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Testing an Approach to Address Barriers to Family Planning for Postpartum Women Experiencing Depression and Anxiety

CASE STUDY

Summary

During the postpartum period, family planning (FP) use can be critical for the health of both the infant and mother—yet globally, many women have unmet need during this time. Many women also experience depression and anxiety—conditions which are common and can impact a range of health behaviors, including those of critical importance to FP. Programs and institutions have done little work to support women experiencing depression and anxiety as they define their FP intentions, barriers to FP use, and seek an FP method, if they desire to do so.

This study aimed to address this gap by exploring the feasibility and acceptability of using simplified Cognitive Behavioral Therapy (CBT) approaches to address symptoms of anxiety and depression,

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which may inhibit contraceptive use. Breakthrough ACTION chose to conduct this work in Ethiopia, a country with strong leadership in both FP and mental health. The study focused specifically on young married women ages 16–25 who have given birth in the past year. The project hopes to raise awareness of how mental health can impact reproductive health and spur further research on how to support all women, including those struggling with depressive and anxiety symptoms, with meeting their FP needs.

Postpartum Mental Health and Postpartum Family Planning

In the year following a birth, women commonly experience unmet need for FP. Analysis on data from 27 low- and middle-income countries estimates that **about 65% of all women who are 0–12 months postpartum period have unmet needs.**[1] In the same period, many women also experience depression and anxiety. In low- and lower-middle-income countries, common perinatal mental disorders like postpartum anxiety and depression affect about 19.8% of women, or about one in five.[2*]

Substantial evidence establishes that mental health challenges can create challenges for positive social and behavior change across diverse health areas, including Ebola virus,[3] malaria,[4] HIV/AIDS,[5] and breastfeeding.[6] However, the literature looking specifically at the intersection of mental health and FP is limited, especially in low- and middle-income countries. Studies from the United States show that women with depression may be more likely to choose less effective FP methods,[7] use methods less consistently,[8] or discontinue oral contraceptives.[9] A recent study in Ethiopia associates mental health symptoms post pregnancy with subsequent unmet need.[10]

Even though both unmet need and mental health conditions are common challenges occurring in the postpartum period, research is lacking on the intersection between postpartum depression, anxiety, and FP. Existing studies at this intersection call for integrating these two health areas, developing tools for FP counseling, and education that supports all women with their FP choices, including those living with anxiety and depression.

This study aimed to fill the gap at the intersection of mental health and reproductive health by testing a CBT approach for supporting women with anxiety and depression in exploring FP options, addressing barriers to FP, and seeking FP if desired, up to one year postpartum.

Cognitive Behavioral Therapy

CBT is an evidence-based psychological treatment approach, considered by many to be the "gold standard" currently available in the field of psychological treatments for supporting mental health and positive behavior change.[15] CBT's core premise is simple: modifying beliefs and assumptions can lead to positive changes in behavior and overall improvements to mental health (**Figure 1**).[16]

*Note: Researchers and practitioners define the timing of the postpartum period differently; in this brief, the term refers to the first year after birth.

Key Terms

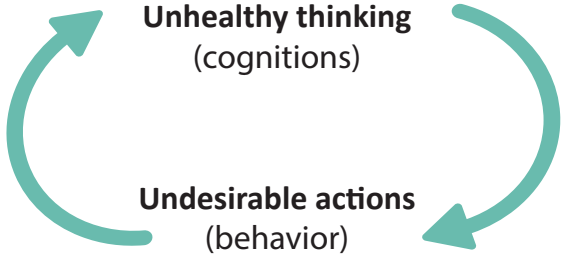
Mental Health
The World Health Organization (WHO) defines mental health as "a state of well-being in which an individual can realize his or her own abilities, interact positively with others, cope with the stressors of life and study, work productively and fruitfully, and contribute to his or her family and community."[11]

Mental Health Disorders
Mental disorders can be characterized by "a clinically significant disturbance in an individual's cognition, emotional regulation, or behavior […], usually associated with distress or impairment in important areas of functioning."[12] Mental disorders can include depression, anxiety, post-traumatic stress disorder, schizophrenia, and others. This study focuses specifically on symptoms of two disorders: depression and anxiety.

