

A stylized silhouette of a family consisting of a mother, a father, and two children. The mother is on the left, the father is on the right, and two children are in the middle. The child on the right is drawn with dashed lines, indicating a child who is not yet born or is being planned for. The text is overlaid on the top part of the image.

Fertility decline and changes in unmet need in countries of Latin America and the Caribbean

2016 International young researchers' Conference

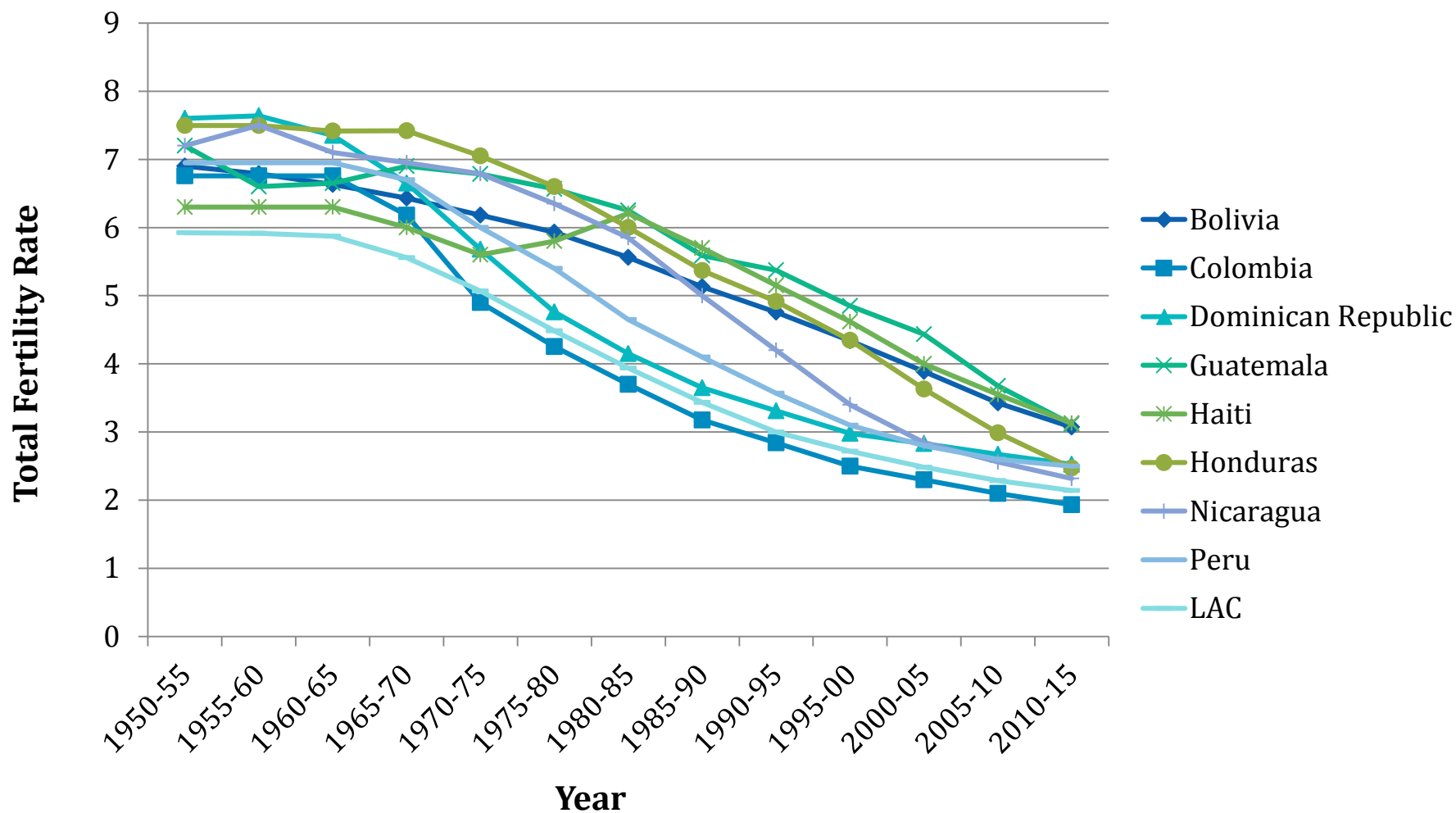
Javiera Fanta Garrido
IPMA-CONICET (Buenos Aires)

