Family Planning Services to Women in Malawi

Jill M. Peterson, Jaden Bendabenda, Alexander Mboma, Mario Chen, John Stanback, and Geir Gunnlaugsson

Family planning (FP) has been a development priority since the mid-1990s, yet barriers to access persist globally, including women being turned away from facilities without a method. This study aimed to assess the extent of, and reasons for, FP turnaway in three districts of Malawi. In 2019, data collectors screened women exiting 30 health facilities and surveyed those who had been denied a method. Follow-up surveys were conducted via telephone with turned away clients at six and 12 weeks postvisit. Of the 2,246 women who were screened, 562 were new or restarting users. Of these, 15% (83/562) reported having been turned away from the health facility without an FP method. Women cited 14 different reasons for turnaway; the top three were unavailability of method (34%), unavailability of a provider (17%), or a requirement to return on the scheduled FP day (15%). The multiple reasons cited for leaving the health facility without an FP method indicate that reducing turnaway will not be achieved easily. The top reasons for turnaway are related to health systems or management issues within health facilities. Facilities need additional support for staffing, training on long-acting and permanent methods, and a consistent supply of methods.

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BACKGROUND

The Sustainable Development Goals (SDGs), adopted in 2015, recognized family planning (FP) as one component necessary to achieving several of the SDGs, including those for ending poverty, ending hunger, promoting good health, and achieving gender equality (United Nations 2015). In recognition of FP's role in reaching the SDGs, the goals highlight the challenge of 218 million women having an unmet need for FP (Sully et al. 2020). Nevertheless, throughout the world, effective contraception can be difficult to access given the many barriers to FP that exist (Starrs et al. 2018). The barriers to FP are varied and include financial barriers related to the cost of traveling to the facility, missing work, and/or the visit or method itself; geographic barriers such as long distances between a potential client and a health facility; and social barriers based on behavioral expectations for women or adolescents (Campbell, Sahin-Hodoglugil, and Potts 2006; Bertrand et al. 1995). In addition, women may lack factual information about FP, which may cause them to delay or avoid seeking FP services (Campbell, Sahin-Hodoglugil, and Potts 2006; Mathe, Kasonia, and Maliro 2011).

One important type of barrier is medical barriers. Bertrand and colleagues defined medical barriers to FP as "scientifically unjustifiable policies or practices, based at least in part on a medical rationale, that inappropriately prevent clients from receiving the contraceptive method of their choice or impose unnecessary process barriers to access FP services" (Bertrand et al. 1995). In 1992, Shelton et al. outlined seven types of medical barriers to FP: contraindications, eligibility, process hurdles, which providers dispense contraception (those not properly trained on contraindications, for instance), provider bias, inappropriate management of side effects, and regulation (Shelton, Jacobstein, and Angle 1992). The seven types of medical barriers included instances where providers require husbands to be present, deny methods to nulliparous women, or require unnecessary physical examinations or laboratory tests before dispensing a method.

A 2018 review highlighted many of these barriers, as well as stockouts of methods, resulting in limited method choice for women (Starrs et al. 2018). Many of these barriers can lead to women being denied, or "turned away," from a facility without a method. The term turnaway was recently popularized by a study conducted in the United States comparing longitudinal data on women who received an abortion to those denied the service (Biggs et al. 2017). Although the term "turnaway" implies a direct action by a healthcare provider or another staff person, in some instances women are passively denied FP by long wait times, closed facilities, FP available only on designated "FP days," or absence of adequately trained FP providers (Konje and Ladipo, 1999; Campbell, Sahin-Hodoglugil, and Potts 2006). In addition, some turnaway is justified, because of medical ineligibility or clients deciding they do not wish to initiate a method after learning more about available options.

Occasionally, turnaway can be overcome relatively easily, if, for example, a woman can return to a clinic on a designated FP day. However, when the barrier is geographic (the health facility is far away or difficult to reach) or financial (transportation to get to the facility is costly) or when women's decision-making is limited, return trips to a facility can be burdensome (Campbell, Sahin-Hodoglugil, and Potts 2006; Pitorak, Lubaale, and Gurman 2014; Mathe, Kasonia, and Maliro 2011). Limited method choice at facilities has also been found

to be problematic and challenging to overcome (Konje and Ladipo, 1999; Campbell, Sahin-Hodoglugil, and Potts 2006).

Although the issue of turnaway, or service denial, is not unique to FP, it has more often been analyzed through qualitative methods or provider self-reporting on attitudes and practices, rather than estimates of the proportion of clients turned away (Sheffel et al. 2019; Wanyenze et al. 2017). The same is true of FP-focused studies conducted throughout sub-Saharan Africa, which have shown providers denying method provision based on age and parity, as well as conducting laboratory tests before providing a method or requiring direct observation of menses (proof of menstruation) for a woman to obtain a contraceptive method as a way of ensuring she is not already pregnant (Stanback and Twum-Baah 2001; Sidze et al. 2014; Tumlinson, Okigbo, and Speizer 2015; Brunie et al. 2013; Speizer et al. 2000; Wado et al. 2019).

An exception is a study conducted by Tavrow et al., who conducted a quality assessment of provider attitudes toward FP in Malawi in the mid-1990s. They examined client–provider interactions through the use of client exit interviews as well as simulated clients and found that 41% of simulated clients were turned away without a method, either before or after seeing a provider (Tavrow 1999; Tavrow, Namate, and Mpemba 1995).

In 2012, Baumgartner et. al. explored rates of denial of reinjection of injectable contraception to women returning after the reinjection deadline in South Africa and found that 22% of women coming one to 14 days late were denied a reinjection, as were 56% of women coming 15–30 days late and 74% of women coming 31–84 days late (Baumgartner et al. 2012). Some of these women, however, were given oral contraceptive pills (OCPs). More recently, in 2018, Hazel et al. engaged simulated clients in Malawi to study the quality of FP services in facilities and to report on a limited number of reasons for service denial (Hazel et al. 2021). In 12% of visits, clients were denied services for either not meeting provider requirements for HIV testing or tetanus vaccinations or because the facility was closed when it should have been open.

Given that the Tavrow et al. research was conducted over 20 years ago and Hazel et al. examined only a few reasons for turnaway, we saw a need to add to the evidence base. The overall goal of our study was to explore current barriers to FP leading to turnaway for women in government-supported health facilities in Malawi. Specifically, the primary objective was to quantify the scope of turnaway—how many women did not receive an effective FP method on the day it was sought and why, and what characteristics were shared by women who were turned away. The secondary objective was to assess the short-term FP outcomes of women who were turned away at the initiation visit. Did women return to the same facility, or a different facility? Were they able to initiate a method within a reasonable period, or did they continue to be at risk for unintended pregnancies?

METHODOLOGY

This quantitative study was the main component of a larger study that gathered data from FP units in 30 publicly supported health facilities in Malawi from October to December 2019. It included a client exit survey and two follow-up surveys with turned-away clients.

TABLE 1 Population, religious affiliation, and modern contraceptive prevalence rate (mCPR), in three districts in Malawi, 2018

				Religious affiliation (%)			
	Total population	New FP users counseled	mCPR	Catholic	Muslim	Non-Catholic Christian	Other religion
Kasungu	842,953	20,160	67.3	23	2	64	11
Machinga	735,438	30,638	45.9	7	67	24	2
Zomba	746,724	29,769	60.6	17	20	59	4

SOURCE: Population and religious affiliation data come from the 2018 Malawi Population and Housing Census, Main Report (Malawi National Statistics Office 2019). New FP users counseled were extracted from DHIS2 and provided by the Reproductive Health Directorate for the period from July 2018 to June 2019. mCPR data come from the 2015-2016 DHS (Malawi National Statistics Office 2017).
NOTE: Other reported religions not shown included traditional, other denominations, and no religion.

Study Design

A purposive sample of FP clinics run by the Malawian Ministry of Health and Population (MOHP) in the districts of Kasungu, Machinga, and Zomba was included in the study. In addition to being among the most highly populated districts, these districts were also selected based on the feasibility of data collection (e.g., travel budget and logistics for the data collectors, including travel time and available accommodations) and diversity in characteristics of the districts, such as religion and modern contraceptive prevalence rates (mCPR) (Table 1) (Malawi National Statistics Office 2019). The highest volume FP sites in each district were identified based on recent annual aggregate-level District Health Information Software 2 (DHIS2) data on new FP clients and those restarting after a break of six months or more. Clients seeking an FP method from the 30 selected health facilities (10 per district), either as new users or after a break from previous use of at least six months, were asked if they were able to obtain an FP method and, if not, were invited to participate in an exit survey. Turned-away clients who were willing to share their phone contact details were also asked to participate in six- and 12-week follow-up phone surveys. Data collector candidates were interviewed by members of the research team and selected based on prior data collection experience with priority on FP and health-related experience, as well as experience collecting data with the use of electronic tablets. Upon recruitment, data collectors underwent a week-long training prior to data collection. Surveys were translated into the predominant local language (Chichewa), and translations were reviewed with data collectors during data collector training. Data collectors were individually supervised by a member of the study team.

By looking at both new and restarting users, we estimated how many clients data collectors might expect to survey and how long they might need to stay at each facility to reach the desired sample size. For the number of new or restarting FP clients needed to estimate the proportion of clients turned away, we assumed that no more than 25% of the women seeking to initiate an FP method would be turned away without an effective method. This was based on the study conducted in Malawi in 2018 showing a 12% turnaway for a limited number of reasons for turnaway (Hazel et al. 2021). Because the focus of our research included any reason for turnaway, we assumed a higher turnaway proportion. Thus, we determined that a sample size of 289 women would be needed to estimate the proportion of women turned away, with a 95% confidence interval and 5% precision. However, we aimed to recruit more than this minimum to also be able to estimate with reasonable precision the proportion of those turned-away clients who started an effective FP method by the time of the six-week

follow-up. Based on monthly client volume data from the DHIS-2, we estimated weekly attendance and determined that by spending four days at each facility we could intercept approximately 700 eligible clients, of whom approximately 175 might be turned away and eligible for a follow-up interview. With this sample size, we would be able to estimate the proportion of those who start an effective FP method by the time of the six-week follow-up with 7% precision. This assumed that 67% of clients turned away initiate an effective method by the six-week follow up (Egyptian Fertility Care Foundation 2004). Precision will be lower due to attrition, and if enrollment of the initial eligible sample is slower or the proportion of clients turnaway is smaller.

Data Collection

Before beginning data collection, a member of the study team met with district leaders to explain the purpose of the research and to gain their permission to visit facilities in their districts. All the facilities were publicly supported facilities; two had additional support from the Christian Health Association of Malawi (CHAM). District staff were requested not to provide detailed information about the purpose of the study to facility staff so as not to influence their treatment of clients or survey responses. For the same reason, we allowed several weeks to pass between informing them about the study and beginning data collection.

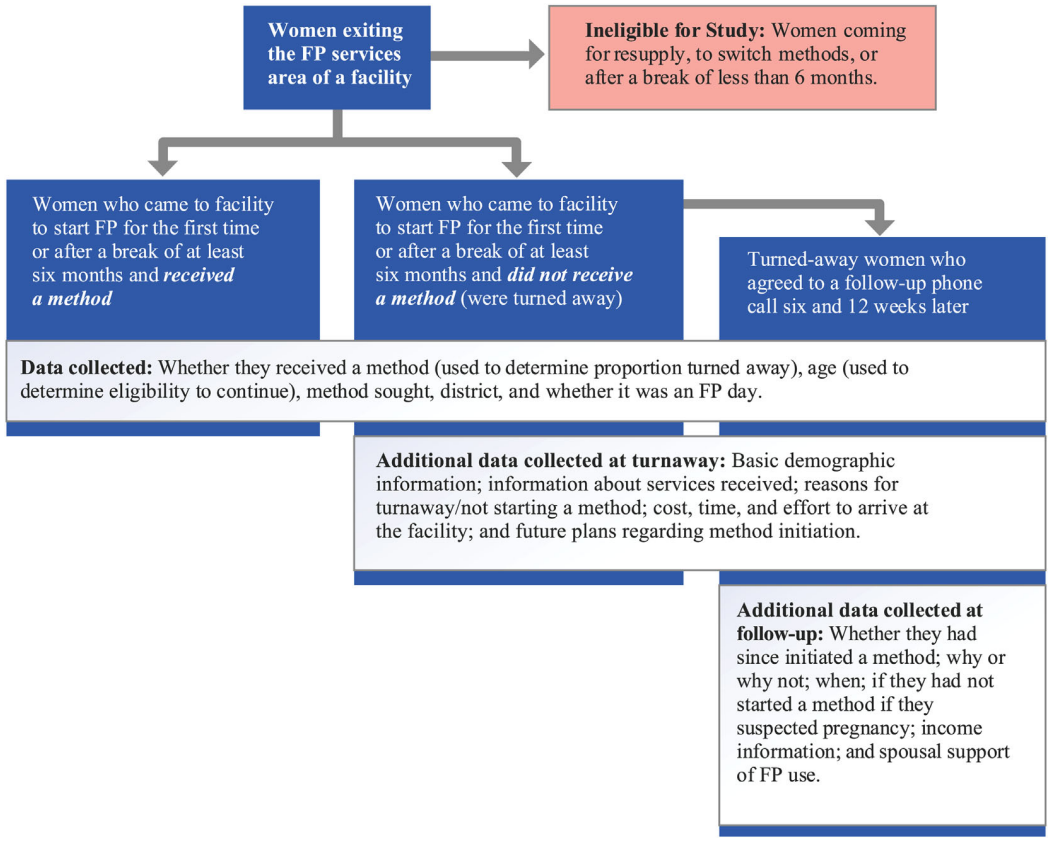
Upon arrival at the site on day one of data collection, data collectors introduced themselves to the person in charge of the facility, explained they had the support of the MOHP and district health office and asked where to find exiting FP clients. If pressed for details, data collectors explained they were there to collect information about FP client characteristics.

Data collectors attempted to screen all women exiting from FP services at each facility for a period of four days—generally Monday through Thursday. Data collectors arrived before the facility opened for the day and remained until the clinic officially closed. They approached all women leaving the FP services area of the facility to ask if they had a few minutes to answer some questions. If a woman agreed to answer the questions, a data collector then determined whether she was eligible to be included in the estimation of the turnaway proportion (those seeking FP for the first time or after a break of at least six months), as well as for the exit survey (those who had been turned away) and future follow-up (turned-away women who agreed to be contacted by phone) (Figure 1). Any client who did not get a method was considered to have been turned away.

After the initial screening, only women who had consented and had been turned-away took the exit survey, which covered aspects of services received that day; their experiences with group counseling and the provider; the reason for turnaway; cost, time, and effort to arrive at the facility; basic demographic information; and expected next steps in light of the turnaway (Figure 1). It was not possible to ask more than a few screening questions of all women exiting the facility without going through a full informed consent process, which would have risked our data collectors missing the opportunity to screen all women leaving the facility. Surveys were conducted on electronic tablets using Open Data Kit (ODK) (Hartung et al. 2010).

Clients agreeing to be followed up by phone were called six weeks after their initial turnaway. Those who reported having started a method or suspecting pregnancy were not

FIGURE 1 Clients who sought FP services and were approached for inclusion in the study, and type of data collected from them, Malawi, October to December 2019



followed up again at 12 weeks. Those who had not initiated a method or who did not suspect pregnancy at six weeks post turnaway were phoned again after another six weeks (12 weeks post turnaway). We phrased the pregnancy question on the survey as to whether they "worried they might be pregnant," rather than whether they had actually tested positive, due to the difficulties women face obtaining pregnancy tests, along with cultural hesitations to declare pregnancy before the end of the first trimester.