Depression
Depression is "characterized by persistent sadness and a lack of interest or pleasure in previously rewarding or enjoyable activities." It can also disturb sleep and appetite.[13]

Anxiety
This condition is characterized by "excessive fear and worry and related behavioral disturbances."[14]

Figure 1. Theory of Cognitive Behavioral Therapy, Simplified and Adapted from WHO's Thinking Healthy.[16]



Programs have developed activities using CBT across a range of low-resource settings to jointly address mental health and other health areas, including, for example, HIV risk behaviors in Uganda[17] and exclusive breastfeeding in Pakistan.[18] CBT can be delivered through several formats, including individual therapy, group therapy, or mobile applications. CBT practitioners employ a range of techniques, including role-playing, mood logs, and activity scheduling.[19]

Perhaps the most widely known and widely used CBT intervention specifically for postpartum mothers is called *Thinking Healthy*,[16] which has been shown to reduce depression and improve maternal and infant health outcomes, including contraceptive use.[20] WHO initially developed *Thinking Healthy* for use in Pakistan, and programs have adapted and implemented it in several countries and low-resource settings, including India, Bangladesh, Peru, Vietnam, Bolivia, and Nigeria. Although the *Thinking Healthy* module available through WHO for adaptation in other settings briefly touches on child spacing, it does not explicitly focus on FP.[16]

Mother's Time Study in Ethiopia

Context: Postpartum Mental Health and Postpartum Family Planning in Ethiopia

The team selected Ethiopia as a study site, based on its existing commitments and infrastructure for both FP and mental health. Ethiopia's National Mental Health Strategic Plan for 2020–2025 outlines the prevalence of various mental health conditions and sets a strategy for improving mental health services on many levels, including at the community level.[21] The strategy notes that challenges in maternal mental health impact not just mothers, but their families and communities, and outlines plans to strengthen detection of and response to maternal depression and anxiety. A recent systematic review and meta-analysis estimated the total prevalence of postpartum depression in Ethiopia to be at about 22%, in line with global estimates of the disorder.[22]

Although Ethiopia has made gains in FP in recent years, barriers continue to limit use. Total unmet need has improved since 2000, showing a steady decline from 36% in 2005 to 22% in 2016.[23] In 2019, a Mini Demographic and Health Survey in Ethiopia found that 41% of currently married women are using modern methods of FP, with the most popular method being the injectable.[24] However, use is inconsistent across the country; 48% of urban women were likely to use any modern method of contraception, compared to 38% of rural women.[24] Postpartum FP uptake is low, with data from 2016 showing that only 25% of women use a method at six months postpartum.[25] Ethiopia's National Guidelines for Family Planning Services call out the need for FP services for postpartum women.[26] Reaching youth with quality services is particularly critical, as 43% of women of reproductive age are between the ages of 15 and 24.[25]

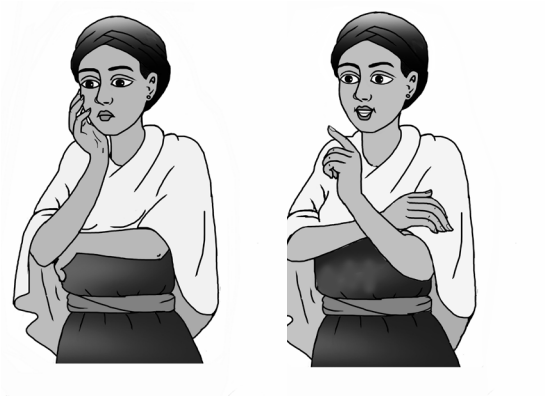
Developing *Mother's Time*

Working with a mental health expert in Ethiopia and drawing heavily on existing CBT materials (such as *Thinking Healthy*[16] and *Mothers and Babies*[27]), Breakthrough ACTION developed a three-session intervention called *Mother's Time*. The intervention is designed to be delivered by Health Extension Workers (HEWs)—Ethiopia's community health workers— to young postpartum women experiencing mild to moderate symptoms of depression or anxiety and unmet need for FP.

Mother's Time teaches CBT concepts by using stories of a mother, Birhan, who struggles with anxious and sad thoughts. Developers designed each story to provoke discussion on "healthy" and "unhelpful" thinking (**Figure 2**) around a specific area important for FP, such as planning for the future or couple communication. The intervention defines "healthy thinking" as thinking that helps a person feel her best and take action for herself and her family, while "unhelpful" thoughts lead a person to feel overly stressed, powerless, and out of control and can lead to inaction or avoidable outcomes. *Mother's Time* asks women to complete simple worksheets as "homework," which prompts women to notice and record how they are feeling and take time for rest and social connection.