Daniel E. Quiroga
CIECS-CONICET (Cordoba)

Introduction

- Since the late 1960s, fertility rates have dropped sharply in most countries of Latin America and the Caribbean (LAC). Overall, the TFR decreased from 6.0 children per woman in 1965 to 2.2 in 2015.
- Increasing demand for family-size limitation → reductions in the ideal number of children (e.g. Bolivia = 2; Peru: 2 (mode))
- Classical demographic transition theory: “fertility decline is a result of industrialization and improvements in economic and social development”. High outcomes of TFR → rational response to poverty.
- In LAC, fertility decline proceeded at a rapid pace despite that the incidence of poverty changed slightly since 1980, mainly due to:
 - 1) Available technology at low cost in the areas of health and medicine (thus, reducing child mortality) and 2) increasing coverage of FP services.
- Study by Casterline & El-Zeini (2014): Reduction in unmet need, especially unmet need for limiting, was positively associated with

Total Fertility Rate by country, 1960-2015. Eight countries of Latin America and the Caribbean



The concept of unmet need

- Defined as the percentage of women who desire to either **terminate** (unmet need for limiting) or **postpone childbearing** (unmet need for spacing), but who are **not** using contraception.
- Definition of unmet need includes **traditional contraceptive methods** → high failure rates.
- Unmet need does not indicate a woman's access to Family Planning services or her desire to use contraception.
- Fertility intentions encompass affective, cognitive, cultural and contextual dimensions → complex conceptualization and measurement.
- Varying definitions → not useful for tracking trends or cross-country comparisons.

Problem statement and objectives

- There is broad agreement that fertility decline in LAC, rather than resulting from improvements in economic development, was due to the implementation and expansion of FP programs → satisfaction of pre-existing demand for family-size limitation and legitimation of the use of modern contraception.
- Empirical analysis aimed at studying the relationship between improvements in FP and fertility decline is scarce.
- The concept of unmet need has received little attention in comparative research on the region, despite it became an indicator for monitoring the progress of the MDG5 in 2008.
- **Objective:** To examine within-country changes of unmet need and determine to what extent variations in unmet need have contributed to achieve lower fertility levels in the region during the past two decades.