Ethics Approval

The study protocol was reviewed and approved by FHI 360's Protection of Human Subjects Committee at Durham, NC, USA, as well as the National Health Sciences Research Committee (NHSRC) in Malawi. All study staff completed training on research ethics, the protocol, and informed consent administration. All clients provided their informed consent to participate, including a brief verbal consent at the time of screening, a full signed consent before beginning the survey, and a brief verbal reconsent on the phone at the time of follow-up. Clients were not reimbursed for their participation in exit surveys or follow-up calls because the NHSRC removed a requirement to do so before our data collection began.

TABLE 2 Proportion of clients receiving an FP method and turned away without a method by the district in Malawi, October to December 2019

District	Total new/restarting clients *n* (%)	Received a method *n* (%)	Turned-away clients *n* (%), 95% CI
Kasungu	150 (26.7)	114 (76.0)	36 (24.0), 17.4–31.7
Zomba	164 (29.2)	136 (82.9)	28 (17.1), 11.7–23.7
Machinga	248 (44.1)	229 (92.3)	19 (7.7), 4.7–11.7
Overall	562 (100)	479 (85.2)	83 (14.8), 11.9–18.0

Data Management and Data Analysis

Survey data were downloaded from ODK as .csv files for uploading into SPSS software, version 26.0 and Stata version 15 for data analysis (IBM Corp. 2019; StataCorp 2017). Both the exit survey and the follow-up surveys included limited open-ended questions. Open-ended response coding was conducted in Excel by two project staff. Answers were compared and differences were discussed. When consensus could not be reached about whether to recode into either a new or existing response category, the response was left as "other." These coded responses were merged into the final analysis datasets.

We used a 95% Clopper–Pearson binomial proportion confidence interval to estimate the proportion of clients who were not provided a method on the day they sought one (i.e., those who were turned away) and the proportion of turned-away clients who initiated an FP method within six weeks of being turned away. Exit survey and follow-up survey results were linked using unique identifiers. We also explored how turnaway might be associated with different characteristics of the women seeking FP. We used a *t*-test, Fisher's exact, or the Freeman–Halton extension test, as appropriate, to explore the association between turnaway and age, method sought, district, and whether turnaway occurred on a designated FP day. Among women who completed six- or 12-week follow-up surveys, we performed similar analyses to explore the associations between having started a method by 12 weeks postturnaway and clients' age, years of education, income, reasonableness of time to arrive at the facility, reasonableness of cost/effort to arrive at facility, number of living children, and income type. We also present descriptive information on services received as well as the cost, effort, mode of travel, and time to arrive at the facility, based on the exit survey. Significant results were assessed at the level of 0.05 for two-sided comparisons.

RESULTS

In total, data collectors screened 2,246 women exiting from FP service areas. One person refused screening. Of those screened, 562 (25%) were new or restarting users (150 in Kasungu, 164 in Zomba, and 248 in Machinga) and were thus eligible for primary analysis of turnaway (Figure 2).

Of the 562 new or restarting FP clients, 83 (15%) reported having been turned away from receiving an FP method on the day they sought it. All 83 of the turned-away clients completed an exit interview the day they were turned away (Figure 2). The turnaway proportions varied by district (Table 2). Data collectors were unable to reach 55 (66%) women to determine their final FP/pregnancy outcome by 12 weeks (Figure 2).

FIGURE 2 Turnaway Prisma for study participants who sought FP services in three districts of Malawi

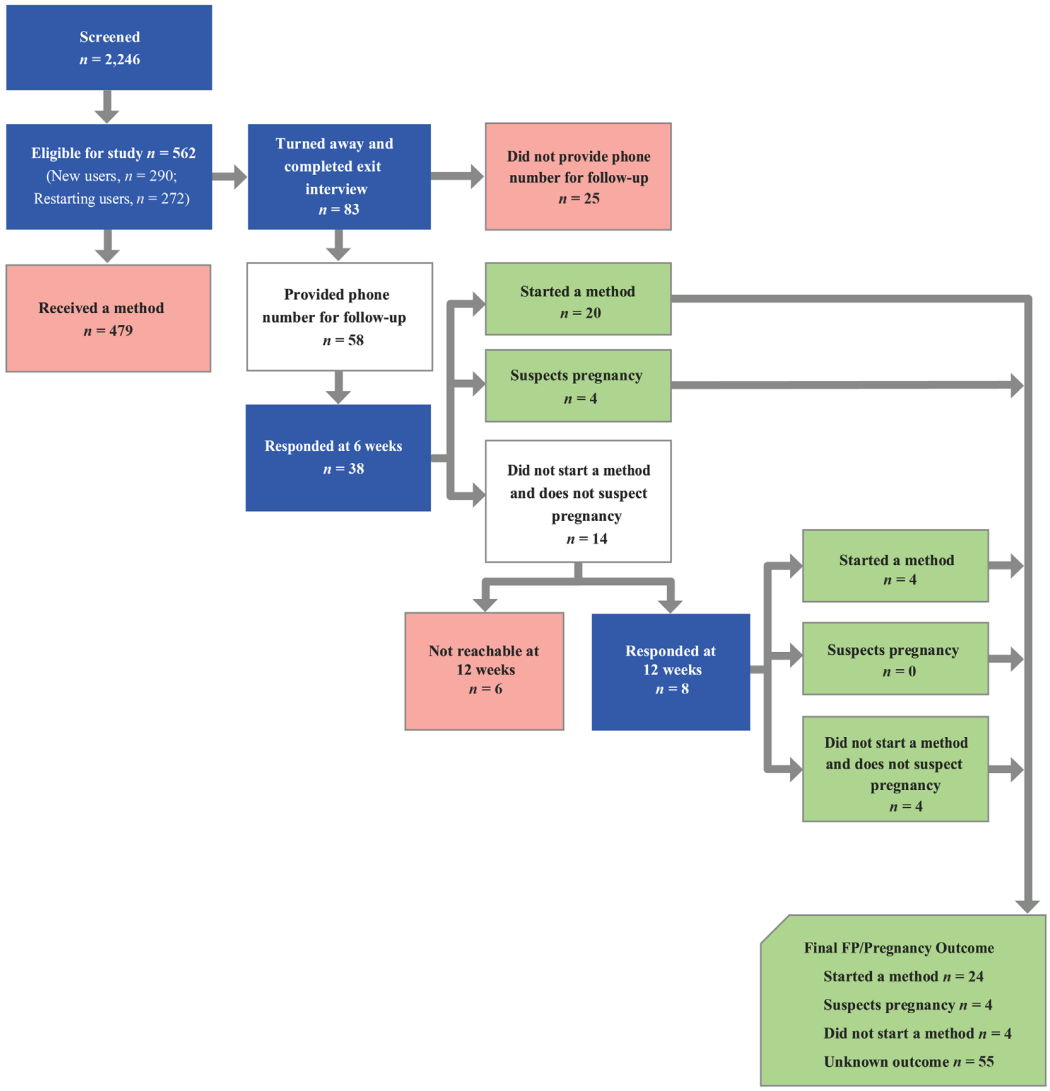


Table 3 compares women's characteristics by turnaway status and the results of the association analysis. The average age of the 562 eligible women was 24.9 years (range 16–48). We found statistically significant differences in turnaway based on age, method sought (short vs. long acting), district, and whether it was a designated FP day. Turned-away women were older (average of 26.6 years versus 24.5), seeking a long-acting or permanent method, coming from Kasungu or Zomba, or going to the facility on a non-FP designated day. In Table 3 we also present the age data by category to show how the proportion turned away increases with age.

TABLE 3 Proportion of clients receiving a method and turned away by selected client characteristics in three districts in Malawi, October to December 2019

Characteristics	Turnaway			
	Received a method $n = 479$	Turned-away $n = 83$	Total $n = 562$	*p*-value
Age				
Mean (SD)	24.5 (5.8)	26.6 (7.0)	24.9 (6.0)	0.013
Range	16–48	17–42	16–48	
Age group				0.024
16–20	150 (88.8)	19 (11.2)	169	
21–30	253 (86.1)	41 (13.9)	294	
31 and older	76 (76.8)	23 (23.2)	99	
FP method, *n* (%)[a]				0.015
Short-acting	330 (88.2)	44 (11.8)	374	
Injectable	*295 (87.3)*	*43 (12.7)*	*338*	
Oral contraceptive pills (OCPs)	*34 (97.1)*	*1 (2.9)*	*35*	
Condoms	*1 (100.0)*	*0 (0.0)*	*1*	
Long-acting or permanent	149 (80.1)	37 (19.9)	186	
Implant	*142 (84.5)*	*26 (15.5)*	*168*	
IUD	*5 (50.0)*	*5 (50.0)*	*10*	
Tubal ligation	*2 (25.0)*	*6 (75.0)*	*8*	
District, *n* (%)				<0.001
Machinga	229 (92.3)	19 (7.7)	248	
Kasungu	114 (76.0)	36 (24.0)	150	
Zomba	136 (82.9)	28 (17.1)	164	
Designated FP day at the clinic, *n* (%)				<0.001
Yes/NA	450 (88.4)	59 (11.6)	509	
No	29 (54.7)	24 (45.3)	53	

[a] Two women who were turned away did not have a method in mind when they were turned away. The *p*-value for this variable compares short versus long-acting methods.

TABLE 4 Demographic results

Demographic information for turned-away women	$n = 83$
Mean number of living children[a]	2.6 (0–7)
Marital status – *n* (%)	
Married	68 (82)
Single	9 (11)
Divorced	6 (7)
Given birth in the last six months – *n* (%)	47 (57)

[a] $n = 81$, two women had more than eight children (exact number of children not reported).

Demographic information for the 83 turned-away women is presented in Table 4. One of the 83 turned-away women reported having no living children, while two had more than eight. The mean number of children with those fewer than eight was 2.6. A majority (57%) had given birth in the past six months. Over 80% of the women were married (82%) with some variation in marital status by district—Zomba had the greatest percentage of single women (18%) and Machinga had no single women in the sample. None of the women were widowed. No other demographic data were collected at the time of turnaway.

Reasons for Turnaway

The most cited reason for turnaway was "preferred method not available" (34%), followed by "provider not available" (17%), and "told to come back on an FP day" (15%) (Table 5). Specifically, of the 28 women who were told that their preferred method was not available, 68% were seeking injectable contraception, and 21% were seeking an implant. All of those told to come back on an FP day were seeking either injectables ($n = 7$) or implants ($n = 5$).

TABLE 5 Exit survey results: Primary reason for not starting FP and travel information at three clinics in Malawi, October to December 2019

Reason for not starting FP the day of the exit survey ($n = 83$)	***n* (%)**
The method I wanted was not available	28 (34)
Provider not available	14 (17)
Told to come back on an FP day	12 (15)
The wait was too long	6 (7)
Did not have a health book	5 (6)
Pregnancy test required but not available	3 (4)
Not currently menstruating	3 (4)
Told to return on a different day without explanation	3 (4)
Told there was a medical reason I couldn't start (headaches, high blood pressure, other medication I'm taking)	2 (2)
I am breastfeeding/told I needed to wait longer after giving birth	3 (4)
I decided I didn't want to start FP or couldn't decide on a method	3 (4)
Told I was too old	1 (1)
Group counseling attendance and wait	
Reasons for not attending group counseling ($n = 61$)	
The wait was too long	1 (2)
Group counseling wasn't offered	12 (20)
I arrived late	44 (72)
Other/specify:	4 (7)
Time waiting at the facility before group counseling started ($n = 21$)	
Less than 10 minutes	5 (24)
10 minutes to 30 minutes	10 (48)
31 minutes to an hour	4 (19)
One to two hours	2 (10)
Travel information of women not initiating a method the day of the exit survey	
Mode of travel (n = 83)	
Walked to health facility	54 (65)
Traveled by bicycle taxi to health facility	10 (12)
Traveled by her own bicycle to health facility	9 (11)
Traveled by motorcycle taxi	6 (7)
Other	4 (5)
Travel time (n = 83)	
Less than 10 minutes	12 (15)
10 to 29 minutes	29 (35)
30 to 59 minutes	27 (33)
1 to 2 hours	10 (12)
More than 2 hours	5 (6)
Travel cost (those not walking) (n = 29)	
Free	8 (28)
Less than 500 Kwacha (approximately 0.67 USD)	10 (35)
500-1000 Kwacha (approximately 0.67 to 1.34 USD)	6 (21)
More than 1000 Kwacha (approximately 1.34 USD)	5 (17)

Six women were turned away because of an inability to show they were not pregnant—either a pregnancy test was not available or they were not currently menstruating (Table 5). A 37-year-old woman seeking an injectable was told she was too old for her preferred method. Two women, both seeking an implant, were told they needed to wait longer after delivery before receiving an implant. Of the 83 women who were turned away, about half (51%) were seeking injectable contraception followed by an implant, either the three- or five-year options (30%). Online Appendix 1 provides a breakdown of reasons for turnaway by method sought.

No women were turned away for refusing other procedures such as HIV testing, physical exams, or a pregnancy test, although in some cases these procedures were suggested and accepted. For example, six clients were asked to submit to a pelvic exam. In all six cases, the clients agreed to the exam; two women were seeking a tubal ligation, two an implant, one an IUD, and one an injectable.

Eight out of nine clients agreed to take a pregnancy test. These women were seeking OCPs, injectables, implants, and tubal ligation. All four women who were asked to show proof of menstruation for two different methods (injectables and implants) agreed to do so. One woman agreed to a vaccination (tetanus toxoid), two to an HIV test, and one to a malaria test.

Service Information

Just over a quarter (26%) of turned-away clients participated in group counseling before being turned away ($n = 82$, one client skipped this question). Of those who did not participate in group counseling, 72% cited as the reason for arriving at the clinic late. A fifth (20%) stated that group counseling was not offered. The occurrence of those not attending group counseling was evenly distributed between districts. None of the women cited missing group counseling as the primary reason for turnaway, and of 17 women who reported having missed group counseling, two failed to see a provider because of arriving late. Nearly all (90%) clients waited less than an hour for group counseling to begin after their arrival, and 94% were seen by the provider within an additional 10–30 minutes.

When asked "Since you were not able to start a method today, what will you do?", most (73%) said they would return another day, and 9% said they were not sure when they would return.

Cost and Effort to Arrive at the Facility

Most women who were turned away traveled to the clinic by walking, using a bicycle taxi, or using her own bicycle (Table 5). The cost of transport was similar across districts. Nearly 90% of clients reported that the facility they attended the day of the interview was the facility nearest to their home.

Follow-Up Calls at Six and 12 Weeks

When asked whether they could be contacted for follow-up, 82 of 83 women agreed and 38 of those were reached for a follow-up interview approximately six weeks after the day of turnaway (Figure 2). Of those reached at six and 12 weeks postturnaway, 24 (52.6%, 95% CI: 35.8% – 69.0%) had started a method by the time we last spoke with them, and four (10.5%) suspected they might be pregnant (Figure 2). Eleven of 20 women who had started a method after having been turned away did so within one week of the turnaway; two did so within two weeks, and five waited a month or longer before initiating. One person did not answer this question, and one could not remember when she had initiated.