The design team created the worksheets for women with no or very low literacy skills and included icons and images representing moods and activities.

Figure 2. Sample Visual Aids from *Mother's Time*: Birhan Having Unhelpful Thoughts (left) and Healthy Thoughts (right)



Sample and recruitment

In 2021, working with local authorities in the Amhara region, Breakthrough ACTION screened and recruited young mothers. A standardized screener, administered by research assistants, helped identify intervention participants who were aged 16–25, married, had given birth in the last year, were not currently using a method of FP, and who also reported mild or moderate symptoms of depression or anxiety.[†] The final sample included 16 mothers, four HEWs, three midwives, and three members of Ethiopia's Health Development Army.

The Pilot

The objective of the *Mother's Time* pilot intervention was to assess the feasibility and acceptability of using simplified CBT to address postpartum depressive and anxiety symptoms, and associated barriers to postpartum FP (**Figure 3**). HEWs participated in a two-day training to learn to deliver the CBT sessions. Over about three weeks, the HEWs led the participants through three sessions. Over the course of the three sessions, the study team collected data at multiple points, both through interviews and structured observations (**Figure 4**).

Figure 3. *Mother's Time* Theory of Change

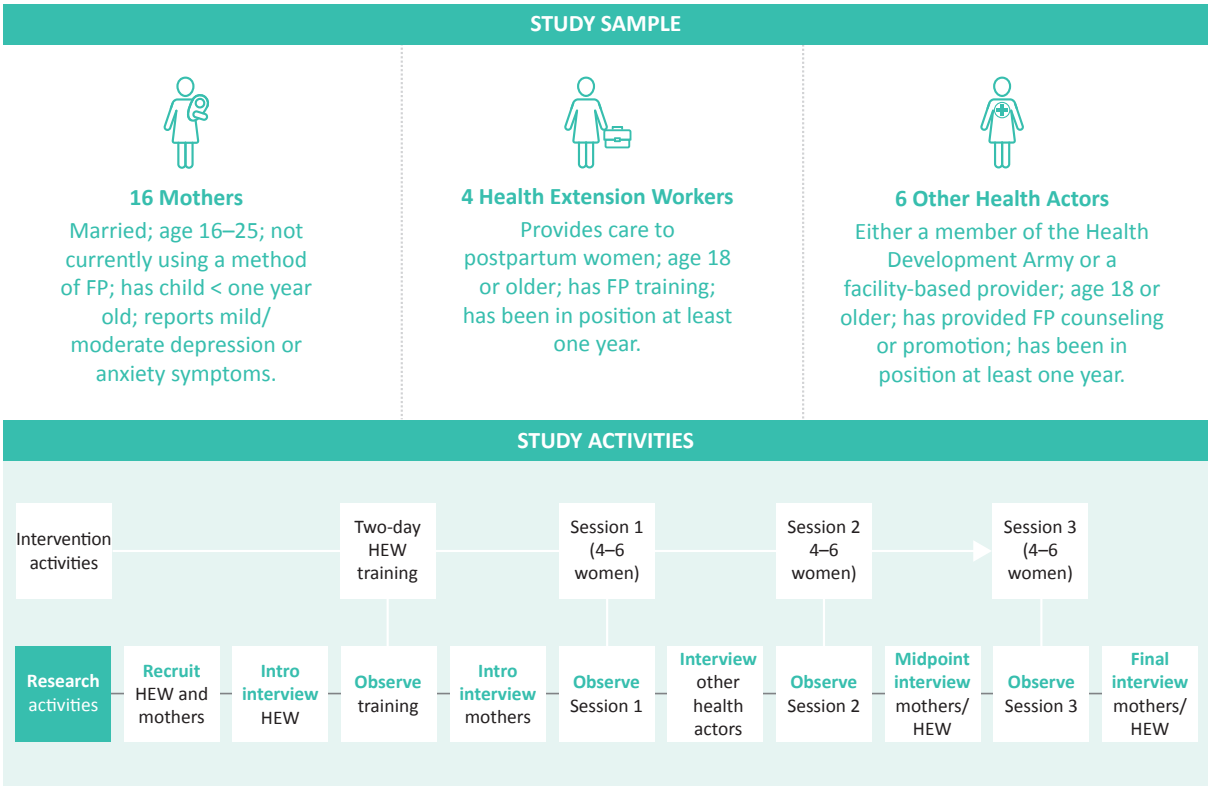
Mother's Time Intervention	**Healthy Thinking** Patterns	**Behaviors** That Support Women in Considering and Acting on FP Intentions	**Desired Outcome**
Simplified CBT exercises on thinking about the self, future, and family	Ability to identify and interrogate unhelpful thoughts (including ones about FP)	Prioritization of both her own health and that of her family	Informed consideration of family planning methods postpartum
Group sessions and social support	Group sessions and social support	Consideration of her desires for the future; making and following plans to achieve them	Enhanced ability to seek and use FP methods, if desired
Links to HEW	Openness to care and support seeking	Communication with partner and HEW	
		Navigation of potential side effects	

