Social Science & Medicine 118 (2014) 80–88

Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

Is religion the forgotten variable in maternal and child health? Evidence from Zimbabwe

Wei Ha [a, *], Peter Salama [b], Stanley Gwavuya [c], Chifundo Kanjala [d]

[a] Graduate School of Education and Institute of Economics of Education, Peking University, Beijing 100871, China
[b] UNICEF Ethiopia, UNICEF House, P.O. Box 1169, Addis Ababa, Ethiopia
[c] UNICEF Zimbabwe, 6 Fairbridge, Belgravia, Harare, Zimbabwe
[d] National Institute of Medical Research, Mwanza, P.O. Box 1462, Isamilo Road, Mwanza, Tanzania

ARTICLE INFO

Article history:
Received 1 April 2014
Received in revised form
28 July 2014
Accepted 30 July 2014
Available online 31 July 2014

Keywords:
Zimbabwe
Apostolic religion
African Independent Church
Maternal and child health

ABSTRACT

The Apostolic faith, a rapidly growing and increasingly influential force in Zimbabwe, has received attention in the literature due to its potential role in shaping its followers' attitudes and behaviours towards health. Existing literature, however, has only examined small cross-section samples from a few confined survey sites or has failed to adequately control for the many factors that may mediate the effects of religion. This paper examines the effects of the Apostolic faith on the usage of maternal health and child immunization services in Zimbabwe. It is based on a nationally representative sample from the 2009 Multi-Indicator Monitoring Survey and employs the established Andersen model on access to health services. Well controlled multivariate logit regression models derived from these data show that an affiliation with the Apostolic faith is a substantial and significant risk factor in reducing the utilization of both maternal and child health services. Moreover, even when the services were least costly and readily available and when gaps along other social and economic factors were limited, as in the case of Bacillus Calmette-Guérin vaccination and one visit to antenatal care, women and children from Apostolic faith families still fared significantly worse than others in accessing them.

1. Introduction

The role of religion in explaining health access and health outcomes in Africa has received increasing attention (Ensor and Cooper, 2004; Ellison and Levin, 1998). This is certainly welcome as Africa is poised to be one of the most religious continents in terms of both religious affiliation and religious practices (PEW Research Centre, 2010). Existing research differs in explaining the causal mechanisms behind observed relationships between religion and health. Followers of the 'particularized theology hypothesis' consider that the doctrinal teachings, beliefs and values of religious groups directly influence health outcomes. Alternatively, those supporting the 'selectivity hypothesis' claim that disparities in observed behaviour between religious groups mainly reflect differential access to social and human capital which in turn determines health access and outcome rather than religion *per se* (Gyimah et al., 2006; Addai, 1999). Results from studies carried out in the Sub-Saharan African context have so far yielded equivocal support for each view. Studies examining relationships between religion and health outcome largely substantiate the selectivity hypothesis (Gyimah et al., 2006 and Antai et al., 2009). In contrast, studies focussing on the pathways between religion and access to healthcare tend to support the 'particular theology' hypothesis (Gyimah et al., 2006 and Antai et al., 2009).

One difficulty is that these studies generally combine many denominations into a single Christian or Muslim group and have neglected inter-denominational diversity. In particular, little attention has been paid to the African Independent Churches, a formidable force of religion in Africa. These churches have come from the spiritual revolution under western colonial rule during the late nineteenth century when African traditional religions encountered the Christian faith (Ranger, 1999). By one account, their adherents are estimated at around 55 million on the African continent and in the diaspora (Barrett and Johnson, 2001). This study will focus on the 'spiritual' churches known as Zionist or Apostolic which sought independence from more conventional missionary churches on doctrinal grounds including the role of spiritual healing and 'Jordan baptism' (Hayes, 1992; Andersen, 1995; Imunde and Padwick, 2008).

* Corresponding author.
E-mail addresses: wha@pku.edu.cn, hawei2007@gmail.com (W. Ha).

http://dx.doi.org/10.1016/j.socscimed.2014.07.066
0277-9536/

Zimbabwe has been one of the strongholds of the African Apostolic church. Although the exact following of the Apostolic movement in the country has not been determined with certainty, we have pieced together the best available estimates from available Demographic and Health Surveys and the Multiple Indicator Cluster Survey (MICS). Data indicate a rather rapid growth of the group from 20% of the population in 1994 and 21.5% in 1999 to 27% in 2009 (CSO & Macro International, 1995; Machingura, 2011; ZIMSTAT, 2010). This would put the current population following the Apostolic faith at 3.5 million and translates into a 1.4 million increase over the 15-year period. This growth of Apostolic faith coincided with the development of an HIV/AIDS crisis, a downward spiral of the Zimbabwean economy and the consequent collapse of the health sector, arguably once one of the best in Africa. Since 2009, the Inclusive Government with support from development partners has been trying to rebuild the health system and increase the coverage of important maternal and child health interventions (Government of Zimbabwe and UN, 2010; UNICEF, 2010). It is more urgent than ever to ensure that the available critical maternal and health services are taken up in a timely and effective manner without undue interference (Pearson and Makadzange, 2008).