For the women for which a final FP/pregnancy outcome is known ($n = 32$), we did not find statistically significant differences in whether women started a method or not based on age, years of education, income, reasonableness of time to arrive at the facility, reasonableness of cost/effort to arrive at facility, number of living children, or income type.

When asked why they had not yet started a method, either at six- or 12-week visits, 36% of those who had not yet initiated a method (including those who suspected they might be pregnant at six weeks) reported it was because the preferred method was still not in stock. One woman said that she did not want a medical procedure requested by the provider—a pregnancy test she was told she would have to pay for herself. At the time of the 12-week follow-up, she cited the same reason, saying she had not yet been able to purchase the pregnancy test. She was seeking an implant.

DISCUSSION

The results presented here are the main findings of a larger study exploring turnaway for FP services from contraceptive clinics in three districts in Malawi. We found 15% of women seeking FP services were turned away without a method from October through December 2019. Although clients cited 14 unique reasons for being turned away, over half of the turnaway reasons we found were related to the structure or management of health facilities, including stockouts, unavailability of providers, or clients being asked to come back on a designated FP day (Table 5).

Although our methodology differed from the work of Tavrow et. al. conducted in the 1990s, if both studies measured the same turnaway phenomenon with reasonable accuracy, our results suggest that turnaway is becoming rarer. Both studies revealed similar primary reasons for turnaway. Tavrow et. al. found that the largest group of turned-away women were turned away at the clinic entrance before seeing a provider, for reasons such as missing group counseling; coming on the "wrong" day, even after having been told services were available that day; provider unavailability; and stockouts of commodities (Tavrow, Namate, and Mpemba 1995). In our research, no women cited missing group counseling as the primary reason they were turned away, although it was cited by two women as a reason for not seeing a provider. It was also a reason for noninitiation at the time of our follow-up calls.

In our research, stockouts were least common in Machinga, which has greater support from nongovernmental organizations than the other two districts—a likely reason the turnaway proportion was lower there. The method most frequently sought—injectables—was also the most frequently out of stock. Almost half of turnaway clients who were seeking injectables said the primary reason for turnaway was that the method was not available. Injectable contraception is the most commonly used modern method in Malawi and is highly valued for its ability to be concealed (Malawi National Statistics Office 2017; Bisika 2008). There was, however, a worldwide shortage of injectable contraception in 2019 due to the shutdown of a manufacturer sterilizing facility, which likely affected supply during the time of our research (U.S. Food and Drug Administration 2019). Even so, clients were more likely to be turned away when seeking long-acting or permanent methods. These methods require more technical training to administer compared to OCPs or injectables, so there may be an insufficient number of providers trained specifically on these procedures.

Although the sampled facilities reported providing FP services every day, we found that, in practice, many facilities have specific days of the week earmarked as FP days. Unavailability of a provider and being asked to come back on the "official" FP day were our second and third

most cited reasons for turnaway (Table 5), despite the MOHP expectation that all publicly supported facilities in Malawi provide FP five days per week. Grouping services on certain days of the week can cause problems for clients beyond just being turned away. For example, if it is widely known in the community that a certain day is an FP day, it may be difficult for women to conceal the reason for their visit that day (Government of Malawi 2015). When facilities do not or cannot offer the full method mix every day, women desiring confidentiality may have to choose between confidentiality and accessing a method. Better integration of FP into other services such as postnatal care or childhood vaccinations may help to alleviate this situation. More research is needed to understand the reasons why facilities designate specific FP days.

While not unique to Malawi, long wait times were a common complaint during the time of the Tavrow et al. research, which reported the average wait time for FP services at three hours (Tavrow, Namate, and Mpemba 1995; Assaf, Wang, and Mallick 2017; Chavane et al. 2017; Zaky, Khattab, and Galal 2007). We found that most clients waited 90 minutes or less in total for the group counseling and the provider. Although the numbers were small, the long wait was still the fourth most common reason women left a facility without a method (Table 5), indicating there is room for more improvement in this area.

Medical barriers were a less common reason for turnaway in our study and did not reflect the level of provider bias reported by Tavrow et al. (Tavrow, Namate, and Mpemba 1995). Few women in our study were asked to submit to a pelvic exam, but of those who were, all agreed. Although pelvic exams are not part of a standard protocol for the provision of OCPs, injectables, or implants, they may be needed if the client has other symptoms, such as unexplained bleeding (Ministry of Health and IntraHealth International 2010). Similarly, all four women in our study asked to show proof of menstruation agreed to do so. Providers, however, have other options available rather than subjecting women to the embarrassment of showing someone else their menstrual pads, such as using "the reasonably sure not pregnant" checklist included in their preservice training or simply asking a woman whether she is currently menstruating (Ministry of Health and IntraHealth International 2010). Because all women agreed to both pelvic exams and providing proof of menstruation, we do not know if they would have been denied a method without it. We would need to use a simulated client approach to test this more thoroughly.

WHO guidance does not limit injectables by age, nor implants in the postpartum period nonetheless, one woman was told she was too old for injectables and two were told they needed to wait longer after delivery before receiving an implant (World Health Organization 2015). The infrequent occurrence of these clinically questionable decisions indicates the problem is not widespread, but certainly frustrating for the turned-away women. In contrast to provider attitudes reported by Tavrow et al., no clients reported being turned away and asked to return with a husband, partner, or parent, nor were any told they were too young to be using FP or that they should be having more children (Tavrow, Namate, and Mpemba 1995). Additionally, in contrast with Hazel et al., no clients were turned away for refusing HIV testing or a vaccine, unofficial policies enacted in some districts but not in others (Hazel et al. 2021).

Although our numbers were small, we found that just under half of the turned-away women we reached at the time of the six-week follow-up had still not initiated a method

and some not even by 12 weeks (Figure 2). Still others suspected pregnancy. These women represent missed opportunities for initiation of FP and in some cases, possibly resulted in unwanted or mistimed pregnancies.

The most common reason for not initiating a method by the time of the follow-up surveys was that the preferred method was still out of stock, highlighting the importance of a reliable supply chain. Related literature has shown that women were resistant to switching methods when their first choice was not available. For example, research in Uganda found that women were hesitant to change methods in the case of a stockout, and rather than switching to a different hormonal method, most commonly resorted to using condoms, withdrawal, or abstaining from sex until their preferred method could be obtained (Grindlay et al. 2016). A discrete choice experiment in Malawi showed that young women (aged 15–24) placed the highest value on having friendly providers and knowing all commodities were in stock when selecting a service provider (Michaels-Igbokwe et al. 2015). Implementing a supply chain management program for FP commodity distribution might be an option, such as the informed push model, which showed great success in Senegal (Daff et al. 2014; World Health Organization 2017). Under this model, FP commodities are resupplied to facilities monthly rather than waiting for the facilities to order them.

While there are other FP service provision options available to women, such as private facilities, community health workers, and pharmacies, women generally returned to the same facility where they had been initially turned away to make another attempt at initiating a method, citing the convenience of the facility. Given that several noted returning only to find their method was still out of stock, the affordability of methods at public facilities, where they are normally free, is likely an important secondary factor to convenience.

We ruled out non-support of FP use by husbands/partners as a limiting factor to a subsequent visit to a facility because nearly all the followed-up clients reported being supported in their decision to use FP. This may not be the case in the larger population, however, because our participants were self-selected based upon willingness to receive a future phone call for follow-up surveys, and we were not able to reach all these participants. Research in Malawi has shown women may be motivated to conceal their use of FP from their male partners to avoid any possible perception of reduced sexual pleasure associated with its use (John, Babalola, and Chipeta 2015).

Our results highlight the need to gather more data from providers about their knowledge, attitudes, and practices of provision of FP. In addition, this research did not examine how willing women were to accept a second-choice method in the case of their first choice was unavailable. An important area for future research is the number and proportion of women accepting an alternative method, and the most accepted and rejected second-choice methods. Lastly, it is also important to compare the results from Malawi to other countries to better understand if the improvements are specific to the country, or part of a broader movement toward reduced barriers in accessing FP.

Strengths and Limitations

This study is one of few to examine and quantify the issue of client turnaway from a facility in sub-Saharan Africa. While much recent research has rightfully focused on the impact of

community-provided services or self-care options such as self-injection, the extent to which women continue to face barriers at facilities has not been as thoroughly examined (Burke et al. 2014, 2018; Kalanda 2010; Masiano et al. 2019). The impact of being turned away has also not been examined. We struggled with the sample size to examine the impact due to a lower turnaway proportion than expected, as well as difficulties reaching women for follow-up without threatening their confidentiality. While all except one of our 83 turned-away clients agreed to receive a follow-up call, many clients did not provide a phone number for the follow-up. Instead, they took the data collector's number and indicated they would call the data collector later with a number for follow-up, in most cases telling the data collector they did not know the number of a phone they were sharing. Even when numbers were offered, some participants could not be reached. As a result, clients reached at follow-up were likely skewed toward those who were not attempting to conceal their use of FP, as well as toward those who owned a phone rather than sharing one with someone else—a common practice in the region (James 2014; Shava and Chinyamurindi 2018; Gunnlaugsson et al. 2020; Marron et al. 2020). Still, we were able to capture descriptive data on the consequences of turnaway.

This study provides important insights on the barriers faced by women seeking FP; however, the purposively selected sample may not represent the client populations of other facilities in the respective districts or other districts in Malawi.

Although providers at health facilities were not aware of our exact intentions on the days data collectors were present, our results may have been affected by the Hawthorne effect (Eckmanns et al. 2006). In fact, in a few cases data collectors gave specific examples where either they or the clients felt services had been provided because of the presence of the data collectors. We were also limited by not being able to use simulated clients, both to reduce the chances of the Hawthorne effect, as well as to test specific scenarios such as what happens when a woman refuses a suggested procedure. In our study design, it would not be possible to debrief providers on the day of data collection, or when a simulated client exited a facility because it would expose further research at that or nearby facilities. For this reason, we were prevented from using simulated clients by our US-based institutional review board.

CONCLUSIONS

This study provides evidence suggesting that the occurrence of facility-based providers turning away clients seeking to initiate a method of FP has declined since the 1990s. We have documented, however, that turnaway remains too high. The main barriers to accessing preferred contraceptive methods were the availability of providers or services—including initiation of more complex methods—and stockout of the methods themselves. These findings reflect the previous research and demonstrate the need for the MOHP and district authorities to improve the family planning infrastructure at health facilities in Malawi. For example, the MOHP may consider an examination of publicly supported health facilities' needs for increased staffing, appropriate training on more complicated FP methods, and how to ensure a reliable supply of methods. These measures will help to ensure that women seeking a method of contraception do not leave facilities empty-handed and at risk for unintended pregnancies. Recent research on turnaway rates in other countries is missing from the literature and

could help to put our results in context, as well as to improve FP services and access in those countries. Additional research on reasons for designated FP days, the number and proportion of women accepting an alternative method when their first choice is not available, and more robust turnaway outcome data would also advance efforts to understand and reduce turnaway. Ensuring pregnancies are wanted and spaced according to women's needs will help Malawi to achieve related targets put forth in the SDGs.

CONFLICTS OF INTEREST

The authors report no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data for this study are available online at https://doi.org/10.7910/DVN/OEYVC1.

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Paper II

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Article

The Provider Role and Perspective in the Denial of Family Planning Services to Women in Malawi: A Mixed-Methods Study

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Abstract: Family planning (FP) has been a global health priority for decades, yet barriers persist, including women being turned away from facilities without receiving services. This study assessed the provider role and perspective in client turnaway in three districts of Malawi. In 2019, data collectors surveyed 57 FP providers from 30 health facilities. All reported being comfortable providing FP to married women with children and married adolescents under 18 years old with children, whereas 12% of the providers expressed discomfort providing such services to married adolescents under 18 without children. Sixty percent of the providers required clients desiring FP and wishing to initiate oral contraceptives or injectables to be currently menstruating. Data collectors later conducted in-depth interviews (IDIs) with 8 of the 57 providers about client turnaway. During IDIs, providers' most frequently mentioned reasons for turnaway was client pregnancy or suspicion of pregnancy. Providers expressed fears that initiating FP with a pregnant woman could cause community mistrust in the efficacy of modern contraception. Provider support for FP waned for nulliparous clients, regardless of age or marital status. To improve FP services in Malawi, providers need continuous education on all available methods of FP, a reduction in stockouts and programs to further sensitize the community to how contraception works. Understanding how Malawi has helped providers overcome social and cultural norms regarding provision of FP to adolescents might help other countries to make improvements.

Keywords: family planning; turnaway; sub-Saharan Africa; Malawi; provider; barrier

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1. Introduction

In 1994, the United Nations' International Conference on Population and Development officially recognized family planning (FP) as a human right [1]. FP is widely acknowledged to be a key to success for several of the Sustainable Development Goals (SDGs), including those for ending poverty and hunger, promoting good health and achieving gender equality [2]. Yet, barriers to accessing FP, especially for women in low-income countries, have persisted.

The barriers to FP have been well documented and categorized, with slightly varying names or definitions, throughout the literature. Categories of barriers include those based on geography or distance from a facility; financial barriers due to the cost of traveling to the facility, missing work and/or the visit itself; misinformation, such as unfounded fear

of side effects; medical barriers, including requirements for unnecessary procedures; and social barriers based on the role of women or adolescents in society [3–5].

Previous research outlines the many ways in which providers themselves can limit access to and choice of FP methods. For example, providers may require women to come with their husbands or the permission of their husbands to initiate a method, or they may require proof of menstruation (i.e., a soiled menstrual pad) at the time of the visit as a way to rule out pregnancy [3,6,7]. Providers may also insert their opinions on appropriate family size or timing of pregnancies into the discussion, including telling women it is time for them to have another child, or restrict the use of contraception for nulliparous women or women who have had fewer than the culturally expected number of children [3,8]. Marriage requirements and minimum age requirements have also been commonly imposed by providers [3,8–10]. Additionally, providers have been found to express bias in the method dispensed to the client, such as a preference for methods that are easier for the health worker to provide, such as injectables, compared to methods that require more effort by the provider, such as IUDs (intrauterine device), which necessitate a pelvic exam [11].

In Malawi, where the unmet need for FP was 18.7% in 2015–2016, and 53% of pregnancies were unintended, the government has prioritized increasing the uptake of FP and controlling rapid population growth [12–14]. In the early 1990s, the Malawian government implemented policy changes to liberalize the provision of FP services, which until that point were known as "child spacing" services [10]. Policy changes included removing restrictions on contraceptive services due to age or marital status, removing the requirement for a husband or guardian's consent, and including an expectation that contraceptive services be provided daily and integrated into maternal and child health services. In the years following the policy changes, Tavrow et al. examined the issue of provider bias in Malawi [10]. Despite the policy changes, they found three-fifths of providers remained hesitant to provide FP to young, unmarried women without children, and two-thirds agreed "every method could be dangerous to someone" [10] (p. iv.).

The government of Malawi made more recent policy changes related to FP, including encouraging the use of the "reasonably sure not pregnant checklist" in its "2010 Preservice Education Family Planning Reference Guide" [15]. In 2010, it allowed trained and paid community health workers (health surveillance assistants (HSAs)) to provide injectable contraception in a further attempt to make FP more accessible to all [16]. Additionally, the "National Sexual and Reproductive Health and Rights Policy 2017–2022" cites repositioning FP as a key development strategy and establishes a goal to strengthen "availability, access to, and utilization of family planning services at both facility and community level" [17] (p. 25). For Malawi to achieve its SDG targets, including to "ensure universal access to sexual and reproductive health and reproductive rights", it will need to make certain that providers are not obstacles between women and their contraceptive preferences [18].

