

Published in final edited form as:

Matern Child Health J. 2022 August; 26(8): 1719-1726. doi:10.1007/s10995-022-03447-w.

# Women's Life Experiences and Changing Reports of Pregnancy Planning in Malawi: A Qualitative Study

#### Stephanie Chamberlin, PhD,

Candidate in Health and Behavioral Sciences, University of Colorado Denver

## Synab Njereng [Diploma Candidate],

Community Development, University of Malawi, The Malawi Polytechnic

## Emily Smith-Greenaway [Associate Professor],

Sociology and Spatial Sciences, University of Southern California

## Sara Yeatman [Professor]

Health and Behavioral Sciences, University of Colorado Denver

## **Abstract**

**INTRODUCTION**—Unplanned pregnancy has been associated with numerous adverse life outcomes. Yet, because these associations are typically based on retrospective reports of pregnancy planning, it is possible that women's adverse life circumstances following pregnancy influence their recollection of it, artificially driving these links.

**METHODS**—To understand how post-pregnancy experiences relate to women's recall of their pregnancy planning, we conducted 17 in-depth interviews with young women in southern Malawi. Respondents were pregnant during the 2015 survey of an ongoing panel study, and answered survey questions about the planning of that pregnancy. During in-depth interviews three years later, women were asked to discuss their life experiences since the pregnancy and retrospectively re-asked a subset of the same closed-ended questions on pregnancy planning. We used thematic coding of respondents' narratives about their relationships, parenting, health, and economic situations in the three years following their 2015 pregnancy and mapped these onto changes in women's reports of their pregnancy planning.

**RESULTS**—More than one-half of respondents recalled their pregnancy planning differently than when pregnant three years prior —some as more planned, others as less planned. The presence and direction of women's changing reports were patterned by the quality of their relationship with the child's father, the father's presence in their and their child's lives, and her family's economic situation.

Authors contributions: Emily Smith-Greenaway and Sara Yeatman conceptualized the study, and, along with Synab Njerenga, designed the interview tools. Emily Smith-Greenaway and Synab Njerenga led the data collection process. Stephanie Chamberlin, Emily Smith-Greenaway, and Sara Yeatman conducted the analyses for this study. Stephanie Chamberlin led the manuscript development in collaboration with all authors who were involved in critically reviewing and editing this paper and approved the final draft.

Ethics approval: All respondents provided verbal informed consent for participating in the interview. This study followed all appropriate ethical standards and was approved as part of the Tsogolo la Thanzi data collection by the Institutional Review Board (IRB) at the University of Chicago, as well as the national IRB for health research in Malawi, the National Health Research Council.

**CONCLUSIONS**—Women's life circumstances following a pregnancy correspond with changes in their reporting on the extent to which that pregnancy was planned. Caution is warranted when using retrospective measures to study the consequences of unintended fertility.

#### Keywords

Pregnancy planning; qualitative; recall bias; retrospective reports; unintended pregnancy

## Introduction

A large body of research suggests that the circumstances surrounding childbearing, including whether the pregnancy was planned and desired, can shape its consequences in women's lives (Guzzo & Hayford, 2020; Kavanaugh, Kost, Frohwirth, Maddow-Zimet, & Gor, 2017). While having a child can bring happiness and provide a sense of purpose (Aiken, Dillaway, & Mevs-Korff, 2015; Edin & Kefalas, 2011; White, Mann, & Larkan, 2018), having a child from an unplanned pregnancy has been shown to correspond with economic struggle, poor mental and physical health, and poor relationship quality in a range of contexts (Ameyaw et al., 2019; Gipson, Koenig, & Hindin, 2008; J. A. Hall et al., 2018; Kavanaugh et al., 2017; Lewinsohn et al., 2018).

Importantly, however, studies of the consequences of unplanned pregnancy commonly rely on retrospective reports of pregnancy intentions, which are often provided up to several years after the child was born and are typically measured at the same time as the outcomes of interest. Even if convenient and practical, this measurement strategy is problematic because retrospective reports of fertility intentions have been shown to differ from women's reports about the same pregnancy both before and while pregnant (Bankole & Westoff, 1998; Guzzo & Hayford, 2014; Joyce, Kaestner, & Korenman, 2002; Koenig, Acharya, Singh, & Roy, 2006; Rackin & Morgan, 2018; Rosenzweig & Wolpin, 1993; Williams & Abma, 2000; Yeatman & Sennott, 2015).