[†] The study team screened potential participants using standardized screeners for the disorders (the Patient Health Questionnaire-9, or PHQ-9 and Generalized Anxiety Disorder-7, or GAD-7). Participants were included if they scored between 5 and 14 on either tool, indicating mild to moderate symptoms. Because *Mother's Time* is a lighter intervention, the project developed a referral protocol for women who scored more than 14 on either screener so that women reporting severe symptoms could be referred to psychiatric services.

Data collection

Data collection was primarily qualitative, involving three in-depth interviews with HEWs and mothers (one before the intervention, one after the second session, and one at completion of the intervention). Interviews included open-ended questions and lasted about 60 minutes. The final interview with mothers, completed after the final *Mother's Time* session, also included the PHQ-9 and GAD-7 screeners for depression and anxiety.

Figure 4. Mother's Intervention and Study Overview



Key Findings

Summary	• Simplified CBT, delivered in a group setting, shows promise for alleviating symptoms of anxiety and depression and associated social and behavior barriers to FP. • Limited time (among both HEWs and mothers) is the biggest barrier to intervention delivery. • While results are promising, the study's sample was very small. Social desirability bias may have played a role in responses. Results cannot indicate if positive effects will last long term.
Mothers' Lives Prior to Intervention	• Women in the sample came from a variety of socioeconomic backgrounds. Some had strong relationships with their partners and families, but many felt isolated from their social networks. • Many women were struggling with adjusting to motherhood or managing a busy workload (including new childcare responsibilities and work inside and outside the home). • On average, at baseline women scored 9.4 on the PHQ-9 and 4.7 on the GAD-7. In introductory interviews, women reported details of experiences or symptoms which are consistent with the clinical definitions of depression and anxiety. *"Sometimes I feel a load of tension. I can't sit still, I will be irritated, I feel hopeless, and I will be tired without working."* – Participant Mother
Health Extension Workers: Learning the Intervention	• HEWs learned simplified CBT and delivered *Mother's Time* to mothers in group discussions. HEWs were effective at convening mothers into groups and teaching CBT concepts, using stories which focused on how thoughts can impact mood and behaviors which are important for health. • HEWs needed additional coaching to deliver the sessions effectively. Only two days of training was not enough for consistency/quality. • HEWs have very busy schedules; they need advocacy at the Ministry Level to ensure HEWs have time for mental health services. Breakthrough ACTION will continue to conduct advocacy in future project stages, and opportunities are available for other partners to collaborate with the Ethiopian health actors to ensure community level actors have time and training for mental health.

Mother's Experiences Engaging with the Intervention	• Women connected with the lessons and CBT stories and used them to talk through strategies for addressing challenges related to mental health, relationships, and FP. • Delivering the sessions in a group, rather than an individual setting, allowed group discussion on shared challenges and built social connection. • "Homework" helped women prioritize caring for themselves and connecting with others. *"The impact completing the homework is that it helped me discuss with my husband; it helped me decrease stress and busy-ness."* – Participant Mother • Women would likely benefit from additional sessions that would potentially allow them time to explore their own specific unhelpful thoughts, in addition to examples in the stories. • Limited length of the intervention may cause oversimplification of CBT concepts; ideally, CBT supports individuals in showing self-compassion and changing unhelpful thoughts into ones that are beneficial. However, post-intervention, some participants seemed critical of "unhelpful thoughts," characterizing them as "weak," even though the intervention did not use this language. Future iterations of the intervention will do more to underscore self-compassion and care.
Changes: Mental Health	• Most participants reported the intervention was helpful for managing feelings of stress or sadness. *"The way I feel and the peace of my mind has changed a lot. I am putting aside destructive thoughts. I am giving myself time. I am minimizing my stress level."* – Participant Mother • One participants' response suggested that sessions provided some immediate support, noting that, *"after the discussion, I found some kind of relief in my mind and body,"* but had limited long-term effects, noting that before and after the intervention, she *"didn't see any change regarding my mood, thoughts or feelings."* • The study team administered the PHQ-9 and GAD-7 surveys immediately after the intervention. PHQ-9 scores went from 9.4 at baseline to 2.6, and GAD-7 scores went from 4.7 at baseline to 2.3.[‡] However, this effect may be due to the "afterglow" of participation and is not indicative of long-term change.