The purpose of this research study is to evaluate the role of providers in enabling FP method use and choice in Malawi, including describing provider experiences, attitudes and potential for bias. Specifically, we examine, from the providers' perspective, the issue of turnaway—a client leaving a facility without a modern method of FP on the day she sought one. The term "turnaway" has been popularized in the context of access to abortion services in the United States, but here, we use it in the context of contraception [19]. Finally, we aim to describe providers' discomfort in providing FP services to specific clients and why they feel it is sometimes necessary to turn women away without dispensing a contraceptive method.

2. Methodology

2.1. Design and Study Aim

This was a mixed-methods descriptive study that gathered data from FP providers at health facilities through a survey and in-depth interviews (IDIs) in three districts in Malawi. The data on providers were collected as part of a larger study that also collected data on FP clients to understand barriers leading to FP turnaway [5]. The aim of the research presented

here was to better understand providers' reasons for turning away women seeking FP, as well as their comfort level in providing FP to women with various characteristics (e.g., age, marital status and whether they have children). We also asked providers questions about the facilities where they work, as well as the services they provide, to better understand the realities of FP service implementation. Provider responses were written down verbatim, with minimal editing. When asking the providers about the facilities where they work, we were interested in what the providers themselves understood about the facilities, which may affect how they work, i.e., our unit of analysis in this study was the provider, not the facility. There was no attempt to validate providers' responses with actual facility assessments.

2.2. Sites

The study was conducted in 30 health facilities offering FP run by the Malawian Ministry of Health and Population—10 health facilities selected from each of the districts of Kasungu, Machinga and Zomba. These more highly populated districts were selected based on feasibility of data collection and diversity in characteristics of the districts, such as religion and modern contraceptive prevalence rates. The highest-volume FP sites in each district were identified by study staff based on recent annual aggregate-level District Health Information Software 2 (DHIS2) data of new FP clients and those restarting after a break of six months or more. Kasungu and Zomba districts were purposively selected for IDIs because they had higher turnaway rates than Machinga, while also accounting for logistical considerations [5].

2.3. Setting

Government policy states that FP services, methods and related materials are provided free to clients seeking care at public facilities in Malawi [13]. Initiating a new method of FP can be performed by clinicians (such as medical doctors), nurses or nurse-midwives (referred to here as nurses), pharmacists or pharmacy clerks, community-midwife assistants and HSAs. The method-specific training is the same for all, although nurses and clinicians receive training in general counseling to clients during their formal education that HSAs do not. Providers at both hospitals and health centers are supervised by managers in their respective facilities.

The traditional framework for provision of facility-based FP in Malawi begins with a group-counseling session. While not offered universally, facilities with enough client volume to warrant group counseling typically do so one or more days per week, after at least a few clients desiring FP have arrived at the facility. Group counseling normally covers a description of all methods, including how they work and what side effects one might expect with each. After hearing about all the methods, clients typically receive individual counseling in a private exam room, where a provider and client discuss the best method for the client and proceed with initiating the method, as appropriate. Given their roles in this process, providers are often the gatekeepers between women and contraceptive choice.

2.4. Study Sample and Data Collection

The study team aimed to survey two FP providers per site for a total of 60. Consistent with the sampling strategy, the sample size was intended to produce descriptive data and was not meant to achieve statistical generalizability. Upon arrival at the site on the day of survey data collection, data collectors asked the person in charge of the facility for the names of all FP providers, both present and not. Surveyed providers were selected from those present. If more than two FP providers were working the day of the visit, two were randomly selected using a Kish grid approach [20]. When only one provider was working the day of the visit, data collectors only surveyed one.

We planned to conduct three to four IDIs per district in at least two districts, for a minimum of six to eight provider IDIs, to gain important insights on the provider's role in FP provision to women. Within the selected districts, convenience sampling was used to select providers for IDIs, based on facility location and provider availability the day IDIs

were conducted. On the day of IDIs, which took place approximately three to six months after the surveys, the data collector asked the person in charge for the first provider on the list who had been previously surveyed. If that person was not available for an IDI, they asked for the next person on the list. In all cases, they were able to speak with one of the two previously surveyed providers.

Surveys and IDIs took place in a private space within the health facility or on the health facility grounds and were completed between October 2019 and April 2020. Surveys were conducted on electronic tablets using Open Data Kit (ODK) [21]. IDIs were recorded and transcribed by the data collectors. Providers participating in IDIs were compensated MWK 7000, or approximately USD 10, for their time, as required by the Malawian Institutional Review Board, National Health Sciences Research Committee.

2.5. Analysis

Survey results were downloaded as .csv files. Open-ended re-coding was conducted in Excel by two researchers prior to results being uploaded into SPSS, Version 26.0, where descriptive analyses were conducted [22]. Given that sampling was based on those present at the time of data collection, we assessed whether some types of providers (e.g., clinicians, midwives, HSAs or nurses) were more likely to be present and available for sampling and data collection than others to determine the representativeness of the FP provider population. IDI transcriptions were coded by one researcher with the use of NVivo version 12 [23]. The researcher performing the coding consulted a second researcher when the responses were not clear or further interpretation was warranted. Researchers used a grounded theory approach, whereby general themes and frequency of responses were analyzed based on the coded responses to the questions. Researchers assessed the data for thematic saturation using the method outlined by Guest et al., with a threshold of $\leq$5% new information to indicate saturation [24].

3. Results

3.1. Provider Survey

We conducted quantitative surveys with 57 FP providers; three facilities had only one FP provider present the day of the surveys. We did not find notable differences (data not shown) in the type of providers present or absent the day of the survey. We were able to capture a range of provider cadres providing FP. In the selected facilities, most providers (84%) were working in health centers. All but three had been providing FP services for at least one year, and among those, the average number of years providing was 5.78, but the range extended to 24 years. The majority (53%) were nurses, with another quarter self-reporting as HSAs (Table 1).

Providers were nearly evenly divided in the frequency with which they reported availability of FP services (Table 1). Different providers working for the same facility answered this question differently at 11 of the facilities. When asked about the number of clients attending FP group counseling sessions, 78% of providers reported averaging more than 15 clients per session. On facility-designated FP days, 90% of providers reported personally seeing more than 10 clients. Fewer than half of providers (47%) reported that group counseling was offered daily at their facility. The mean number of FP providers available on FP days to see clients was 5.8 (standard deviation = 7.0, range 1 to 36).

The methods most reported by providers as normally available at the facilities were condoms, oral contraceptive pills (OCPs) (combined), injectables (intramuscular, IM) and implants. Of those methods, the most common stockouts were of injectable (IM) and Jadelle implants (Table 2). Almost half of providers (47%) reported at least one day in the past week when pregnancy tests were not available, affecting 20 of the 30 facilities. When asked if providers charge clients for a pregnancy test, 9% of providers said yes, and an additional 5% reported asking clients to buy one when they run out at the facility. The providers who did so reported charging between MWK 400 and MWK 1500 for the pregnancy tests (approximately USD 0.50 to USD 2).

Table 1. Surveyed FP provider service statistics by district in Malawi, October to December 2019.

Variable	Total	Zomba	Machinga	Kasungu
	N = 57 *n* (%)	N = 19 *n* (%)	N = 20 *n* (%)	N = 18 *n* (%)
Responses	57 (100)	19 (33)	20 (35)	18 (32)
Facility Type				
Hospital *	3 (5)	0 (0)	2 (10)	1 (6)
Health center	48 (84)	15 (79)	16 (80)	17 (94)
Health post	2 (4)	0 (0)	2 (10)	0 (0)
Dispensary	4 (7)	4 (21)	0 (0)	0 (0)
What is your professional cadre?				
Nurse	30 (53)	13 (68)	10 (50)	7 (39)
HSA	14 (25)	2 (11)	8 (40)	4 (22)
Clinician	9 (16)	3 (16)	2 (10)	4 (22)
Community midwife assistant	3 (5)	1 (5)	0 (0)	2 (11)
Pharmacy clerk	1 (2)	0 (0)	0 (0)	1 (6)
How often are family planning services available at this facility?				
Daily	21 (37)	11 (58)	8 (40)	2 (11)
Weekly	17 (30)	2 (11)	7 (35)	8 (44)
More than once a week but not daily	19 (33)	6 (32)	5 (25)	8 (44)
On the days you provide family planning services, how many clients do you personally see on average?				
1 to 5	1 (2)	0 (0)	0 (0)	1 (6)
6 to 10	5 (9)	1 (5)	1 (5)	3 (17)
More than 10	51 (89)	18 (95)	19 (95)	14 (78)
How often is family planning group counseling offered?				
Group counseling not regularly offered	6 (11)	4 (21)	1 (5)	1 (6)
Daily	27 (47)	11 (58)	8 (40)	8 (44)
Weekly	11 (19)	2 (11)	4 (20)	5 (28)
More than once a week but not daily	13 (23)	2 (11)	7 (35)	4 (22)
On average, how many women attended each group counseling session?				
	N = 51	N = 15	N = 19	N = 17
10 or fewer	0 (0)	0 (0)	0 (0)	0 (0)
11 to 15	11 (22)	8 (53)	2 (11)	1 (6)
More than 15	40 (78)	7 (47)	17 (90)	16 (94)

* Hospital refers to district or rural hospitals. Central hospitals were not included.

When providers were shown a copy of the "reasonably sure not pregnant" checklist included in the pre-service training manual and asked if they had seen it before, 28% reported they had. Of those, 94% felt comfortable using it, and 87% could explain to the data collector how to use it.

3.1.1. Requirements for Clients Initiating Various Methods

Data collectors asked providers in an unprompted manner what requirements they had for clients initiating OCPs, injectables, implants and IUDs. The results in Table 3 are for providers reporting their facility regularly offered the method.

Table 2. Provider (N = 57) report of methods normally available and stocked out in Malawi, October to December 2019.

Method	Method Normally Available at this Facility? N = 57	Has a Method Normally Available Been Stocked out in the Past Week?
	n (%)	*n* (%)
Condoms	57 (100)	0 (0)
OCP *-combined	57 (100)	2 (4)
Injectable-IM	54 (95)	12 (23)
Implant-Jadelle	53 (93)	14 (27)
Implant-Implanon	53 (93)	5 (9)
OCP-Progesterone only	51 (89)	5 (10)
Emergency contraception	34 (60)	4 (12)
Injectable subcutaneous	26 (46)	1 (4)
IUD *	19 (33)	1 (5)
Tubal ligation	11 (19)	2 (18)
Vasectomy	6 (11)	2 (33)

* OCP = Oral contraceptive pills; IUD = Intrauterine device.

Table 3. Provider requirements for FP initiation at facilities that regularly offered the method, by method, in Malawi, October to December 2019.

	OCP *	Injectable	Implant	IUD *
	N = 57	N = 57	N = 53	N = 19
What requirements do you have for women initiating the method specified?				
	n (%)	*n* (%)	*n* (%)	*n* (%)
Medically eligible	38 (67)	40 (70)	42 (87)	18 (95)
Negative pregnancy test	39 (68)	38 (67)	36 (68)	13 (68)
Currently menstruating	34 (60)	34 (60)	24 (45)	9 (47)
Reasonably sure not pregnant	18 (32)	20 (35)	14 (26)	4 (21)
Negative pregnancy test if not currently menstruating	11 (19)	14 (25)	13 (25)	4 (21)
HIV test	12 (21)	16 (28)	20 (38)	7 (36)
Pelvic exam	6 (11)	5 (9)	5 (9)	6 (32)
Already has children	1 (2)	1 (2)	2 (4)	1 (5)
Spousal consent	1 (2)	1 (2)	1 (2)	0 (0)
Parental consent if under 18	0 (0)	0 (0)	0 (0)	0 (0)
Immunization	0 (0)	0 (0)	0 (0)	0 (0)
None	0 (0)	0 (0)	1 (2)	0 (0)

* OCP = Oral contraceptive pills; IUD = Intrauterine device.

Some sort of medical eligibility was mentioned by 67% to 95% of providers for the four methods. Examples of medical eligibility include no history of blood clots, no current sexually transmitted infection (STIs) and no problems with headaches or migraines. Negative pregnancy tests were mentioned as a requirement more often than current menstruation, the "reasonably sure not pregnant checklist" or a negative pregnancy test if not currently menstruating, as means to ensure a woman was not pregnant. Nearly half (47%) of providers, however, reported a stockout of pregnancy tests on at least one day in the past week.

3.1.2. Reasons Providers Were Uncomfortable Providing Certain Clients with Services

None of the 57 providers expressed being uncomfortable providing FP to married women with children nor married adolescents under 18 with children (Figure 1). Conversely, seven (12%) providers expressed discomfort providing FP to married adolescents under 18 without children. The reason most often given was "she should have children," with three providers citing this reason. Providers were most likely to express discomfort providing FP to unmarried adolescents under 18 with no children, with nine (16%) providers expressing being uncomfortable. The reason cited by seven providers was "she should not be having sex". Three felt uncomfortable because "it may be bad for her health". When considering unmarried adolescents under 18 with children, however, only two providers expressed discomfort, with one citing "she should not be having sex" and one citing "it may be bad for her health".

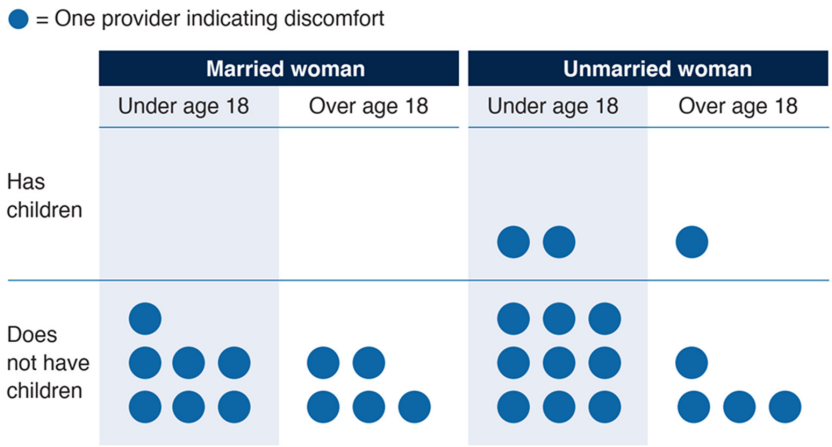

Figure 1. Providers who responded they were uncomfortable providing FP services to each type of client.

As indicated by the "uncomfortable" responses displayed in Figure 1, providers expressing discomfort were most often uncomfortable with clients who did not have children. No cadre of provider expressed discomfort more frequently than the others. HSAs, nurses and other providers all experienced discomfort.

3.2. Provider In-Depth Interviews

In-depth interviews were conducted with eight FP providers—four in Kasungu and four in Zomba. As described by Guest et al., using a base size four (analyzing four IDIs) and run length of two (adding results from two more IDIs to determine how much new information was added) as evaluation parameters, we reached the $\leq$5% new information threshold (3%) at six interviews, providing confidence that our sample reached thematic saturation [24].