This leaves open the possibility that women's life experiences following a pregnancy influence their retrospective reporting of it, rather than the unplanned pregnancy actually precipitating the subsequent poor outcomes. There has long been concern that women's experiences with their children, rather than the more abstract idea of an unknown child before or during pregnancy, could lead women to underreport unintended pregnancies over time, an idea referred to in the literature as *ex post* rationalization (Rosenzweig & Wolpin, 1993). Indeed, studies have shown that women who experience a child's death are more likely to retrospectively report that pregnancy as intended (Smith-Greenaway & Sennott, 2016). On the other hand, a woman's pre-birth optimism about the social-emotional and financial resources available to support her and her child may differ from the post-birth reality she experiences, which could negatively color her retrospective reports of its planning. Thus, women may engage in a 'response shift' (vs. a simple inaccurate recollection) due to changes in how they evaluate and define the planning of a pregnancy in response to evolving life circumstances (Guzzo & Hayford, 2014; McPhail & Haines, 2010).

In this paper, we offer insight into the dynamic, situational factors in women's lives that correspond with their reports of pregnancy planning over time in a sub-Saharan African

context where unplanned pregnancies are common (Bearak, Popinchalk, Alkema, & Sedgh, 2018). To do so, we draw upon in-depth interviews with a subset of respondents in a panel study in southern Malawi, who had reported on the planning of an ongoing pregnancy three years prior to the interview. These in-depth accounts offer a novel perspective on how women's social and economic circumstances can pattern their evolving characterizations of pregnancy planning. The findings offer a cautionary tale of the possible pitfalls associated with reliance on retrospective reports for understanding the determinants and consequences of unplanned pregnancy.

# Study Setting

Like most sub-Saharan African settings, rates of fertility and unplanned pregnancy are high in Malawi (Bearak et al., 2018; Palamuleni & Adebowale, 2014), and becoming a mother is a key marker of adulthood. Uncertainty permeates everyday life in Malawi where many families rely on small-scale farming, poverty is widespread, and high rates of morbidity and premature mortality persist (Chin, 2010; Haug & Westengen, 2020). Further, male migration to South Africa and relationship instability (i.e., divorce and remarriage) are common (Bertrand-Dansereau & Clark, 2016; Johnson, 2017).

### **Methods**

We conducted a qualitative follow-up-study among a subsample of women in the Tsogolo la Thanzi (TLT) panel study in Malawi. TLT began in 2009 with a sample of 1,505 young women ages 15–25 years old living within a 7-km radius of Balaka, a large town in the southern region of the country (Yeatman et al. 2019). As part of the 2015 round of TLT, all pregnant respondents (N=115) were asked about the planning of their current pregnancy, using an adapted version of the London Measure of Unplanned Pregnancy (LMUP) that asks a series of six questions to measure the degree of pregnancy planning (G. Barrett, S. Smith, & K. Wellings, 2004; Yeatman & Smith-Greenaway, 2018).

In 2018, three years after pregnant women were administered the LMUP, we conducted in-depth interviews with a subsample of women to understand their life circumstances following their 2015 pregnancy. We purposively selected women with a range of LMUP responses—using the standard LMUP categorizations of unplanned, somewhat planned, and planned pregnancies (G. Barrett, S. C. Smith, & K. Wellings, 2004; Wellings et al., 2013). This approach allowed us to compare women's life circumstances following the birth across degrees of pregnancy planning. We over-sampled women who initially reported unplanned and somewhat planned pregnancies, as their experiences were theoretically most relevant.

We initially drew a stratified, random sample of 47 women, based on a range of LMUP responses. We then sought respondents in-person at their last village of residence and using cell phone numbers, and successfully located 20 women—our target sample size—who agreed to be interviewed. One woman was found not to be the TLT respondent she claimed to be and two women did not show up for their interview appointments, leaving a final sample of 17 participants. Of these 17 women, seven women's 2015 LMUP responses indicated that their pregnancy was unplanned, seven women's responses indicated the

pregnancy was somewhat planned, and three women's responses indicated the pregnancy was fully planned. Participants were 24 to 34 years old at the time of the 2018 in-depth interview. All but one woman was married at the time of their 2015 pregnancy, which was typically their second or third child.