[‡] Note that this qualitative study was not designed to test for statistical significance.

Changes: Addressing Barriers to Family Planning	• The intervention also appeared to help most participants consider their FP intentions, address barriers, and take action to obtain a method, if desired.
	• The intervention helped support many participants in achieving behavior important for informed FP, including:
	  • **Couple Communication:** One mother, for example, explained prior to the intervention that she was not using FP because she has not yet resumed sex with her husband; she also had concerns about side effects. She also described feeling overwhelmed with responsibilities and worries. She reported that *Mothers' Time* motivated her to communicate with her husband, who had sympathy for her and agreed to take on more household responsibilities. She then had more time to care for herself and described increased motivation to visit a health care worker.
	  • **Management of Side Effects:** Others expressed that the intervention helped them navigate or manage fears about side effects. In the final interview, for example, one participant noted one of her key takeaways from the intervention was that worrying about side effects without consulting health workers was unproductive, as the HEWs may be able to help with her concerns.
	  • **Care seeking:** Others described increased motivation to seek support from health workers or others. One mother, for example, noted that she wanted to use FP but had not yet made time to obtain a method. Later, in interviews, she noted that she and fellow mothers tended to keep problems to themselves, but following the intervention, she realized this behavior "is not good for us, and we should discuss with health workers if we have issues or need help."
	• Although overall the intervention appeared helpful for supporting FP choice, it is likely not appropriate for addressing all barriers to FP. One woman, for instance, described deep religious barriers to FP, which this intervention cannot be address.

What's next?

Based on this pilot study's findings from this first phase of research, Breakthrough ACTION is revising the *Mother's Time Guide* in line with research findings. In 2023, the project will launch a larger-scale study in Ethiopia, which will aim to evaluate the impact of the intervention.

References

1. Ross, J. A., & Winfrey, W. L. (2001). Contraceptive use, intention to use and unmet need during the extended postpartum period. *International Family Planning Perspectives, 27*(1), 20-27.
2. Fisher, J., Mello, M. C. D., Patel, V., Rahman, A., Tran, T., Holton, S., & Holmes, W. (2012). Prevalence and determinants of common perinatal mental disorders in women in low- and lower-middle-income countries: A systematic review. *Bulletin of the World Health Organization, 90* (2), 139-149.
3. Betancourt, T. S., Brennan, R. T., Vinck, P., VanderWeele, T. J., Spencer-Walters, D., Jeong, J., Akinsulure-Smith, A. M., & Pham, P. (2016). Associations between mental health and Ebola-related health behaviors: A regionally representative cross-sectional survey in post-conflict Sierra Leone. *PloS Medicine, 13*(8), e1002073.
4. Jenkins, R., Othieno, C., Ongeri, L., Ongecha, M., Sifuna, P., Omollo, R., & Ogutu, B. (2017). Malaria and mental disorder: A population study in an area endemic for malaria in Kenya. *World Psychiatry, 16*(3), 324.
5. Nel, A., & Kagee, A. (2011). Common mental health problems and antiretroviral therapy adherence. *AIDS Care, 23*(11), 1360-1365.
6. Slomian, J., Honvo, G., Emonts, P., Reginster, J., & Bruyère, O. (2019). Consequences of maternal postpartum depression: A systematic review of maternal and infant outcomes. *Women's Health, 15*, 1-55.
7. Garbers, S., Correa, N., Tobier, N., Blust, S., & Chiasson, M. A. (2010). Association between symptoms of depression and contraceptive method choices among low-income women at urban reproductive health centers. *Maternal and Child Health Journal, 14*(1), 102-109.
8. Hall, K. S., Moreau, C., Trussell, J., & Barber, J. (2013). Young women's consistency of contraceptive use—does depression or stress matter? *Contraception, 88*(5), 641-649.
9. Hall, K. S., White, K. O. C., Rickert, V. I., Reame, N., & Westhoff, C. (2012). Influence of depressed mood and psychological stress symptoms on perceived oral contraceptive side effects and discontinuation in young minority women. *Contraception, 86*(5), 518-525.
10. Catalao, R., Medhin, G., Alem, A., Dewey, M., Prince, M., & Hanlon, C. (2020). Mental health impact on the unmet need for family planning and fertility rate in rural Ethiopia: A population-based cohort study. *Epidemiology and Psychiatric Sciences, 29*, e160.
11. World Health Organization. (2004). *Promoting mental health: Concepts, emerging evidence, practice: Summary report*. https://apps.who.int/iris/handle/10665/42940
12. World Health Organization. (2022). *Mental Disorders*. https://www.who.int/news-room/fact-sheets/detail/mental-disorders
13. World Health Organization. (2022). *Depression*. https://www.who.int/health-topics/depression#tab=tab_1
14. American Psychological Association. (2022). *Anxiety*. https://www.apa.org/topics/anxiety
15. David, D., Cristea, I., & Hofmann, S. G. (2018). Why cognitive behavioral therapy is the current gold standard of psychotherapy. *Frontiers in Psychiatry, 9*, 4.