Providers' years of experience in providing FP ranged from 1 year (although she had previously worked in obstetrics for 25 years) to 9 years. Five were nurses, one a clinician and two FP providers; six were female and two were male. While some providers had received training on FP while in school, more recent experiences varied between formal refresher training and on-the-job training. The methods respondents reported as providing corresponded with the methods on which they had been trained. The method-specific training mentioned, including that for implant insertion and removal, and subcutaneous injectables, had been sponsored by nongovernmental organizations.

The thematic analysis identified four domains most discussed by providers: the client types some are uncomfortable providing contraception for, reasons providers turn clients away without a method, community-held beliefs and myths about FP, and areas for service improvement.

3.2.1. Client Types Providers Are Uncomfortable Initiating on Family Planning

The interviewers followed up on the survey results of providers uncomfortable with providing FP to certain types of clients, including those who were unmarried, without children or adolescents. All eight providers expressed that medically eligible women should be treated equally and given a method. One noted, "the golden rule is everyone who wants to have a FP method should get it". Another said, "Yes, because they have a right . . . I cannot deny them".

Despite this, some providers continued to express unease with providing a method to adolescents. For example, one provider expressed feeling particularly uneasy when providing FP to young adolescents (13–14 years old), because of what being sexually active might mean for the girls' ability to do well in school.

> *As for me, teenagers are very hard for me to provide the method most of the time. I still feel they may not concentrate on school or what they're doing. Some of them are very young like 14; some of them are as young as 13. So it's very hard for me to provide the methods to them though I still provide. Most of the health workers there, we even ask each other, should I still provide? None of us are comfortable providing to teenagers because we just become afraid, I don't know why. Sometimes we are afraid that maybe they might have uterine fibroids, and sometimes we are afraid that they may not continue school and not concentrate.*

The provider went on to say,

> *Personally, it's not been medically proven but most of us just worry that they might have problems when they get married and want a baby. Fertility might not return as quick as we think, or most of us are afraid that maybe because they protect themselves against pregnancy, but are they protecting themselves against the STIs?*

Another provider expressed discomfort with indecisive clients,

> *Sometimes I am uncomfortable to provide permanent methods to the indecisive ladies. If she says I haven't really talked to my husband, then I tell her to go back so she can discuss it with her husband.*

3.2.2. Reasons for Turnaway

The most frequently mentioned reason for turning away clients seeking contraception, mentioned by seven out of eight interviewed providers, was when the woman tested positive for pregnancy or showed signs of pregnancy. Two providers mentioned turning away women who had missed their last period, and two mentioned turning away those who were not currently menstruating. According to one provider, some women seek FP due to a belief that initiating contraception while pregnant will induce an abortion. As a result, providers reported insisting on pregnancy tests for anyone with a missed period before dispensing a method.

Because of myths we find a lot of women who are already maybe one month pregnant, but most think that if we give them a method they will abort. That's why after one or two months you see a good number of women who come wanting to be put on Implanon, but after assessing you find that they are pregnant. And they are open, they tell you that I thought that if you put Implanon in me the pregnancy will go away.

. . . for some, they would say they are suspecting themselves to be pregnant so we offer them [a pregnancy test] to rule out pregnancy, and sometimes when they are saying that they are having menses we would even see, because some can cheat to say that they are having menses just to get a method, which is not good for them.

Additionally, women who are already pregnant and initiate a method may conclude that FP does not work.

And mainly they come back to say that your methods are not working, that's why I'm pregnant, so we have to make sure that sometimes they're not pregnant and then we give a method.

Six of the eight providers accurately listed clinical reasons for turning away clients, such as elevated blood pressure when seeking hormonal methods, or sexually transmitted infections when seeking an IUD. One incorrectly reported that FP is less effective with older women due to their "weak uteruses".

Six providers mentioned stockouts as a reason for turnaways, most frequently citing injectables (cited by six providers), but IUDs (cited by four providers) and the materials needed for IUD insertion (cited by two providers) were also mentioned as having been recently stocked out.

One provider discussed turning away clients whose husbands were not aware of their wives' use. The explanation given was,

. . . especially implants the women cannot hide it because someone can see it, so if the husband realizes that the wife has a family planning method it brings conflicts to the family, which will force the woman to come seek for removal when the days are not due.

Arriving late, not having a health book and no availability of a trained provider for a particular method were each mentioned by one of the eight providers as reasons for turnaway.

Based on the survey results, we followed up in the IDIs on the possibility of being turned away for refusing HIV testing. Providers reported that knowing one's HIV status was recommended when initiating FP, but refusing a test or not knowing her status would not be a reason to deny someone a method. Instead, the information is used to help women choose the most effective method if taking antiretrovirals.

3.2.3. Provider Reports of Community-Held Beliefs and Myths about Family Planning

Providers were asked about beliefs and myths shared in the community regarding FP. In total, 13 beliefs or myths were identified about FP. Four providers mentioned the belief that only women who have had children, or a certain number of children, should use FP; one noted a belief that women should have four or five children before they get a bilateral tubal ligation (BTL). Another provider noted that use of youth-friendly services by nulliparous adolescents provides evidence that this belief may be changing in communities. Two providers discussed a community-held belief that using FP will reduce a woman's sex drive. Box 1 contains beliefs mentioned by individual providers.

Box 1. Community-held beliefs and myths about FP, as explained by FP providers

- Only women with children (or a certain number) should use FP.
- Using FP reduces a woman's sex drive.
- Young people should not use FP; they might be ridiculed and called prostitutes if they are known to be using FP.
- Initiating a method can induce an abortion.
- Implants and IUDs can cause pain to men during intercourse.
- FP causes the uterus to swell.
- Implants can migrate to the heart or stomach.
- FP methods used by women can cause impotency in men.
- OCPs can accumulate in the stomach.
- In the community, there is a preference for methods provided by the witch doctor.
- If a woman initiates soon after delivering a child, she might be promiscuous as local custom says sexual relations should not re-start for 6 months.
- FP can cause sterility.

3.2.4. Areas for Service Improvement

When asked what they would need to improve in the services they offered, providers most frequently mentioned training, reducing their workload and reducing stockouts of methods and supplies. Some facilities do not have anyone available to insert IUDs or perform BTL, and some are overly dependent on one or two providers who are trained on these methods. For example, one provider expressed frustration that when the sole provider trained to provide BTL at their facility had been transferred to another facility, his/her facility was no longer able to provide that method. In addition, one provider expressed a desire for more exam rooms, as inserting long-term methods can take a while, leaving other clients to wait for extended periods.

Another provider highlighted the importance of improving community education on FP, noting community members were unaware of how the methods worked and that they would not work if a woman was already pregnant. A different provider lamented the myths that spread about particular methods and how that affects the service volume faced by providers.

> *The misconceptions and the myths, they are still circulating in the villages. If somebody sees a side effect of a certain family planning method, she may choose to discourage friends who want to take the same method. You may see a lot of women who have been told by their friends about side effects hence discouraging them to take the method which are we are encouraging women to take. One example is Jadelle. One year you will see a woman has come who has taken Jadelle, and next year she is coming and saying it is doing me such bad things in my body. When you ask, you see that she has just gotten the message from a friend it will kill you, so that's our major challenge. We may waste a lot of Jadelles because of these myths and misconceptions.*

Given the pressure in the community to restrict adolescent FP use, one provider reported coming in extra hours to see adolescents at times when their confidentiality could best be protected.

4. Discussion

This mixed-methods study explored providers' level of discomfort in initiating FP methods with various categories of clients and other reasons for client turnaway. We found providers to experience the most discomfort when initiating contraception with nulliparous women, with little to no discomfort when initiating contraception with other categories of women based on marital status or age. Providers reported that service delivery would improve with reduced workload and frequent stockouts of at least one method of FP. Both factors plausibly contribute to client turnaway. This finding is supported by our research on client turnaway, showing clients were most often turned away due to a lack of providers

or methods and rarely for reasons such as age or parity [5]. The most frequently mentioned reason for turnaway by providers during IDIs was client pregnancy or suspicion of one.

Nearly 30 years have passed since research by Tavrow et al. described provider actions as discouraging, delaying or denying women FP [10,25]. Hazel et al. found continued evidence of provider mistreatment of clients in their research in six districts of Malawi in 2018, including refusal of service, not accounting for the client's method preference and humiliation, such as verbal abuse, by the provider [26]. Our research more closely followed the issues noted in the Tavrow study and found improvement on those issues, especially in their openness to provide FP methods to adolescents. None of the providers we surveyed reported requiring parental consent before dispensing FP to adolescent girls, whereas more than a quarter believed they needed it in the mid-1990s [10]. Less than a fifth of providers expressed concerns about providing FP to unmarried adolescents under the age of 18 without children—down from 40% of providers who had expressed discomfort with this group in the Tavrow et al. research [10]. Although the methodologies of the studies were different, all of the providers we spoke with during IDIs noted the obligation of providers to give FP to all women who wanted it and who were clinically eligible.

According to providers, however, this openness to FP is not equally supported in the community and notably not for adolescents. Adolescent pregnancy is a problem in Malawi, where 29% of women aged 15–19 years have begun childbearing [12]. Research in one district of Malawi on the subject of adolescent reproductive and sexual health summarized the conflicting cultural viewpoints that place a high value on both motherhood and education but, by law, mandate a 12-month absence from school when girls become pregnant [27]. Similarly, sexual relations for adolescents are discouraged, but sexual initiation ceremonies for girls are commonly practiced around the time of first menses, and transactional sex with older men is common [27]. These complexities are reflected in the responses of the providers we interviewed who worried whether an adolescent girl in need of FP would be able to concentrate on schooling.

As the survey indicated, the factor that most caused providers unease was dispensing FP to nulliparous clients, regardless of other factors, such as marital status or age (Figure 1). Motherhood is highly valued in Malawi, and there are superstitions around not having any children in a marriage; having several children is the ideal for most [28,29]. While the mean ideal number of children per family has declined from 5.1 in 1992, it remained at 3.7 in 2015–2016 [12]. Social and cultural norms are known contributors to provider bias, but as demonstrated in research conducted in Ghana in the late 1990s, a lack of understanding of the science behind how contraception works, or an inadequate belief in the science, can also lead to provider bias [9,11,30]. Beliefs persist in Malawi that initiating modern FP methods too young may lead to infertility, or that one should "know" their fertility by having a child before starting to use FP [27,29]. Providers did not mention parity in their reasons for turning away clients in the quantitative survey, but during the IDIs, half of the providers cited a belief that women should have children, or a certain number of children, before using FP. Although one provider acknowledged this is not supported by science, this belief likely rests on the fear that young girls could become infertile in the future because of early FP use.

During IDIs, providers articulated beliefs and myths held by community members about FP. Although several of the myths were mentioned by only one provider, they are the same or similar to FP myths noted in the literature [31–33]. In addition, providers noted that if community members had a better understanding of FP and how it works, they would not need to spend so much time inserting and removing implants, for example, due to rumors women hear in the community about the method. Further, they noted that community members might accuse a young girl in need of FP of being a prostitute and said that community members often did not understand how various methods worked, instead believing misguided myths concerning FP.

Establishing that a client was not pregnant was also important to providers. When available, providers mentioned requiring negative pregnancy tests. They also relied heavily

on proof of menstruation to rule out pregnancy. That 14% of providers reported either charging for pregnancy tests or asking clients to provide their own, when they should be free and available, is a potential barrier to accessing FP. Some responses to the question varied among providers working at the same facilities, indicating that charging for pregnancy tests may not be a facility-level practice, but rather implemented by individual providers. Research in Malawi based on the value of the dollar in 2016 showed the procurement cost of pregnancy tests in Malawi ranged between USD 0.08 and USD 0.25—less than the USD 0.50 to USD 2 providers in our survey reported charging [34].

The qualitative results, however, provide a rationale for the importance of ensuring a client is not pregnant before she initiates a method—the providers' concern that if they initiate a pregnant client on FP, she will tell others in the community that modern FP methods are not effective. Providers claimed this can cause the community to lose trust in the efficacy of modern contraception. In addition, providers reported instances of women seeking a method of FP in hopes of inducing an abortion despite neither OCPs, injectables nor implants being abortifacients. Another consequence of pregnant women seeking FP with hopes of inducing an abortion is that they may delay seeking antenatal care in the meantime.

Few providers, however, reported having heard of another method of ruling out pregnancy—the "reasonably sure not pregnant" checklist—despite it being included and frequently mentioned in their pre-service training materials [15]. Better familiarity with, and use of, the checklist could help providers bridge the gap when pregnancy tests are not in stock or in cases when pregnancy can easily be ruled out without the use of a hormonal test. A refresher training on the checklist, along with support for its use from provider champions, as suggested by Carlough and Jacobstein, could be particularly impactful in allowing women without risk of pregnancy to initiate modern FP [30].

Other provider requirements for initiating a method, beyond medical eligibility, were few. Although about a third of providers mentioned requiring an HIV test, offering one is part of the regular FP initiating protocol. When this matter was explored further in the IDIs, providers reported they would not deny a method to a client who had not had a recent HIV test, but rather they used information on HIV status to recommend an appropriate method for those on antiretrovirals. This is again supported by client surveys on reasons for turnaway, which showed no women citing the primary reason for turnaway being refusal of an HIV test [5].

In several cases, providers working at the same facilities answered questions about that facility differently, including the frequency with which FP services are available and the availability and stockout of methods and pregnancy tests. This emphasizes the unevenness in which these services may be delivered by individual providers. Method stock may fluctuate during the week; pregnancy tests may be accessible to some providers and not to others within the same facility; and only some providers may be trained to provide particular methods. Providers also reported daily offer of group counseling more than daily offer of FP services, which may reflect its inclusion in routine health education talks, antenatal care services and routine growth monitoring.

Our results showed Malawi doing better in some ways suggested by Carlough and Jacobstein to address provider bias than in others [30]. Providers expressed a desire for more training on methods they are not familiar with, which, coupled with championing providers and a stronger focus on the benefits of FP in relation to risks, would undoubtedly result in better service and fewer turned-away clients. A more regular supply of commodities would help providers in their same-day service provision, as would facilities to accommodate more clients simultaneously, rather than a single family-planning exam room.

This study benefited from a mixed-methods approach and is the first study to re-examine the reasons for client turnaway in Malawi studied by Tavrow et al. (1999). It is a strength that it explores client turnaway, and specifically, the proportion of clients turned away for particular reasons, information that has been lacking in the literature. Similarly, barriers to family planning have not been frequently examined since the 1990s

and early 2000s. Another strength of this research is that it was conducted in 30 facilities, stretching across three districts. Although we acknowledge our study has limited statistical generalizability beyond the three districts and clients served in other types of facilities, the selected facilities are typical of the types found across the country. Alternative methods for collecting data on provider requirements for initiating various contraceptive methods, such as simulated clients or direct observation, were not possible; these might provide more reliable data but come with their own drawbacks. IRB approval for simulated clients has proven difficult, despite it being employed in quality assessments in Malawi. Direct observation can be uncomfortable for clients and introduces the risk of the Hawthorne effect, whereby a person being observed may modify their behavior as a result of being observed [35].