Data and method

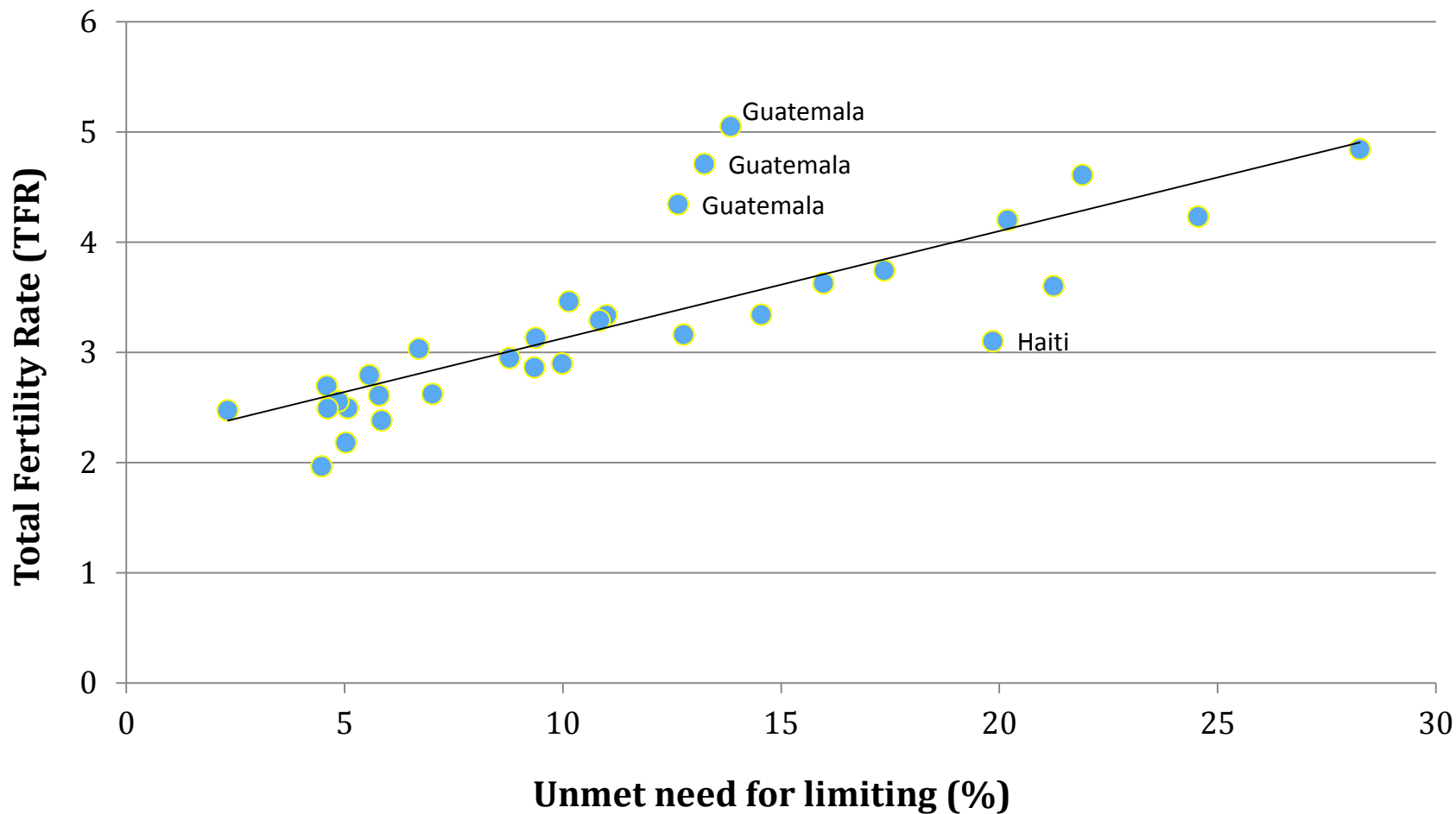
- Data was derived from DHS and RHS 1990-2013 (32 surveys).
- Selection of countries was based on: 1) access to micro-data sets, 2) standardize data, and 3) availability of at least two surveys, in order to examine changes over time.
- We used the revised version of unmet need, particularly [unmet need for limiting](#) (Bradley et al., 2012)→ [valid for surveys as early as 1990](#). In addition, we analyse the proportion of demand for limiting satisfied by any method and the proportion of demand satisfied by modern methods.
- The analysis was confined to married/cohabiting women in reproductive ages (15-49).
- Assuming that TFR should lag contraceptive prevalence by 9 months, we estimated unmet need values for 10 months prior to the survey through linear interpolation.
- We offer a descriptive analysis of within country trends and a cross-country regression analysis, treating all surveys as independent observations.

Percentage of unmet need for limiting childbearing in eight countries of Latin America and the Caribbean, 1990-2015

Country	1990-95	1995-00	2000-05	2005-10	2010-15
Bolivia	21.4	19.8	16.9	14	-
Colombia	9	6.6	5.7	4.9	4.5
Dominican Rep.	10.3	6.1	5.5	4.4	4
Guatemala	13.7	13.1	12.5	9.8	-
Haiti	27.7	24	-	20.8	19.7
Honduras	-	-	-	8.8	4.4
Nicaragua	-	10.5	9.0	5.2	-
Peru	15.4	12.2	7.5	6.2	5.3