16. World Health Organization. (2015). *Thinking healthy: A manual for psychosocial management of perinatal depression, WHO generic field-trial version 1.0, 2015*. https://apps.who.int/iris/handle/10665/152936
17. Senyonyi, R. M., Underwood, L. A., Suarez, E., Musisi, S., & Grande, T. L. (2012). Cognitive behavioral therapy group intervention for HIV transmission risk behavior in perinatally infected adolescents. *Health, 4*(12). http://dx.doi.org/10.4236/health.2012.412195
18. Sikander, S., Maselko, J., Zafar, S., Haq, Z., Ahmad, I., Ahmad, M., Hafeez, A., & Rahman, A. (2015). Cognitive-behavioral counseling for exclusive breastfeeding in rural pediatrics: a cluster RCT. *Pediatrics, 135*(2), e424-e431.
19. Lam, Danny C.K. (2004). A brief overview of CBT Techniques. In A. Freedman, (Ed.). *Cognitive behavior therapy in nursing practice* (pp. 29- 48). Springer Publishing Company.
20. Rahman, A., Malik, A., Sikander, S., Roberts, C., &and Creed, F. (2008). Cognitive behaviour therapy-based intervention by community health workers for mothers with depression and their infants in rural Pakistan: A cluster-randomised controlled trial. *The Lancet, 372*(9642), 902-909.
21. Diseases Prevention and Control Directorate. (2020.) *National mental health strategic plan*. Ministry of Health, Ethiopia. https://e-library.moh.gov.et/library/wp-content/uploads/2022/02/NMHSP-final.pdf.
22. Zeleke, T. A., Getinet, W., Tadesse Tessema, Z., &and Gebeyehu, K. (2021). Prevalence and associated factors of post-partum depression in Ethiopia. A systematic review and meta-analysis. *PloS One, 16*(2), e0247005.
23. The DHS Program. (2022). *STATcompiler*. https://www.statcompiler.com/en
24. Ethiopian Public Health Institute (EPHI) and ICF. (2021, May). *Mini demographic and health survey 2019*. The DHS Program & ICF. https://dhsprogram.com/pubs/pdf/FR363/FR363.pdf
25. Track20. (2020). Opportunities for family planning programming in the postpartum period in Ethiopia. http://www.track20.org/download/pdf/PPFP%20Opportunity%20Briefs/english/Ethiopia%20PPFP%20Opportunity%20Brief%202.pdf
26. Federal Democratic Republic of Ethiopia Ministry of Health. (2020). *National guideline for family planning services in Ethiopia* (3rd Ed.). https://www.moh.gov.et/site/sites/default/files/2021-06/National%20Guideline%20final%20for%20Family%20Planning%202020%20edited-final%20version_August%2025_2020.pdf
27. Mothers and Babies. (n.d.). *Resources*. https://www.mothersandbabiesprogram.org/resources

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