5. Conclusions

Providers were generally supportive of FP for anyone desiring and medically eligible to use it, but their support waned for nulliparous clients, regardless of age or marital status. Understanding how Malawi is able to help providers overcome social and cultural norms regarding the provision of FP to adolescents, in particular, would help other countries to determine whether similar interventions might prove successful in their own settings. Provider concerns in dispensing FP to nulliparous clients focused on fears of future sterility and mistreatment in the community if young women were discovered to be using contraceptives. Further education and sensitization of the community to how contraceptive methods work, as well as dispelling common myths and encouraging more acceptance of the use of FP, may also put providers' minds at ease and allow them to feel less out of step with their communities. Providers expressed a desire for more trained providers in all methods, a reduction in stockouts of methods and supplies, and more exam rooms to accommodate the full client load. Investigation should also be conducted into how providers can be better supported.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study are openly available in Harvard Dataverse [doi:10.7910/DVN/S7NXKL].

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Paper III

Title: Turned away and sleeping apart: Women's perspectives on and experiences with family planning denial in Malawi

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Abstract

Introduction: Barriers to family planning for potential clients have been explored in the literature, but rarely from the perspective of the women themselves in a low-income setting. This research aimed to understand clients' perspectives on being turned away from receiving a method of family planning at a facility on the day it was sought.

Methods: Three focus group discussions were held in two districts of Malawi in 2019 with clients who had been turned away approximately three to six months prior.

Results: The reasons for turnaway participants mentioned fell into eight categories: no proof of not being pregnant, method and/or supply stock-outs, arriving late, provider unavailable, provider refusal, needing to wait longer after delivery of a child, financial constraints, and medical reasons. Participants

were often turned away more than once before finally being able to initiate a method, in some cases returning to the same facility and in others finding it through community health workers, traditional healers, or private facilities. Clients often resorted to sleeping apart from their husbands until they could initiate a method and reported stress and worry resulting from being turned away.

Conclusions: Turnaway is almost always preventable with better knowledge and more client-centred attitudes among providers. It is stressful for clients, who often make several attempts to find a method after turnaway. Increasing the availability and use of pregnancy tests or screening checklists to rule out pregnancy, having a more reliable supply of methods and materials, increasing the number of providers—including those trained in all methods and trained to have a patient-centred attitude—and providing family planning services daily would help reduce turnaway in Malawi and potentially other settings with similar barriers. Improved access to family planning will help counties achieve their Sustainable Development Goals.

Introduction

The importance of high-quality family planning (FP) services in achieving the Sustainable Development Goals (SDGs) cannot be underestimated. Traditionally recognised for its role in maternal and child health, FP also contributes to the success of the SDGs of eliminating extreme poverty, increasing health and well-being, ensuring quality education for all, and lessening the impact of climate change, among others (Starbird et al., 2016; United Nations, 2015). In 2019, 218 million women in low- and middle-income countries were estimated to have an unmet need for FP (Sully et al., 2020). In many cases, unmet need can be attributed to the various barriers women face in accessing FP (Starrs et al., 2018).

FP barriers that have been frequently categorised in the literature include geographic (e.g., long distances between clients and services), financial (e.g., unaffordable methods, services, or transportation to obtain a method), and medical barriers (Bertrand et al., 1995; Campbell et al., 2006; Starrs et al., 2018). Medical barriers can include non-medically necessary policies or practices 'that inappropriately prevent clients from receiving the contraceptive method of their choice or impose unnecessary process barriers to access family planning services' (Bertrand et al., 1995). For example, a medical barrier could include requiring direct observation of menstruation (i.e., a soiled menstrual pad) to rule out pregnancy, lab tests, or vaccinations (Campbell et al., 2006; Stanback et al., 1997; Brunie et al., 2013; Hazel et al., 2021). Clients may also face barriers due to a lack of information on how FP or

particular methods work, stock-outs of supplies or methods, or bias on the part of providers (Solo and Festin, 2019; Campbell et al., 2006; Bertrand et al., 1995).

In the case of provider bias, providers may require clients to be married or of a certain age or may impose their own beliefs regarding ideal family size or spacing of pregnancies, including limiting the use of contraception for nulliparous women or women who have had fewer than the socially accepted number of children (Campbell et al., 2006; Stanback and Twum-Baah, 2001; Tavrow et al., 1995; Tumlinson et al., 2015). Providers may also determine the method dispensed to a client based on ease of initiation or available supplies (Solo and Festin, 2019; Farmer et al., 2015; Hasselback et al., 2017). Some barriers can lead to women being turned away from receiving a preferred FP method on the day they seek one (Peterson et al., 2022b).

The term 'turnaway' was first used by researchers exploring access to abortion services in the United States (Biggs et al., 2017). It can result from the intentional actions of a provider or facility circumstances, including closures or understaffing of facilities, long wait times, stock-out of methods or supplies, or FP being offered only on certain days of the week (Peterson et al., 2022b). Unlike evidence on the presence and types of barriers to FP facing women, evidence on the impact of denying FP methods is sparse (Solo and Festin, 2019). Although related issues such as a limited method mix resulting from provider bias or method stock-outs have been explored, these studies have not given a strong voice to women on the effects of limited choice and access on their lives (Solo and Festin, 2019; Bertrand et al., 1995). In this paper, we describe client experiences with turnaway from FP with the aim to explore and analyse the reasons women understood they were turned away and the potential outcomes and consequences.

Setting

Malawi is a country of approximately 17.5 million people in southern Africa (Malawi National Statistics Office, 2019). It is divided into three regions and 28 districts, with approximately 86% of the population living in rural areas. Christianity is the most common religion, with 77% of the population practising some type of Christianity, whereas Muslims account for 14% of the population.

Malawi has a total fertility rate of 4.4, an infant mortality rate of 42 per 1,00 live births, and a maternal mortality ratio of 349 per 100,000 live births (Malawi National Statistics Office, 2017; World Health Organization, 2019). The modern contraceptive prevalence rate for married women is 58%, with an

unmet need for FP of 19% (Malawi National Statistics Office, 2017); the turnaway rate has been estimated to be 15% for three districts studied (Peterson et al., 2022b). Fewer than three-quarters (72%) of women are literate (Malawi National Statistics Office, 2017). Malawi is one of few sub-Saharan African countries to reach the Millennium Development Goal 5, to lower child mortality, which was achieved through general health system strengthening, among other activities (Gunnlaugsson and Einarsdóttir, 2018; Haraldsdóttir et al., 2021).

From 1982 to 1992, Malawi had a conservative FP policy in place requiring women to be married, undergo a full physical exam, meet age and parity restrictions, and have permission from their husbands to initiate FP (Tavrow, 1999; Devlin, 2017). Health facilities offered FP services only once per week (Tavrow, 1999). In 1992, the Ministry of Health and Population (MOHP) introduced a new FP policy relaxing many of these restrictions (Tavrow, 1999). The policy eliminated requirements related to age, parity, and permission of husband and allowed FP to limit births rather than just birth spacing. It also set the expectation that FP services should be offered daily at MOHP facilities.

Today, trained community health workers in Malawi are allowed to initiate women on oral contraceptive pills (OCPs) and injectable contraception, but facility-based services remain an important source of FP for many women in Malawi (Government of Malawi, 2009). Facility-based FP services generally start with a group counselling session for prospective clients, which is held in the mornings. During the session, various FP methods are explained to clients, including their possible side effects. After the group counselling session has ended, clients speak with providers individually to decide upon and receive a method, as appropriate and available.

Methodology

This qualitative study was part of a larger mixed-method study that gathered data on clients and providers from FP units in 30 health facilities in three districts in Malawi from October to December 2019 (Peterson et al., 2022b; Peterson et al., 2022a). In the first part of the study, clients who were turned away from receiving a method of FP at a facility on the day they sought one participated in a survey on the day of turnaway. Clients who agreed and provided a phone number were followed up six- and 12-weeks post turnaway. At the time of the 12-week follow-up—or the six-week follow up for those reporting pregnancy at six weeks—research assistants asked clients via telephone if they would be willing to participate in a focus group discussion (FGD). The two districts with the highest turnaway rates were selected for the FGDs. Data collectors attempted to reach all clients who lived in the two selected

districts and stopped when they had eight participants agreeing to participate. No alternate participants were selected. Turned-away clients were eligible for an FGD if they had access to a phone, were willing to be contacted, and expressed interest in participating.

We chose to use FGDs to allow women to share their experiences in their own words. Qualitative research, including FGDs, allows for a greater understanding of complex issues than quantitative methods alone and offers greater opportunities to bring unanticipated findings to light (Baum, 1995; Bryman, 1984; Krueger and Casey, 2000). In our case, qualitative research put the turned-away clients in the position of expert witnesses and allowed researchers to see the world through their eyes (Bryman, 1984). In some cultures, participants may feel shy about sharing personal information in a group setting. In Malawi, however, local researchers advised that clients would feel more comfortable sharing personal information in an FGD than in individual interviews because, in a group setting, they would know that others were also sharing such information; thus, the risk of social desirability bias would be reduced (Elrofaie, 2020).

Study design and data collection

The qualitative data presented here are taken from three FGDs with turned-away clients conducted three to six months after turnaway. The number of FGDs was constrained by cost and feasibility. The turned-away clients came from two districts in Malawi, Kasungu and Zomba. The team intended to include six to eight participants per FGD, but in two cases, five participants attended. Discussions took place in a private space at available primary school classrooms in each district in late March and early April 2020. Clients participating in FGDs were compensated 7,000 Malawian kwachas, or approximately US$10, for their time, as required by the Malawian institutional review board, the National Health Sciences Research Committee (NHSRC). Although COVID-19 had not yet been detected in Malawi at the time of the FGDs, rates were rising throughout the world. To accommodate social distancing in their transportation to and from the FGDs, participants were offered transportation reimbursement and encouraged to use transportation that could best ensure social distancing (motor taxi in place of minibus, for example). Those needing reimbursement for transportation received US$2–US$15, depending on the distance travelled and means of transportation used. The data collection team consisted of a lead interviewer and a note-taker, both women. FGDs were conducted in Chichewa.

Data management and analysis

FGDs were audio recorded and transcribed directly into English by the lead interviewer; transcriptions were reviewed by the note-taker present at the FGDs. Transcriptions included bracketed notes from the transcriber/lead interviewer to add context to comments where necessary. Further context was provided by Malawian members of the research team. To analyse our FGDs results, we imported transcripts into NVivo (QSR International Pty Ltd., 2018). We used grounded theory to analyse the transcripts, first by open-coding to find similarities and differences in results, then using axial coding to establish connections between categories and subcategories, and finally, selective coding to establish core categories, themes, and the grounded theory (Priest et al., 2002). We performed inter-coder agreement checks with two coders and discussed any discrepancies until we reached agreement. Demographic information for the FGD participants was based on follow-up surveys conducted six and 12 weeks post turnaway. Specific comments made during FGDs were not linked to the demographic details given at the time of the initial survey.

Ethics

The study protocol was reviewed and approved by FHI 360's Protection of Human Subjects Committee in Durham, NC, USA, as well as the NHSRC in Malawi. All study staff completed training on research ethics, the protocol, and informed consent administration. All participants provided their written informed consent to participate.

Results

Three FGDs were held—two in Kasungu District with five participants each and one in Zomba District with six participants. Participant quotes are presented verbatim with minimal editing for clarity.

Participant background and demographic data

Demographic data for FGD participants were collected during the exit survey conducted at the facility the day they were turned away. The participants were on average aged 26.3 years (range 19-42). All but one was married, and all had given birth at least once, including eight who had given birth within six months of the day we first spoke to them. Sixty percent had a primary school education; the remaining 40% had a secondary school education. One of the participants reported on the six-week survey that her

husband/partner disapproved of her use of FP; the others reported their partners had approved FP use. Based on the six-week post-turnaway survey, over half of the FGD participants were able to start a method by that time, and three more were able to start by 12 weeks post-turnaway.

Reasons for 'turnaway'

After establishing the meaning of the term 'turnaway' with FGD participants as leaving a health facility without a method of FP on the day a client wanted one, facilitators asked about why clients get turned away. Using thematic analysis, the reasons for turnaway most commonly discussed were classified into eight categories (Figure 1). All were mentioned in two or more FGDs.

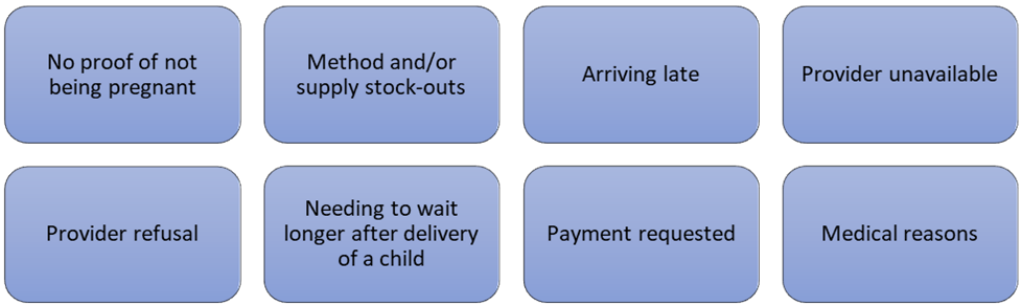

Figure 1. Categories of reasons for turnaway after seeking contraception method at health facility, participants in Kasungu District and Zomba District, Malawi, March–April 2020.

No proof of not being pregnant

Women discussed being turned away when they could not demonstrate they were not pregnant. If they had missed a period, or came in between periods, health workers asked them to come back after taking a pregnancy test or while they were menstruating. In some cases not menstruating was mentioned in the context of initiating a new method, but in many cases the participants were referring to clients coming for a reinjection. Women noted this was particularly unfair for women who missed a reinjection date by just a few days, given that missing periods while using injectable contraception is common.

> If the day you were appointed to come for FP and you did not come and go the following day, they turn you away so that you get a pregnancy test first, so they see evidence that you are eligible to access FP. (FGD-03-05)

> If a woman has gone after the appointed date has passed, she is told to come back when she is menstruating. It's not right because some methods make some women not to menstruate … For example, Depo [injectable], most people stop menstruating when they are using this method, and yet the providers want you to menstruate first as proof that you are not pregnant. This is not right. (FGD-02-02)

Method and/or supply stock-outs

Facilities can run out of methods or the supplies needed to initiate a method, such as the trocar needed to insert a contraceptive implant. Known as 'stock-outs', this reason for turnaway was frequently mentioned by FGD participants. Specifically noted by the participants were stock-outs of injectables, implants, intrauterine devices (IUDs), and insertion materials. In some cases, participants said that during a stock-out the providers would give them advice on where else they could go to get the method or a future date when the method should be back in supply. Women also mentioned being advised to use pills or condoms while waiting for injectables to be available. But other women reported that they had not been offered any backup methods and had simply been turned away. One participant gave an example of the consequences of stock-outs:

> Sometimes they know that we are going to get our children checked by the scale [at the under-five growth monitoring clinic], but the stock is little, like for Depo [injectable], to cater for all of us. They communicate when we should come back, but while waiting some women end up pregnant. (FGD-03-05)

Participants found it disappointing to be turned away for method or supply stock-outs but understood this reason for turnaway when all women seeking that method were turned away.

Arriving late

Participants explained that they can get turned away when there are too many clients for providers to see by a certain time. In one example, a participant reported that providers will see clients up until 2pm, but any clients still waiting at that time are asked to come back another day. In other cases, clients who arrive late to the facility are turned away upon arrival. 'Like for [Health Center], they open at 8 o'clock, so if you are late beyond 11 o'clock, they send us away,' one client explained. (FGD-03-04)

Another participant tried to access two services on one day, making her late for FP services:

> The second time [I was turned away] they said that I came in late. That day I was also weighing my child [at the under-five growth monitoring clinic]. When I explained, they said that I should only come for one thing. (FGD-03-02)

Being turned away for these reasons was frustrating for clients who came long distances and preferred to receive more than one service in a single trip to a facility, but other participants saw it as fair.

