

Trends in Contraceptive Use and Family Planning Indicators

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Improvements in reproductive health are dependent on access to contraception and family planning services, but a lack of data makes it difficult to monitor progress in these areas. Robust statistical techniques are very much needed to provide accurate assessments and projections using available data. Asst Prof Leontine Alkema and her co-researchers recently provided one such technique, devising a breakthrough statistical approach to estimating contraceptive prevalence and the unmet need for family planning among married women aged 15-49 worldwide.

Unmet need for family planning is measured as “the percentage of women of reproductive age who are married or in a union and want to stop or delay childbearing but are not using any method of contraception to prevent pregnancy”, according to Asst Prof Alkema. This is an important indicator “because it measures lack of access to voluntary family planning”.

However, measuring this unmet need is difficult. Data on family planning are obtained through national surveys, which are carried out less frequently in some countries than in others. Asst Prof Alkema also notes that the survey algorithm used to measure unmet need is more involved and not always included in surveys. Laos, for instance, has only had two surveys that measured unmet need since 1990. Other data issues are that some surveys include all women in their samples, regardless of whether they are married, or generate lower-quality data given problems with the way they are organised.

To address this situation, the researchers drew on data from many sources and used a probabilistic approach to construct estimates and to determine whether increases and decreases over time were signs of significant progress or highly uncertain change. To produce estimates and short-term projections for countries in which little information was available, the team used a Bayesian hierarchical model based on information from subregional, regional and global trends. They found that contraceptive prevalence increased from 54% worldwide in 1990 to 63.3% in 2010, and unmet need for family planning decreased from 15.4% in 1990 to 12.3% in 2010.

This trend might seem positive but Asst Prof Alkema and her co-researchers estimated that in 2010, around 146 million married women of reproductive age worldwide had an unmet need for family planning. Given projected increases in populations, the number of married women who either use contraception or who have an unmet need for family planning will increase from 900 million in 2010 to 962 million by 2015.

There is an urgent need for increased investment to meet the demand for contraceptive methods and access to family planning. Asst Prof Alkema notes that the estimates and short-term projections she and her co-researchers produced will help “to identify populations that are in need of improved access to family planning services, and to monitor progress in improving access on a national level”.

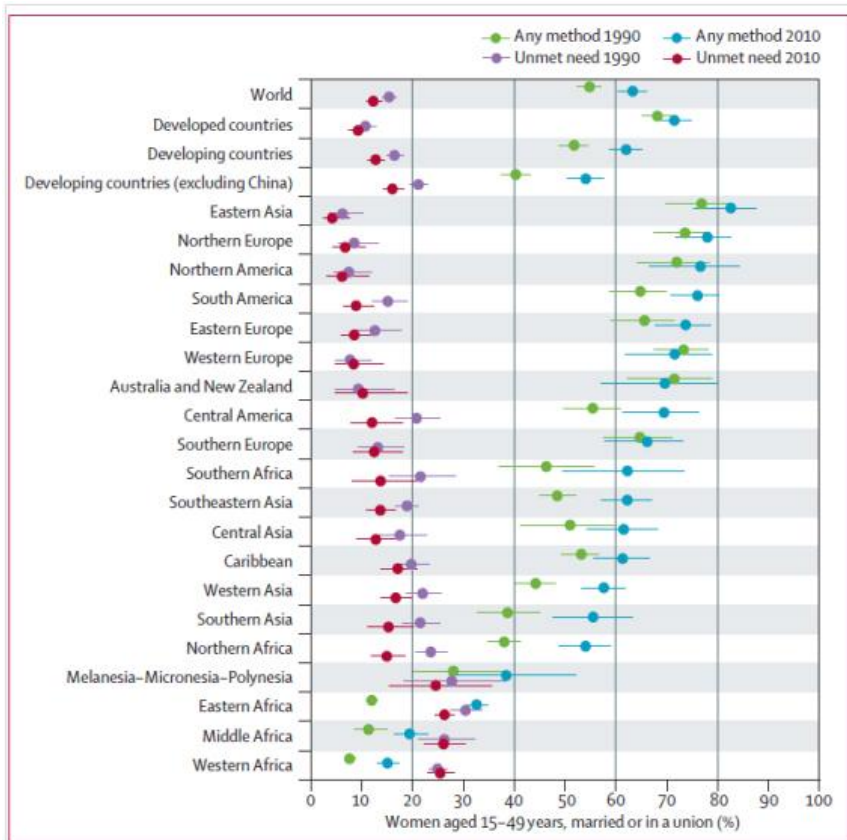


Figure 1: Percentage of women aged 15-49 years who were married or in a union who used a contraceptive method or who had an unmet need for family planning in 1990 and 2010, by world, development group, and subregion

Horizontal lines represent the 95% uncertainty intervals.

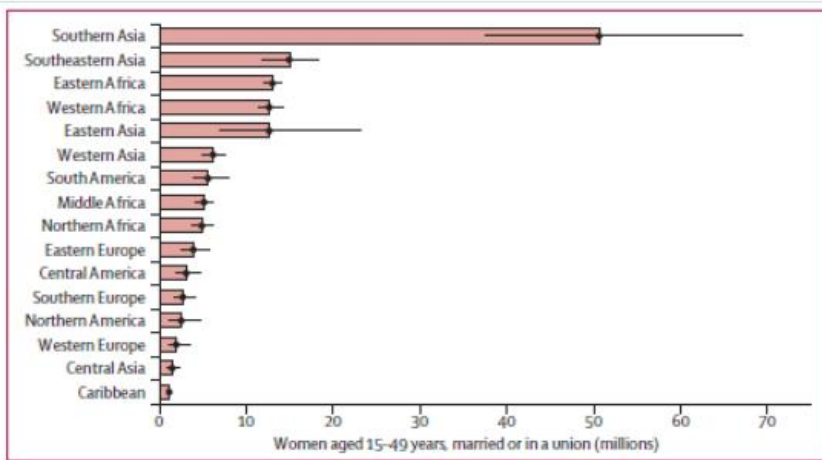


Figure 2: Number of women aged 15-49 years who were married or in a union with an unmet need for family planning in 2010, by subregion

Subregions with fewer than 1 million women with an unmet need for family planning are not presented.

Horizontal lines represent the 95% uncertainty intervals.

Publication:

Alkema, L. Kantorova, V., Menozzi, C., Biddlecom, A. National, regional, and global rates and trends in contraceptive prevalence and unmet need for family planning between 1990 and 2015: a systematic and comprehensive analysis. *The Lancet*, 381, 1642-1652 (2013).