Interviews were conducted in Chichewa by one of the study authors, a local, similarly aged Malawian woman, who has been an interviewer for TLT since 2009. Interviews lasted approximately 1–1.5 hours and were audio recorded with permission from the respondent. Interviews took place in private rooms at the TLT research center, a setting where respondents had previously been interviewed, helping to ensure that they felt comfortable talking candidly. Women were given an incentive (equivalent to ~\$6) for their participation and were informed of their right to voluntarily discontinue the interview without losing this incentive. All interviews were translated and transcribed into English by a Malawian research assistant and checked by the original interviewer.

#### **Key Interview Themes**

The interview guide was developed to address key domains associated with unintended pregnancy in the literature, and key themes that had emerged in the authors' analyses of the TLT survey data (Yeatman et al. 2019). For this study, we focus on those sections of the interview specific to women's life circumstances since the focal birth. In particular, women were asked about their family's health, the nature of their relationship with the child's father, the father's involvement in caring for the child, and their economic situation. The interview guide was piloted with three women in a neighboring village and was modified in response.

When designing the interview guide in 2018, we were also interested in understanding the stability of women's reports of their pregnancy planning between 2015 and 2018. Thus, we included three closed-ended questions from the LMUP in the in-depth interview guide – using the same language from the 2015 survey. The three items we included were: timing of the pregnancy (right time, not quite right, wrong time), intendedness of the pregnancy (intended, intentions kept changing, not intended), and desire for the pregnancy (wanted, mixed feelings, not wanted). The three LMUP items excluded were those focused on concrete actions women took prior to the pregnancy (i.e., partner discussion, contraceptive use, and changes in behaviors in anticipation of a pregnancy). It was not our goal to remeasure the full, psychometrically validated LMUP. Our aim was to assess the consistency of a small set of questions that could be easily asked in an in-depth interview, which could offer insight into the key indicators of pregnancy intention, timing, and desire. Henceforth, we refer to 2015 and 2018 "pregnancy planning" based on the correspondence of two of these three indicators (see Table 1): fully "intended", fully "wanted", and/or "right timing" are categorized as "planned pregnancies", and the converse for "unplanned pregnancies"; and "changing intentions", "mixed feelings" about wantedness, and/or timing "not quite right" are categorized as "somewhat planned pregnancies".

#### **Coding Interviews**

We coded the interviews iteratively, first creating a list of a-priori codes based on the interview guide and supplementing these with inductive codes from an initial reading of the

transcripts. Two authors and a research assistant then coded two interviews, compared their coding, and adapted the codebook, which was then used to code all 17 interviews in Nvivo 12 (QSR International).

In our initial analyses stratifying women's experiences post-birth by their 2015 pregnancy planning responses, it became clear that there was little correspondence between women's 2015 and 2018 responses on pregnancy planning. To understand these dramatic shifts, we focused our analyses on the life experiences that corresponded with women's changing reports of the intentionality, timing and desire for their pregnancy from 2015 to 2018. We used visual maps and analytic memos to identify the following key themes that patterned pregnancy report changes: economic stability, quality of the relationship with the child's father, involvement of the father in childcare, and father's migration status. Three study authors further categorized and mapped women's reports for each theme as: mostly positive, mixed positive and negative, or mostly negative life experiences. There were select cases of coder disagreement, but in all but one case, two of the three coders agreed. We adjudicated minimal coder differences by re-reading the transcripts and collaboratively discussing their meaning.

# **Ethical Considerations and Approval**

All respondents provided verbal informed consent for participating in the interview. TLT data collection, including this study, was approved by the Institutional Review Board (IRB) at the University of Chicago, as well as the national IRB for health research in Malawi, the National Health Research Council.

# Results

Women's reports on the intentionality, timing, and desire for their pregnancy often changed between 2015 and 2018. As shown in Table 1, we identified three groups of women in our data. The first group, comprised of eight of the 17 women, switched from reporting the pregnancy as fully or somewhat planned in 2015 to unplanned in 2018. While pregnant, these women reported their pregnancy came at the right time (or, in one case, the timing was not quite right), was intended or the result of changing intentions, and was somewhat or fully wanted. Yet, three years later, they recalled at least two of these responses in the opposite direction—as less intended, well-timed, or wanted. A second group are the five respondents that offered relatively consistent reports of their pregnancies as unplanned in 2015 and 2018. The final group are those that reported their pregnancy as fully intended, well timed, and wanted in 2018. Two women in this group changed their reports of their pregnancy from being fully unintended, poorly timed, and unwanted in 2015 to the opposite (i.e., fully intended, well timed, and wanted) in 2018. An additional two women reported their pregnancies as consistently planned in 2015 and 2018. Below, we report our findings related to women's life circumstances for each of these three groups of women.