Provider unavailable

Providers must not only be present but also trained in all methods. Participants described being asked to return on a different day when the provider trained to supply a particular method was not present the day they were seeking it. 'For example, if you want the method placed in the arm, the providers know that the person responsible to insert the method is not around, they advise that you come the following day when the specific provider comes around.' (FGD-03-05)

Another client shared another example of a difficult to understand reason for turnaway,

> Like when you go and you know that you don't react well to Depo, and you want to collect pills, they tell you that 'we have no pills' or the person responsible to supply pills is not there. You end up disappointed, because the pills are needed every day. (FGD-03-02)

Clients also discussed that providers may get pulled in to work with other clients, such as those in need of immediate care, leaving FP temporarily without a provider. Although clients could understand the need for FP providers to respond to emergencies circumstances, they found this disappointing and frustrating, nonetheless.

Provider refusal

Participants described situations in which providers refused to give them a method. They had trouble understanding why they should be turned away just because a provider was tired, or wanted to take a lunch break, or had other responsibilities to tend to. One participant said, 'The supplies may be available, but [the providers] will say they are tired, and the clients won't get the methods.' (FGD-01-01).

More frequently mentioned was refusal when a client showed up for a reinjection, but not on the assigned day. One participant explained, 'FP days at our facility is Tuesday and Thursday. If the

appointment date falls on a different day other than Tuesday or Thursday, we are turned back. Sometimes we end up falling pregnant as a result of this.' (FGD-02-03)

In some cases that participants found frustrating, providers appeared to be saving the requested method for particular women, such as those who arrived in cars or who had 'personal connections' to the providers.

> It also happens at our health facility that others access the same FP methods you are going for, and yet we are turned away. Usually they prefer well-to-do people: those that have come by car go straight in the provider room and get assisted, while the rest of us are sent back. Sometimes they judge us with the way we are looking or are dressed; we are turned away without any assistance. (FGD-02-01)

Needing to wait longer after delivery of a child

Some FGD participants had been told they had come to initiate FP too soon after delivery. 'Sometimes they tell us that the baby is still young, so it is impossible to get a method of FP before the baby reaches six weeks.' (FDG-03-01) Participants said they had been told to wait until six weeks after the birth of a child to initiate a method, without mentioning the particular method they had been denied or if they had been offered a backup method in the meantime, such as progesterone-only pills or IUDs, which can be used immediately after delivery.

Payment requested

Despite methods being offered for free at public facilities, FGD participants noted several examples of providers asking for payments from clients. Some participants mentioned providers selling methods for a profit or needing to be 'connected' to a provider to receive methods that are in short supply. One participant said, 'It happens that sometimes that some [providers] are selling the family planning methods, so maybe money is hard to find, so we fail to access FP.' (FGD-03-01). Another said:

> The providers share amongst themselves. We go to the facilities, and they tell us that there is a stock-out, but the same provider will tell you that the same method he has at home. So, I was wondering why the FP services are found in their homes and not at the health facility. I did not go to their house to get. (FGD-02-01)

Yet another participant mentioned making payments. When asked to clarify if the payment was for all services or particular services, she explained:

> It's mostly the method one is looking for, to help build another hospital. Like when I went there, they said we should pay 200 kwachas, and then the person handling the records suggested that we pay more the next time we go, like add 300 kwachas so that each one should contribute 500 kwachas [approximately USD 0.60] in total. (FGD-02-04)

Participants expressed frustration in these cases and did not understand why they should have to pay for methods that should be available for free. They reported refusing to pay and instead going without FP until it could be obtained for free.

Medical reasons

Women also discussed medical reasons for being turned away, including showing up before a scheduled resupply or reinjection date, anaemia, high blood pressure, and risk of blood clots. One participant said, 'For me, when I was getting a removal, they denied me another method because I was told I have anaemia and so I was told to wait for 3 months to observe the situation.' (FGD-03-03)

Participants understood that for medical reasons, some methods were incompatible with some women.

What do clients do when turned away?

Participants mentioned several approaches they take to coping when turned away. Most frequently mentioned was sleeping apart from their husbands to abstain from sexual relations. This was preferred to "eating sweets still in their wrappers," the local saying used to describe having sex with condoms. But women also mentioned the failure to obtain a contraceptive method leading to quarrels with their husbands, who sometimes felt their wives had deliberately failed to get a method because they wanted more children.

Other coping mechanisms discussed were returning to the facility on a different day, seeking FP through an outreach service, and accepting a second-choice method in place of the one they preferred. Accepting an alternate method was usually noted in conjunction with a second or third turnaway. Going to a health surveillance assistant (HSA), who is a paid and trained community health worker, a

traditional healer, or a private facility, were also mentioned. One participant said there was nothing she could do because other facilities did not exist in her area. Several noted the stress of the situation. One participant said, 'You get stressed when turned away. You go everywhere. You ask friends, neighbours, and HSAs for help.' (FGD-03-06)

Participants in all three of the groups discussed the advantages of going to private facilities when they can afford it, because at private facilities all methods are in stock and available. They tried other facilities—either public or private—when they felt they had not been treated well by a provider or thought they had a better chance of accessing a preferred method.

> I didn't take long before I sought a method. I knew that my husband sleeping alone was not a good idea, so I tried hard to visit [the District Hospital] to look for my method, and so I got it a week later. (FGD-01-01)

Participants said they did not return to any facility when they were geographically isolated and/or had to pay large amounts in transport to get to a facility. 'Sometimes the transportation is tricky. You see that you travelled a long distance only to not be turned away. So, you start contemplating on not going [back] for fear of experiencing a similar predicament.' (FGD-01-06)

Finally, unwanted pregnancies were noted as an unfair consequence of turnaway. 'Sometimes you go to access FP methods, and you are not assisted, it leads to an unexpected pregnancy, so this is hurtful.' (FGD-03-06). As described by another participant, 'It's not right to be turned away, because if we get turned way there are high chances of us getting pregnant and we will be giving birth frequently.' (FGD-01-01)

Multiple turnaways are common

Participants in the focus groups described being turned away one to three times in relation to the time we first met them. Many went back in the week following the initial turnaway and were then able to initiate a method. But for others it was more difficult. One participant said, 'The first time I was turned away was in December due to a holiday. The second time they told me there was a stock-out of sterilizing materials. I got a method on my third try.' (FGD-03-03)

Another participant looking for an implant explained, 'After being turned away from [my local] health centre, I went to another hospital, but I didn't find it again, and then I found [an outreach service] and that's where I got it.' (FGD-02-05)

One participant spoke of finding implants stocked out twice, and then the materials for inserting implants were unavailable, so she finally agreed to an injectable instead. Another participant said after two unsuccessful attempts at her local public facility, she visited a private facility and was able to initiate a method.

Perceived quality of services

When asked about providers during the FGDs, participants expressed several concerns about the quality of the services provided. For example, participants mentioned that providers do not always take the time to explain methods and can treat clients poorly when they are in a hurry. 'Like when they want to inject us with Depo, they do not consider that we are in pain, they just bring in many people and inject us in a hurry, then we go back home we start swelling up.' (FGD-02-03)

Clients said sometimes there are not enough staff, and providers get tired. One participant suggested that providers be rotated among facilities. 'We need to reshuffle the providers because the ones we have now are used to us and don't respect us anymore.' (FGD-02-03) Participants also reported that providers can be 'mean' and 'shout at us'.

Some participants provided positive feedback related to providers giving them comprehensive information on all methods and helping them find the right one for their circumstances. One participant recognised that providers give better information than friends do.

> The problem that I noticed amongst women is that we listen to our friends, we find out they are complaining about FP services, and we take it from them that there is no help we can get from the providers. We get easily discouraged, but if we could take the initiative to hear from the providers themselves, I believe it would help us all. (FGD-02-01)

Discussion

This research presents the results of a qualitative study on clients' experiences with, and perceptions of, turnaway from receiving a method of FP in two districts in Malawi. Nearly all the reasons described for

being turned away were medically incorrect, preventable, and potentially harmful to women seeking FP. Clients described how not receiving FP on time—either new methods or resupplies—was stressful for them and had real implications. Whether clients had to return to search for methods another day, refrain from sexual relations, or adopt a second-choice method, it caused them worry and inconvenience. Although none of our participants mentioned being pregnant at the time of the FGDs, they discussed it as a possibility; based on the survey data, at least one suspected she might be pregnant in the weeks following the turnaway.

Participants frequently mentioned the need to be currently menstruating to receive a method. In the era of cheap, accurate pregnancy tests (estimated to cost a facility US$0.08–US$0.25 each in Malawi in 2016), as well as the ability of providers to rule out pregnancy in many cases through the use of the of the *Reasonably Sure Not Pregnant Checklist* included in providers' pre-service training materials, why this requirement still exists can be questioned (Kolesar et al., 2017; Ministry of Health and IntraHealth International, 2010).

Also questionable is why a client would be scheduled for re-injection of injectable contraception on a non-FP day, and then denied a re-injection for coming in a day or two late, on the closest FP day to her scheduled appointment. Malawi follows the World Health Organization's medical eligibility criteria, which state that women can come up to two weeks before or four weeks after a scheduled appointment date to receive a re-injection (Ministry of Health and IntraHealth International, 2010). As noted by one participant, asking women who are current users of injectables to wait until they begin menstruating again seems unreasonable, especially given that this can take several months (DEPO-PROVERA-medroxyprogesterone acetate injection, 2020). Providing FP services daily is in line with MOHP expectations and is reasonable, in particular for re-injections, which require little time for counselling.

Stock-outs of supplies and methods also lead to turnaway but are normally out of the control of individual providers. A worldwide shortage of injectable contraception in 2019, due to the shutdown of a manufacturer sterilizing facility, likely affected the supply of injectables in Malawi during our research (U.S. Food and Drug Administration, 2019). In addition, ordering and delivering commodities is a complex process involving a host of players, including pharmacy technicians, FP coordinators working for the Reproductive Health Unit in the MOHP, the MOHP Health Technical Services and Support Unit, and the Central Medical Stores Trust, which is responsible for procurement (Government of Malawi, 2015). This system has been noted to lack accountability, perhaps allowing individual providers to sell methods on the side, as mentioned by the participants (Government of Malawi, 2015). These findings

are in line with other research in Malawi showing the 'leakage' of essential drugs from official health facility stocks, as well as the frequency with which others have seen official drugs being sold through unofficial channels (Carlson et al., 2014; Msoma et al., 2020).

Turnaway resulting from too few providers, or providers not trained on all methods, was also observed. Providers in Malawi have expressed frustration with being short staffed or not having staff trained in all methods (Peterson et al., 2022a). It is understandable for overworked providers to grow weary and frustrated when they cannot keep up with their workloads or do not have the supplies and training needed to do so. What is not acceptable is for them to lash out at clients or treat them in a rude and disrespectful manner. Furthermore, they should not partake in selective practices, with women who appear to be financially advantaged having better access to services and methods than those judged to be poorer.

Stock-outs and staffing issues, including training on all methods as well as client eligibility, are systematic challenges that should be addressed by the MOHP and district authorities. For example, providers should know that clients should be able to receive progesterone-only pills any time after delivery and that an IUD can be inserted within 48 hours of delivery or after four weeks (Ministry of Health and IntraHealth International, 2010). Efforts should also be made to eliminate the occurrence of providers privately selling methods acquired through unofficial channels.

The women participating in this research have given us a good picture of their experiences with turnaway from FP. Most of the reasons for turnaway are preventable, indicating that these barriers can be removed if there is a will and if providers adopt a client-centred approach that enables easy access to the methods of contraception Malawian women need and are entitled to receive.

A strength of this study is that it provides information on the client perspective of turnaway, in their own words. Our study is unique because we recruited women who have been followed longitudinally to understand their experiences with and the outcomes of turnaway. Nonetheless, our sample was limited to clients with access to a mobile phone who were willing to contacted—two factors that could bias our results. The number of FGDs is another limitation; we struggled with sample size because the research started just as the COVID-19 pandemic began, and people were becoming wary of going out or gathering with others. Given that most of the reasons for turnaway were discussed in multiple FGDs, however, we

consider the results a reliable representation of the range of reasons why women have been turned away. The impact of client turnaway on women and families is an understudied area.

Conclusions

Clients are turned away without a method of family planning on the day they seek one for multiple reasons. Turnaway is difficult for clients who must then make a second (or third or more) attempt to find family planning, while not getting pregnant in the meantime. In nearly all cases discussed, the turnaway was preventable. Participants described the ways in which the turnaway was harmful to them. Many examples given by the participants showed a lack of knowledge and respect for clients on the part of the providers, such as unfairly charging for methods, giving preferential treatment to clients assumed to be wealthier, and being rude and shouting at clients.

Ensuring providers have a client-centred attitude and improving their morale, motivation, and practices could improve client-provider interactions. Providing turned-away clients with alternative options such as referrals to other means of initiating FP (through outreach facilities or HSAs), and talking to them about second choice methods are practical steps to ensure FP needs are met in a timely manner. Changing attitudes, however, may require additional steps, such as training and increased oversight, to achieve lasting change. Increasing the availability and use of pregnancy tests, having a more reliable supply of methods and materials, increasing the number of providers—including those trained well in all methods—and providing daily FP services would all help reduce turnaway. Enabling all medically eligible women who are seeking a method of FP to obtain one the day it is first sought will help Malawi and other low- and middle-income countries achieve their SDGs in women and children's health and beyond.

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Paper IV

Expanding equity measurements of family planning beyond wealth status and contraceptive use

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Despite progress, the vision of the International Conference on Population and Development to achieve universal access to sexual and reproductive health services, including contraception, remains unfulfilled. *Transforming our world: the 2030 agenda for sustainable development* acknowledges the continuing need for sexual reproductive health and contraception by including two goals with targets aimed at universal access to contraceptive services. Realizing these goals will require greater focus and investment, to understand and address the barriers that millions of women and girls currently at risk of an unwanted pregnancy face in accessing and using voluntary family planning.

The partnership on High Impact Practices in Family Planning synthesizes and translates evidence and learning in family planning programmes to assist stakeholders in making evidence-informed decisions to maximize the impact of resources and extend voluntary, high-quality services to everyone. A persistent challenge in realizing this vision is reaching those not well served by current programmes. To communicate the evidence base to better support countries in addressing this challenge, the partnership reviewed existing definitions, frameworks and evidence from intervention studies, and secondary analyses of national surveys, policy papers and grey literature relevant to equity in family planning.[1] The review identified eight single-intervention studies on overcoming inequities conducted in low- and middle-income countries (Afghanistan, Burundi, Cambodia, Kenya, Pakistan, Rwanda and United Republic of Tanzania) between the years 2000 and 2018, as well as many analyses of national surveys. The eight studies, which showed mixed results, revealed variations in how equity is defined, with most addressing economic barriers to contraceptive use.[1] Secondary analysis of national surveys analysed across time showed more consistent reductions in the equity gap for key family planning outcomes.[1] While this type of analysis implies these programmes have been successful in expanding access to key populations, it does not elucidate how this success was achieved.

