INTRODUCTION

While modern methods of contraception (i.e., birth control pills, injectables, intrauterine devices or condoms) are more and more widely available throughout the world, more than 200 million women in developing countries are at high risk for unintended pregnancy because they have an “unmet need” for contraception, meaning they are fertile and sexually active, and they do not wish to become pregnant now, but they are not using contraception. Unmet need for contraception has wide ranging public health consequences, including 54 million annual unintended pregnancies and 76,000 deaths (Singh and Darroch 2012). The social and financial consequences of unintended pregnancies effect far more people. Despite the tremendous burden on women and families caused by non-use of contraception, we lack clarity about the basics of what prevents non-users from using, what motivates users to use, and how women transition between non-use and use of contraception.

In the southern African nation of Malawi, dramatic change has occurred in the past twenty years around contraceptive uptake: since 1992, current use of modern contraception among women aged 15-49 has risen from 6% to 41% (DHS 2012). Nevertheless, an estimated 25% of reproductive aged women still have unmet need for contraception (Casterline 2013). Highly effective methods to prevent pregnancy exist, but even in locations where accessible and affordable contraception is available, a sizable proportion of women who do not want to conceive nevertheless do not use contraception. Reasons for non-use of contraception have been assessed among non-users, and these include: worries about side effects (including lowered libido and irregular bleeding); fear that contraception will cause future infertility; perceptions of low fertility; opposition from partners, providers or religion; cost; ambivalently positive feelings toward pregnancy; and inconvenience of obtaining or using contraception. All of these barriers contribute to unmet need and lead to unintended pregnancy. On the other hand, motivators for using contraception have been assessed among users, and include: positive past experiences; knowing users your personal network; wanting to limit or space childbearing (e.g., because of time and/or financial constraints); beliefs that birth spacing improves health of women and children; personal agency for decision making; and social norms that contraceptive use is “modern” or progressive (C-Change, Malawi 2012).

In both the general research on contraceptive non-use and the more specific analysis of unmet need, individual motivations for non-use are typically only examined in relation to a contraceptive non-user. In other words, when a woman reports non-use of contraception, she is asked a series of follow-up questions to try and ascertain the reasons for non-use. We posit that a critical aspect of unmet need has not been considered: although most research about barriers to contraceptive use has focused on those with unmet need, barriers are also present for many women who use contraception. Likewise, beliefs in positive aspects of contraception are also present for many women who do not use contraception. Women who use contraception may experience barriers differently, may have motivators that are sufficient to overcome barriers, or both.

The individual motivations that factor in to the decision to use or not to use contraception remain poorly understood because we do not know the associated motivations of current users. Said differently, we know only why non-users are not using but less about how these specific factors are acknowledged and overcome by contraceptive users. In most cases, the comparison of users to non-
users is missing – thus giving us an imperfect picture of the reasons associated with non-use. In this analysis, we aim to determine the barriers (or reasons for potential future non-use) among both current users and non-users of contraception in rural Malawi. Additionally, we assess motivators (or reasons for potential future use) among both current users and non-users of contraception.

METHODS

Our research group, Umoyo wa Thanzi (UTHA) has established a community-based cohort of reproductive aged women (n=1034) in rural Malawi. The cohort was selected with two-stage, stratified, cluster sampling. All women aged 15-39 in selected villages were invited to participate, and a total of 1034 women joined the cohort.

Data and Measures

The UTHA data contains measures on ever use of contraception in which respondents detailed modern (pills, IUD, implant, injectables, and male and female condom), low efficacy (withdrawal, rhythm, lactating) and traditional (the string, herbs, and washing genitals) methods of contraception. Subsequently, respondents who used any modern method stated the reason for use. Additionally, we asked about reasons for stopping and the experience of side effects among ever-users of contraception. In regards to current users of contraception, we asked the reasons for current non-use among non-users.

Finally, for the entire sample we have measures on the reasons an individual might use and not use contraception in the future. These are our key measures as they allow us to compare motivations across current users and non-users in regards to future behavior. Broadly, the reasons for use and non-use (both present and future) fall in to categories related to fertility desires, social and economic consequences, and health effects. These reasons were created based on past research, theoretical justification, and a full set of qualitative data within the study area prior to the baseline wave of data collection. For all of these questions, respondents were allowed to answer all that applied so that frequencies do not sum to 100% across all reasons or method choices.

In our analyses we simplify the measure of current use to be a dichotomous indicator for current use of a modern method (pill, injectables, IUD, implants, and male and female condom) against the single group of non-users and users of only traditional methods. Women who are sterilized (N=24) are excluded leaving a total sample of 1,010 women.