#### Life Experiences and Recall of Pregnancy

**Reported Pregnancy as Unplanned in 2018**—Negative life experiences were common among women whose reports of their pregnancy changed from somewhat or fully

planned to unplanned between 2015 and 2018. All but one of these women described some form of separation from the child's father, which framed women's experiences in all aspects of their lives. Since the child's birth, five of the eight women in this group reported living separately from the child's father due to his migration for work, and four women reported dissolution of the relationship.

Women whose partners had migrated frequently described feeling abandoned by their child's father, who often stopped communicating with them entirely, or rarely sent the anticipated remittances. One 28-year-old mother of four described her experience this way:

"When he went to South Africa, at first, he was helping me, and I was happy that I could manage to support the children. But in 2017, he stopped helping me. When I wanted to know why he has stopped helping me, I was told by his friends that he is married in South Africa. And when I asked him, he told me that I should go my way and he will go his way."

Women in this group reported limited father involvement in supporting their children, especially among migrant fathers. This 25-year-old mother of three described not expecting any involvement from the father who is in South Africa:

"Our relationship has not been good because since the twins were born he has not been helping the children as he used to immediately when they were born, because he stopped sending me any assistance for the children and I accepted that these children will grow up without the support of their father."

Women also experienced economic precariousness due to their husband's migration or separation from the family, as exemplified by this 25-year-old mother of two, who was still married to her migrant husband:

"The challenges which I face because my husband is in South Africa...it is when I need money and I inform him that I need money and he will tell me that he will send the money. But it takes a month before you receive the money and it may happen that by the time you receive the money, there are more problems than you had anticipated so the money is not enough to meet your needs."

Other women in this group similarly reported financial struggles due to the costs associated with raising a child, as described by this 31-year-old mother of four:

"I can say that we have been struggling because of the coming of [my child] as we have to make sure that we have soap, food and clothes, as when a child is growing they change clothes more frequently; so the situation has gotten worse than it was in the past."

Consistently Reported Pregnancy as Unplanned in 2015 and 2018—The five women whose responses indicated their pregnancy was unplanned in both 2015 and again in 2018 did not have as unifying a profile. Three of these women remained married to or living with the father, and none had partners who had migrated.

These women described both positive and negative aspects of their relationships with their child's father, but often cited examples of on-going dysfunction. For example, a 31-year-

old mother of three described an emotionally abusive husband who frequently expressed suspicion of her, openly doubted his paternity, drank heavily, provoked fights, and pursued other sexual partnerships.

Most women in this group described some, limited engagement and support from the father. This is demonstrated by a 27-year-old mother of two, who described the father's involvement before and after their divorce:

"He was supporting the child when we were together but since we divorced the support has not been coming... No he would not [change nappies] but when the child cried he would help me to take care of the child; he would take the child around and make sure he had stopped crying."

In general, these women's economic situations were more secure than their peers who switched from reporting more to less planned pregnancies from 2015 to 2018. Indeed, several women, including this 27-year-old mother of three, described generally positive economic circumstances since the birth of their child:

"It has improved; we have now bought a bicycle since [our child] was born. We have bought a solar panel and the battery to help in charging phones."

Reported Pregnancy as Planned in 2018—Given their similar, positive life experiences, we report here on the combined findings for the four women who reported their pregnancy as planned in 2018. Two of these women had reported similarly in 2015, whereas the other two women's recollection of their pregnancies changed from unplanned to planned over the three-year period. All four of these women remained married to their child's father, none of whom had migrated since the pregnancy.

These women all described positive relationships with their husbands, even if there had been problems in the past. For instance, this 25-year-old mother of two described her improved relationship:

"Our relationship has improved [since the birth of our child] and we have been moving forward. He knows that he has been living with me for a long time now and there is no way he can be mistreating me. "

These positive relationship dynamics largely centered on these women's husbands taking active and dedicated roles in raising their child. This is described by a 29-year-old mother of two:

"My husband is a minibus driver; he works from Sunday to Friday; he leaves in the morning and comes backs in the evening; he does not work on Saturday; we go to church on Saturday. And he tells me that he will be one who will do all the household chores and when we are going to church, he is the one who will carry the baby. He makes sure that I have a total rest on Saturday; he literally does all the work including taking care of the child. When we are at the church, he will change the nappies when he has dirtied them. So, what I can say is that on Saturday he is the one who nurses the child. He also provides food and clothes for the child."