Drawing on these findings, we propose a more comprehensive approach for examining and addressing inequities in family planning. We aim to challenge researchers and advocates to expand their vision of equity towards a more inclusive and insightful analysis; to encourage managers and evaluators to incorporate a more nuanced approach in defining and evaluating success; and to support implementers in thinking more creatively about the root causes of inequity and programme responses, rather than to set out indicators or provide programmatic guidance in their use. We recommend expanding how inequities are characterized and how they are measured and evaluated to go beyond wealth as the sole driver of inequity and contraceptive use as the primary outcome.

Moving beyond wealth

How equity is defined is critical to determining where inequities exist, and often shapes programme response. The World Health Organization (WHO) defines equity in health as "the absence of avoidable, unfair, or remediable differences among groups of people, whether those groups are defined socially, economically, demographically or geographically or by other means of stratification."[2] In relation to family planning, FP2030 – a global partnership to empower women and girls through rights-based family planning – adds that "quality, accessibility and availability of contraceptive information and services should not vary by non-medically indicated characteristics, such as age, geographical location, language, ethnicity, disability, HIV [human immunodeficiency virus] status, sexual orientation, wealth, marital or other status."[3] These definitions go beyond wealth as the standard independent variable proxy for inequity and encourage examination of other socially determined differences that can affect equity. In addition, these definitions focus on the availability, accessibility, acceptability and quality of health care.

Evidence suggests that economics may not be the most important driver of all inequities, nor is it necessarily co-linear with other dimensions of inequity, an insight critical to designing effective approaches to addressing access issues. For example, being an adolescent or unmarried can be a limiting factor for accessing contraception, regardless of wealth. Among the youth population

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in 33 countries in Africa, Asia and Latin America and the Caribbean, education and marital status are as predictive of ability to use contraception as wealth status.[4] While residence (urban versus rural) is commonly considered an indication of status, proximity to services may be a better predictor of equity in access. One study found that individuals who lived closer to health facilities had higher rates of contraceptive use compared to those living further away, regardless of their residential status.[5] Studies such as these reinforce the need for more comprehensive and nuanced analyses and understanding of how social determinants influence health for entire population groups.

Frameworks that support operationalizing the availability, accessibility, acceptability and quality of health care will accelerate the shift to programming that addresses all dimensions of inequity. Building on social gradients of health,[6] WHO's Priority Public Health Conditions Analytical Framework is useful for defining the underlying determinants of health.[7] The framework is intended to identify social determinants at play and their contribution to inequity, for example pathways, magnitude and social gradients; promising entry points for intervention; potential adverse side-effects of eventual change; possible sources of resistance to change; and what has been tried and what were the lessons learnt.[5]

Using this framework, researchers found that the burden of unintended pregnancies is not equally distributed within countries and that social determinants hinder access to contraceptives.[8] The researchers showed that access to the health system plays a large role in helping women avoid unintended pregnancies; however, other vulnerabilities related to user characteristics, namely being from a rural area, an adolescent or a migrant, having little or no education, lacking autonomy or having been exposed to sexual violence or child marriage, hindered access. They concluded with several macro- and microlevel interventions to improve accessibility, availability and acceptability of services.[8] This analysis shows that the WHO framework is useful to analyse the public health conditions at the differential health outcomes level to determine the root cause of differences between groups, design an intervention at each promising entry point, and ensure rigorous measurement.[8] More work is needed to translate this and other equity frameworks into practical programming guidance and tools.

Outcome measures

Adopting a consistent, relevant and actionable approach to measuring equity in family planning is key to identifying population groups that face access barriers. Doing so would also facilitate identifying aspects of such services that are inequitable and effective strategies for monitoring progress towards reducing inequity. The current focus on contraceptive use for measuring inequity is insufficient as it lacks dimensions of variations in fertility preferences, access and individual choice.

Equitable access to family planning services does not mean that all groups use contraception at equal rates. Rather, equity implies that all groups have the same access to information and quality services, including access to all available methods of contraception, their removal and high-quality care that includes equal treatment by providers. Furthermore, equity implies that women and men, including adolescents and young adults, can make decisions about their fertility and their use of contraceptives, and act on those decisions. Uniformly high contraception use is equitable only if it adheres to the choices of individuals in all groups.

Programmes and research should incorporate measures of equity that go beyond contraceptive use and track both demand- and supply-side barriers to access to family planning services, methods, information and quality as measured by client satisfaction, respectful care and equitable treatment.[9] Outcome measures could include demand satisfied for contraception, unintended or mistimed pregnancy or childbearing, ability to achieve preferred number of children and rights-reflective indicators such as agency to make decisions, including about voluntary contraceptive use,[10] and interruptions in the availability of contraception, for example in crisis situations.

Moving forward

A growing number of tools and resources to help planners and advocates adopt a more comprehensive approach to equity exist. The *Equity in family planning strategic planning guide* published by the High Impact Practices partnership leads readers through steps to work towards equity in family planning.[11] The guide encourages the identification of those groups whose needs are not being met as well as the barriers they face, and suggests tools to meet these needs. The *Approach for diagnosing inequity in family planning programs: methodology and replication guide*[12] uses demographic and health surveys to identify inequities across the dimensions of availability, accessibility, acceptability and quality of health care and in demand satisfied, based on age, education, marital status, wealth, residence, religion and ethnic status. When sufficient data are available, this tool can also be used to analyse inequities down to the subnational level.

The FP2030 Performance Monitoring and Evidence Working Group and the United States Agency for International Development-supported Equity in Family Planning taskforce are two initiatives that are working to identify and define key indicators for monitoring and evaluating progress in equity.

The implications for this expanded view of programming to address equity may mean investing in interventions and studies outside of and in addition to family planning health care, such as those relating to shifting gender norms, education and child survival, as well as collecting sufficient data to be able to disaggregate or control for relevant different dimensions of inequity.

Adopting these recommendations can contribute to addressing underlying constraints to individuals and couples' access to and demand for contraceptives based on inequities and will help reach the millions of women and girls in need of quality reproductive health care. ■

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Supplementary Material 1

Creating equitable access to high-quality family planning information and services: A Strategic Planning Guide

Creating equitable access to high-quality family planning information and services:

A Strategic Planning Guide

This Strategic Planning Guide is intended to guide program managers, planners, and decision makers through a process to identify inequities in family planning and interventions to reduce them. The guide was developed through consultation and deliberation with technical experts in family planning and health equity and builds upon the discussion paper on equity in family planning developed under the Partnership for High Impact Practices for Family Planning.[1]

> *"Equity is the absence of avoidable, unfair, or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, or geographically or by other means of stratification. 'Health equity' or 'equity in health' implies that ideally everyone should have a fair opportunity to attain their full health potential and that no one should be disadvantaged from achieving this potential."* World Health Organization[2]

Equity in family planning does not mean that all groups use contraception—or specific methods of contraception—at the same rates. Rather, equity is realized when all individuals have access to high-quality reproductive health information and contraceptive services, including choice of methods and availability of those methods, that reflect their values and preferences and the context in which they live—regardless of age, sex, disability, race, ethnicity, origin, religion, economic status, or other factors.

Figure 1. Equality, equity, and justice

Graphic adapted with permission from King County, WA.

Figure 1 depicts an example of equity. In this example, various populations are represented as figures of different sizes. This is not intended to suggest differences in value but rather to show how the assets of different groups are accommodated to a greater or lesser extent by the existing system, as shown by the fence and the boxes. Providing everyone equal support to see over the fence does not result in the same outcome for all spectators. Equity recognizes population groups may require differing resources to overcome barriers in the existing system. Justice takes an additional step to acknowledge and address the barriers directly and seeks to remove the barriers, indicated by the removal of the fence.

The following steps are intended to help program planners, managers, and development partners identify family planning inequities and develop interventions to address them.

Step 1: Determine whose needs are not being met.

To begin working toward improved equity in a family planning program, consider all defining characteristics of a population group that may play a critical role in shaping how these groups access family planning.[1] Analyses such as those included in the Demographic and Health Surveys (DHS), however, typically use wealth quintiles to assess inequities. While living in poverty is a common experience among individuals experiencing worse health outcomes, analysis based on economic status alone may conceal important social and environmental considerations for program design. For example, being an adolescent or unmarried person can limit access to contraception, regardless of wealth. Programs that focus on women, exclusively, may miss opportunities for male engagement. Geographic location may affect a person's ability to get to a facility, as well as which methods and services are available. Table 1 describes three categories of characteristics that may contribute to differential family planning outcomes. Be sure to consider how

combinations of these characteristics may affect access to information and services.[*] An adolescent from a poor household who is part of a minority population group is likely to have a very different experience in accessing care than an individual with only one of these characteristics.

Table 1. Categories of characteristics potentially related to inequitable family planning outcomes

Economic	Wealth, poverty, income stability, employment, occupation
Social	Age, race, ethnicity, caste, sex assigned at birth, gender identity, sexual orientation, religion, nationality, language, education, disability, social and gender norms
Environmental	Geographic location (urban/rural, distance from health services), humanitarian setting

Using the characteristics in Table 1, first identify the population groups whose needs may not be met by an existing family planning program and the reference groups to be used as a comparison for monitoring and evaluation. The reference groups can be national averages or a defined population that may have greater access to resources, such as the wealthy. Next, determine which measures to use to assess whether the population groups are being fully served by the family planning program. While contraceptive prevalence rate (CPR) is an important measure of family planning program implementation, it is not sufficient to fully understand inequities in family planning. Consider using a combination of the following measures to more fully understand how groups are or are not able to access family planning services, information, or methods, compared to the reference groups.

- Are those who want to delay, space, or limit their next pregnancy using contraception? Look at percentage of demand satisfied[†] and reasons for nonuse among women who do not want to become pregnant in the next two years but are not using contraception.
- Are members of this group more likely to experience an unwanted or mistimed pregnancy? Do they lack contraceptive autonomy? Consider differences in reported unwanted or mistimed pregnancies and ideal family size.
- Are members of this group at higher risk of adverse events from a pregnancy, including maternal mortality? Consider differences in adolescent pregnancy rates, short birth spacing, high parity, and risk of unsafe abortions.
- Do all members of this group have physical access to family planning, without barriers of geography, stigma, or discrimination? Consider data on locations of health facilities/pharmacies relative to where group members live, experiences of stigma and discrimination, and provider attitudes and practices. Many of the data on the indicators are available through DHS, accessible through the STATcompiler, while others may be collected by the ministry of health or at a programmatic level. The following resources may be helpful:
    - World Health Organization Equity Assessment Toolkit
    - Family Planning Equity tool, which identifies inequities for seven commonly disadvantaged groups based on DHS data
    - Reproductive Empowerment Scale and the Reproductive Autonomy Scale
    - Performance Monitoring for Action (PMA) DataLab tool and reproductive empowerment tool
    - Client poverty status measurement process
    - Service Provision Assessment client exit interviews and provider interviews

[*] Intersectionality refers to the overlap of more than one category of discrimination, such as race, class, and gender. For more information see: Crenshaw K. Demarginalizing the intersection of race and sex: a black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*. 1989(1):8. Accessed August 6, 2021. http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8

[†] Demand satisfied is calculated as the number of all women ages 15–49 using any modern family planning method, divided by the total number of all women with unmet need plus women currently using any family planning method. See https://dhsprogram.com/data/Guide-to-DHS-Statistics/Need_and_Demand_for_Family_Planning.htm for a full definition.

Step 2: Determine what barriers individuals from this population group face in accessing high-quality family planning information and services.

After the population groups facing inequities in family planning have been identified, the next step is to define the barriers the target population faces relative to other population groups. Potential barriers leading to nonuse or unmet need are lack of access to information, services, and supplies; restrictive policies; stigma; and social, cultural, and gender norms. The social ecological model is a useful framework to consider constraints at multiple levels.[3] The process of defining barriers should be conducted in partnership with clients from the group,[4] and the following four questions about barriers should be considered:

1. Do the barriers lead to disproportionate family planning outcomes for the population group relative to the reference group?
2. Are the barriers amenable to effective interventions?
3. Are the barriers undesirable?
4. Are current interventions to relieve or reduce this condition less available to the disadvantaged population groups?

These tools may be helpful in defining barriers:

- How to Conduct a Root Cause Analysis
- A Practical Guide to Conducting a Barrier Analysis
- The Social Ecological Model
- The Social Norms Exploration Tool (SNET)

Step 3: Make the family planning program more responsive to the values and preferences of all people.

Once the barriers and root causes are identified, programs should continue working with members of the population group, the communities in which they live, and the providers that serve them to design or adapt interventions most likely to lead to sustainable change. A landscaping activity is useful to understand current efforts as well as lessons learned from previously implemented programs. In addition, an asset-based analysis should be conducted to brainstorm locally derived solutions to overcoming barriers. Nearly 60 organizations have worked to develop 20 evidence-based high-impact practices (HIPs) addressing environmental equity (expand method coverage and choice), social equity (reach underserved populations), and economic equity (reduce financial barriers), and these HIPs have been published online. The community health worker HIP emphasizes the importance of these workers reflecting the population groups that face inequities. Community health workers can address barriers to care-seeking by bringing services into clients' homes or accompanying them to health visits to bridge language and social barriers. The social marketing HIP describes how social marketing programs can reduce out-of-pocket expenses for products and services and create promotional campaigns that respond to the needs, preferences, and concerns of population groups facing inequities. Read through the HIPs to learn how to make programs more responsive to the needs of all groups. Though programs targeted to one population may be costly, these investments may produce future savings.

Once the three critical equity pieces have been determined—whose needs are unmet, the driving barriers, and potential interventions—a theory of change can be created. The theory of change will map out the program conditions that need to be in place to reach the long-term goal of reducing inequities in family planning. Developing a theory of change that is comprehensive, but not overly complicated, may be challenging. These publications provide a helpful reference:

- Using Theory of Change Frameworks to Develop Evaluation Strategies for Research Engagement: Results of a Pre-pilot Study
- Building a Theory of Change for Community Development and HIV Programming: The Impact of Social Capital, Stigma Reduction and Community-level Changes on HIV-related Health Outcomes for Orphans and Vulnerable Households in Mozambique

Examples of theories of change include:

- Transforming Social Norms for Family Planning and Reproductive Health, and at an intervention level, Transforming Masculinities
- Adolescent Girls Empowerment Program
- HIPs including family planning vouchers, community group engagement, and domestic public financing

Step 4: Monitor implementation.

The theory of change should provide ideas about how program success will be defined and measured. It should include an approach to monitoring program strategies to test assumptions and to inform adjustments in program response—with population group input. In addition, program implementers should regularly monitor outcomes. For example, programmatic results data can be compared with national data. Monitoring data should be disaggregated by age, region, and other factors to enable analysis of equity and prioritization of equity-related programmatic adjustments. Gender-based violence and other potential unintended outcomes of increased family planning information and use should also be identified and monitored. Information from clients should be collected and analyzed to determine if the care received was free from stigma, discrimination, and bias based on age, marital status, ethnicity, and other factors. Quality improvement strategies can be used to address any identified issues. Sample family planning process and outcome indicators to monitor programs are available from multiple sources including the Family Planning and Reproductive Health Indicators Database, FP2030 and PMA2020. Valuable guidance is also available from Data for Impact on using routine data in evaluation. Lastly, suggested measures of quality of care are available.

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