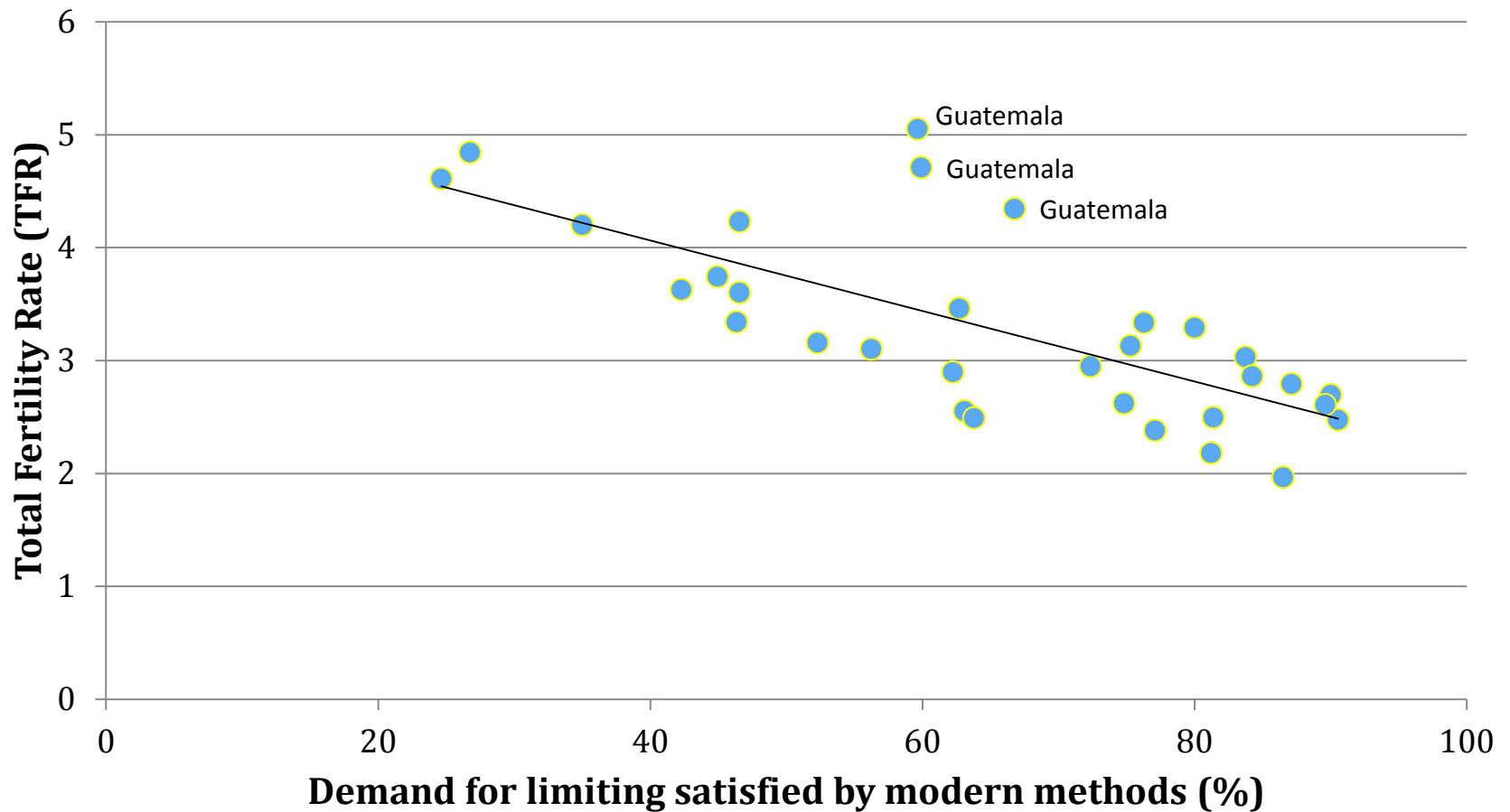
Sources: Demographic and Health Surveys from the DHS program (USAID); Reproductive Health Survey from Global Health Data Exchange (GHDx)

Fig. 1 Levels of unmet need for limiting (%) and TFR in eight countries of Latin America and the Caribbean



slope=0.1; $R^2= 0.618$; $p \leq 0.05$

Fig. 3 Levels of demand for limiting satisfied by modern methods (%) and TFR in eight countries of Latin America and the Caribbean



slope= -0.3; $R^2= 0.500$; $p \leq 0.05$

Comments and limitations of the study

- In the countries concerned, fertility decline tracks the decline in unmet need for family planning fairly closely, irrespective of the indicator of unmet need considered.
- Fertility declines as a consequence of increased implementation of preferences regarding contraception.
- Policy implications: Provision of contraception seems the most appropriate alternative to lower fertility (instead of induced abortion or policies towards changing fertility desires).
- Limitations of the study:
 - Unintended fertility may be an outcome of inadequate or incomplete contraceptive use, instead of a consequences of unmet need.
 - This research assumes that the reported intentions of wanting to limit childbearing do not change among women surveyed by DHS and RH.