Further, all but one of these four women reported that their family could meet their basic needs without worry, as described by this 28-year-old mother of four:

"We are satisfied with what we have; we have two salaries from me and my husband's jobs and we are able to support our family without struggling."

## **Discussion**

Our study provides evidence that women's recollection of pregnancy planning is patterned by their post-birth experiences. Importantly, we found that women whose lives were marked by struggle following the birth were more likely to retrospectively report their pregnancies as unplanned—even if they had reported otherwise during the pregnancy. In contrast, women who had largely positive life experiences since the birth of their child frequently recalled their pregnancies as planned, even if they had initially characterized the pregnancy as unplanned. These common patterns among our sample call into question what we know about the association between pregnancy planning and women's later life outcomes given the conventional reliance on retrospective indicators.

Specifically, in the Malawian setting, relationship problems, lack of support from the child's father, and economic insecurity were recurrent themes that seemed to prime women to change their recollection of a pregnancy to unintended, undesired, or ill-timed. Further, many adverse life experiences described by those who recalled unplanned pregnancies were framed by the context of the father's migration. While health concerns for women and their children were common, they were less clearly patterned by reports of pregnancy planning. Even as our results are specific to the Malawian context, we suspect that this overarching pattern of greater life adversity leaving women more susceptible to remembering a pregnancy as unplanned may be prevalent in other contexts. We echo other researchers who call for further studies to better understand how women's life circumstances before, during, and after an unplanned pregnancy may influence their reports of pregnancy planning (K. S. Hall, Dalton, Zochowski, Johnson, & Harris, 2017; Kost & Zolna, 2019; Lewinsohn et al., 2018).

Our study is subject to limitations, including that we had few women in our sample who recalled their pregnancy as planned in 2018. We had anticipated, based on existing evidence (Gipson et al., 2008), that women would often change reports of their pregnancies from unintended to intended. In our post-data collection analysis, however, we were surprised that sampling for variation on 2015 pregnancy planning yielded so few women who recalled their pregnancy as planned. While this is itself noteworthy, our study may not have reached theoretical saturation in characterizing the experiences of women who recalled planned pregnancies.

Our results reveal that a woman's recollection of her pregnancy may be as much a consequence of her lived adversity as it is a cause. This finding has important implications for researchers studying the impact of unintended fertility and highlights the potential for bias when using standard retrospective measures. Approaches that measure fertility intentions and desires *before* the child's birth (e.g., Bishai, Razzaque, Christiansen, Mustafa, & Hindin, 2015; Singh, Singh, & Mahapatra, 2013; Stephenson, Koenig, Acharya, & Roy,

2008) are critical for understanding how women's lives diverge—or do not—following an unintended birth.

# Funding:

This research was supported by a gift from Facebook to Emily Smith-Greenaway. This research uses data from Tsogolo la Thanzi, a research project designed by Jenny Trinitapoli and Sara Yeatman and funded by grants R01-HD058366 and R01-HD077873 from the National Institute of Child Health and Human Development. The research was also supported by the population center at the University of Colorado (CUPC; P2C HD066613), and grant R03-HD 097360 from the National Institute of Child Health and Human Development.