In further analyses, we will use measures of age, education, income, fertility desires (want soon, want later, want no more, and undecided), parity, self-rated health, past labor and delivery experiences, and unmet need (non-users who want to delay pregnancy) to better understand the group differences (and similarities) in the reasons, or motivations, for future use and non-use.

Analysis

The first step is a descriptive analysis of the reasons for ever-use, for stopping, and the extent of the side effects experienced by women in the sample. From this, we move to comparisons of reasons for future use among current users and non-users of modern methods. We use a two-sample t-test to individually examine the difference between groups.

Future analyses will include modeling the determinants of the most common reasons for use and non-use. These will be logistic regressions including controls for background characteristics – education,
income, parity, and self-rated health and an indicator of current users and non-users. We will further examine the extent to which background characteristics are associated with interactive effects on the likelihood of giving a particular reason for contraceptive behavior. Stratification of the sample by parity, age, education and fertility preference will be considered in regression analyses.

RESULTS

The typical woman in our study sample is 26 years old with 5 years of schooling and from a household with a monthly income of between 12 and 25 USD. Average parity is 2.3, 78% of women have ever-used a modern method of contraception while 16% have never used any form of fertility control (modern or traditional). Current modern method use is 49% among the sample which and the sample is mostly comprised of married women. A further 32% are using no method of contraception. Taken as a whole, the women in this sample typically are of low educational attainment, are young adults, are poor and have past experience with modern method use, whether condoms or hormonal methods.

Both current users and current non-users of modern methods of contraception endorse many reasons for potential future use of contraception. Most often cited reasons are to space between children, to have healthy children, and for a woman’s body to be healthy (Figure 1). While the reasons are similar, current users are statistically significantly more likely to cite each of the motivations listed in Figure 1, as compared to current non-users.

![Figure 1: Reasons for future use of contraception](image)

Both current users and current non-users of contraception endorse two major reasons why they might not use contraception in the future: to be able to conceive and to have a break from contraception (Figure 2). Both of these reasons were given statistically significantly more often by women who are current users of contraception, which makes sense given that these are both reasons to stop using. The potential reasons for not using at all were endorsed by many smaller proportions of contraceptive users and non-users.
Figure 2: Reasons for future non-use of contraception

Only the responses of “not applicable” or “I don’t know” were statistically significantly more often cited by current non-users of contraception. The high levels of the “not applicable” response in reasons for future non-use compared to future use (absent and therefore not pictured in Figure 1) warrant further investigation. Initial univariate analyses observes that a number of the current users giving a “not applicable” response are women who desire no more children, and thus have no reason to stop using contraception.

Reasons for Stopping and Side Effects

Among the sample, 400 women had stopped the use of modern methods. For half of the sample (48%) the given reason was in order to conceive. A small number (9%) of the sample said there was “no reason” and 23% cited an experience of side effects. Among modern users who had experienced side effects, menstrual changes (47%) and body pains (23%) were most common.

DISCUSSION

Current users of contraception provided more reasons to use and more reasons not to use contraception in the future, as compared to current non-users of contraception. Along these lines, on the reasons for use in the future, only non-users indicated a response of “I don’t know”. Taken together, it is possible that these individuals represent a small group of individuals with less knowledge of contraceptive methods and additionally, a less conscious or deliberated decision-making process in regards to contraception. Given that current users gave more reasons for both future use and non-use, it could be that these individuals have both greater awareness stemming from their own experience, and a clearer formulation of their opinions about the costs and benefits of using contraception.
Moving forward, this paper represents an important first step in considering how users and non-users are both similar and different in their motivations to use. This will offer insight both for the UTHA study as it prepares for further longitudinal data collection with the cohort and provide additional rationale for the observation of how motivations influence and change for women across their reproductive careers.

Overall, our initial picture of the reasons for future use and non-use represent significant awareness across all women of the advantages and rationales for using contraception. However, there remains a substantial amount of non-use that is not explained solely by fertility desires. Examination of the economic, social, health- and access-related rationales for contraceptive behaviors among both users and non-users promises a deeper understanding of the distribution of knowledge, the associated background characteristics influencing future motivations, and the nature of the barriers associated with programmatic challenges such as unmet need for contraception.

**CONCLUSION**

It is entirely possible that both users and non-users recognize similarly valid reasons to use or not to use, and yet their behaviors regarding contraceptive use differ. Up to this point, this hypothesis of shared motivations to both use or not use, has not been examined. Given the increasing global and programmatic importance of reducing unmet need, a better understanding of what motivates both non-users and users will push forward our current understandings of factors associated with contraceptive non-use as well as inform better policies and practices in the provision of family planning services.