## References

- Aiken ARA, Dillaway C, & Mevs-Korff N (2015). A blessing I can't afford: Factors underlying the paradox of happiness about unintended pregnancy. Social Science & Medicine, 132, 149–155. doi:10.1016/j.socscimed.2015.03.038 [PubMed: 25813729]
- Ameyaw EK, Budu E, Sambah F, Baatiema L, Appiah F, Seidu A-A, & Ahinkorah BO (2019). Prevalence and determinants of unintended pregnancy in sub-Saharan Africa: A multi-country analysis of demographic and health surveys. PloS one, 14(8), e0220970. [PubMed: 31398240]
- Bankole A, & Westoff CF (1998). The consistency and validity of reproductive attitudes: evidence from Morocco. Journal of biosocial science, 30(04), 439–455. [PubMed: 9818553]
- Barrett G, Smith S, & Wellings K (2004). London Measure of Unplanned Pregnancy (appears in: Conceptualisation, Development, and Evaluation of a Measure of Unplanned Pregnancy.) Copyright: BMJ Publishing Group.
- Barrett G, Smith SC, & Wellings K (2004). Conceptualisation, development, and evaluation of a measure of unplanned pregnancy. Journal of Epidemiology & Community Health, 58(5), 426–433. [PubMed: 15082745]
- Bearak J, Popinchalk A, Alkema L, & Sedgh G (2018). Global, regional, and subregional trends in unintended pregnancy and its outcomes from 1990 to 2014: estimates from a Bayesian hierarchical model. The Lancet Global Health, 6(4), e380–e389. [PubMed: 29519649]
- Bertrand-Dansereau A, & Clark S (2016). Pragmatic tradition or romantic aspiration? The causes of impulsive marriage and early divorce among women in rural Malawi. Demographic research, 35, 47–80
- Bishai D, Razzaque A, Christiansen S, Mustafa AG, & Hindin M (2015). Selection Bias in the Link Between Child Wantedness and Child Survival: Theory and Data From Matlab, Bangladesh. Demography, 1–22. [PubMed: 25550142]
- Chin B (2010). Income, health, and well-being in rural Malawi. Demographic research, 23(35), 997. [PubMed: 21359133]
- Edin K, & Kefalas M (2011). Promises I can keep: Why poor women put motherhood before marriage: Univ of California Press.
- Gipson JD, Koenig MA, & Hindin MJ (2008). The effects of unintended pregnancy on infant, child, and parental health: a review of the literature. Studies in family planning, 39(1), 18–38. [PubMed: 18540521]
- Guzzo KB, & Hayford SR (2014). Revisiting retrospective reporting of first-birth intendedness. Maternal and child health journal, 18(9), 2141–2147. [PubMed: 24604625]
- Guzzo KB, & Hayford SR (2020). Pathways to parenthood in social and family contexts: Decade in review, 2020. Journal of Marriage and Family, 82(1), 117–144. [PubMed: 34012172]
- Hall JA, Barrett G, Copas A, Phiri T, Malata A, & Stephenson J (2018). Reassessing pregnancy intention and its relation to maternal, perinatal and neonatal outcomes in a low-income setting: A cohort study. PloS one, 13(10), e0205487. [PubMed: 30335769]
- Hall KS, Dalton VK, Zochowski M, Johnson TR, & Harris LH (2017). Stressful life events around the time of unplanned pregnancy and women's health: exploratory findings from a national sample. Maternal and child health journal, 21(6), 1336–1348. [PubMed: 28120290]

Haug R, & Westengen OT (2020). Policy and Action for Food and Climate Uncertainties in Malawi. In Climate Impacts on Agricultural and Natural Resource Sustainability in Africa (pp. 331–345): Springer.

- Johnson JA (2017). After the mines: the changing social and economic landscape of Malawi–South Africa migration. Review of African Political Economy, 44(152), 237–251.
- Joyce T, Kaestner R, & Korenman S (2002). On the validity of retrospective assessments of pregnancy intention. Demography, 39(1), 199–213. [PubMed: 11852837]
- Kavanaugh ML, Kost K, Frohwirth L, Maddow-Zimet I, & Gor V (2017). Parents' experience of unintended childbearing: A qualitative study of factors that mitigate or exacerbate effects. Social Science & Medicine, 174, 133–141. [PubMed: 28038432]
- Koenig MA, Acharya R, Singh S, & Roy TK (2006). Do current measurement approaches underestimate levels of unwanted childbearing? Evidence from rural India. Population Studies, 60(3), 243–256. [PubMed: 17060052]
- Kost K, & Zolna M (2019). Challenging unintended pregnancy as an indicator of reproductive autonomy: a response. Contraception, 100(1), 5–9. [PubMed: 31059700]
- Lewinsohn R, Crankshaw T, Tomlinson M, Gibbs A, Butler L, & Smit J (2018). "This baby came up and then he said," I give up!": The interplay between unintended pregnancy, sexual partnership dynamics and social support and the impact on women's well-being in KwaZulu-Natal, South Africa. Midwifery, 62, 29–35. [PubMed: 29631201]
- McPhail S, & Haines T (2010). Response shift, recall bias and their effect on measuring change in health-related quality of life amongst older hospital patients. Health and quality of life outcomes, 8, 65–65. doi:10.1186/1477-7525-8-65 [PubMed: 20618978]
- Palamuleni ME, & Adebowale AS (2014). Prevalence and determinants of unintended pregnancies in Malawi. African Population Studies, 28(1), 551–563.
- Rackin HM, & Morgan SP (2018). Prospective versus retrospective measurement of unwanted fertility: Strengths, weaknesses, and inconsistencies assessed for a cohort of US women. Demogr Res, 39, 61–94. doi:10.4054/DemRes.2018.39.3 [PubMed: 31827372]
- Rosenzweig MR, & Wolpin KI (1993). Maternal expectations and ex post rationalizations: The usefulness of survey information on the wantedness of children. Journal of Human Resources, 205–229.
- Singh A, Singh A, & Mahapatra B (2013). The consequences of unintended pregnancy for maternal and child health in rural India: evidence from prospective data. Maternal and child health journal, 17(3), 493–500. [PubMed: 22527770]
- Smith-Greenaway E, & Sennott C (2016). Death and desirability: Retrospective reporting of unintended pregnancy after a child's death. Demography, 53(3), 805–834. [PubMed: 27150965]
- Stephenson R, Koenig MA, Acharya R, & Roy TK (2008). Domestic violence, contraceptive use, and unwanted pregnancy in rural India. Studies in family planning, 39(3), 177–186. [PubMed: 18853639]
- Wellings K, Jones KG, Mercer CH, Tanton C, Clifton S, Datta J, . . . Macdowall W (2013). The prevalence of unplanned pregnancy and associated factors in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3). The Lancet, 382(9907), 1807–1816.
- White AL, Mann ES, & Larkan F (2018). 'You just have to learn to keep moving on': young women's experiences with unplanned pregnancy in the Cook Islands. Culture, health & sexuality, 20(7), 731–745.
- Williams L, & Abma J (2000). Birth wantedness reports: a look forward and a look back. Social biology, 47(3–4), 147–163. [PubMed: 12055692]
- Yeatman S, & Sennott C (2015). The Sensitivity of Measures of Unwanted and Unintended Pregnancy Using Retrospective and Prospective Reporting: Evidence from Malawi. Maternal and child health journal, 1–8. [PubMed: 24740722]
- Yeatman S, & Smith-Greenaway E (2018). Birth Planning and Women's and Men's Health in Malawi. Studies in family planning, 49(3), 213–235.
- Yeatman S, Chilungo A, Lungu S, Namadingo H, & Trinitapoli J (2019). Tsogolo la Thanzi: A longitudinal study of young adults living in Malawi's HIV epidemic. Studies in family planning, 50(1), 71–84 [PubMed: 30690738]

# Significance

# WHAT IS ALREADY KNOWN ON THIS SUBJECT

Unintended pregnancy has been linked to negative life circumstances; however, these associations generally rely on retrospective reports of pregnancy intentions captured months and often years after the birth of a child. This may be problematic as evidence demonstrates that women's retrospective reports of their pregnancy intentions frequently differ from their prospective report of the same pregnancy.

#### WHAT THIS STUDY ADDS

We offer qualitative evidence that women's life circumstances shape their recollection of pregnancy planning. Researchers examining the consequences of unintended fertility should exercise caution when linking retrospective pregnancy planning reports with current or past life circumstances.

Table 1.

Detailed description of women's pattern of recall on the timing, intention, and desire of focal pregnancy while pregnant and 3 years later

	2015: Report while pregnant			2018:	2018: Retrospective report		
	Right time	Intended	Wanted	Right time	Intended	Wanted	
Fully/Somewhat planned to unplanned <sup>1</sup> (N=8)							
Consistently unplanned (N=5)							
Unplanned to fully planned (N=2) Consistently fully planned (N=2)							
		Fully planned		omewhat lanned			

Source: Tsogolo la Thanzi (2015) and follow-up interviews with 17 women in 2018

"Fully" represents that the pregnancy was at the "right time"; "intended"; "Somewhat" represents the pregnancy was "okay, but not quite right time"; "intentions kept changing"; "mixed feelings"; "Not" represents the pregnancy was "wrong time"; "unintended"; "not wanted".

N=1'

<sup>&</sup>lt;sup>1</sup>Note that 1 respondent in this group reported their pregnancy as fully intended, wanted, and well-timed in 2015, but their full LMUP score was categorized as only somewhat planned due to other responses on the full LMUP.