Apostolic churches in Zimbabwe have been found to affect adherents' health access and health outcomes in several ways. Firstly, the churches provide necessary social support to their members in times of great change or adversity which can positively support improved physical and mental health (Mpofu et al., 2011). Secondly, their strict doctrine and moral codes on sexual behaviour may offer perceived protection from HIV infection. These have been confirmed in small sample surveys by Gregson et al. (1999) and Pearson and Makadzange (2008). Lastly, but most pertinent to our focus on maternal and child health, Apostolic churches emphasize prophet-healing through prayers and the action of the Holy Spirit. Any use of western and modern medicine is seen as exhibiting little faith in God and is strongly prohibited. Despite recent changes in ideology aimed at improving access to health services for members of the Apostolic faith and spearheaded by the Union for the Development of Apostolic Churches in Zimbabwe (UDA-CIZA), traditional beliefs still prevail especially among the ultra-conservative Marange and Madhidha Apostolic groups (Maguranyanga, 2011). The recent rise and spread of measles outbreaks were allegedly linked to Apostolic gatherings. Despite nationwide campaigns to ensure that every child in Zimbabwe is immunized, pockets of religious objection exist and these remain of concern (UNICEF, 2010). These deleterious impacts on access to health can also be exacerbated by the asymmetric power that the churches bestow to men and husbands which constrains women's decision-making in relation to health. Indeed, Gregson et al. (1999) found that in the 1980s, children from the Apostolic churches had much higher infant mortality rates. By the 1990s, however, in Honde Valley in Manicaland, this difference had disappeared. Hove et al. (1999) have documented that mothers belonging to Apostolic faith were less likely to have used postnatal care services in Kuwadzana, a suburb of Harare. These studies are however based on small samples in a few confined areas and thus their results cannot be extrapolated to other parts of the country. A notable exception is the work of Hallfors et al. (2013) where data from Zimbabwe's Demographic and Health Survey 2005 was used to show that Apostolic women were at a higher risk of HIV infection via the early marriage channel. Yet, this study controlled only for age and omitted other potential mediating factors, it cannot be used to refute the 'selectivity' hypothesis with confidence.

It is against this background that this present study will contribute to the literature by using the latest nationally representative household data and the established Andersen conceptual framework on access to health services (Andersen, 1995, 2008) to examine the relationship between the Apostolic faith and the take-up of child immunization and maternal health care services in Zimbabwe while controlling for a large set of mediating factors.

Section two introduces the data and the empirical strategy used in this paper. Section three reports the empirical findings followed by Section four that draws conclusions and discusses the implications of this paper.

2. Data and methodology

2.1. Data

This study utilizes data from the Multi Indicator Monitoring Survey (MIMS) 2009, a customized version of the Multi Indicator Cluster Survey (MICS). MICS is designed to collect statistically sound data to assess the situation of children and women in the areas of education, health, gender equality, rights and protection. As part of a worldwide survey programme, MIMS is a nationally representative survey implemented by the Zimbabwe National Statistics Agency (ZIMSTAT) in collaboration with UNICEF. The 2009 survey interviewed 11,469 households that included 11,339 women aged 15–49 years. Information on 7,242 children aged under five years old was obtained from their mothers (ZIMSTAT, 2010). We constructed two analytical samples consisting of women between 15 and 49 years who had fallen pregnant within two years before the survey and of children between the ages 12–23 months, respectively.

The MIMS asked women aged 15–49 years with a live birth during the two years preceding the survey whether they had sought antenatal care (ANC), who had attended to them, how many months pregnant they were when they first received ANC, how many times they had received this care, whether they delivered in health facilities and were attended by health professionals (ZIMSTAT, 2010). ANC visits and skilled birth delivery (SBA) were chosen as the two outcome variables for maternal health because they have been identified as vital interventions for the health and well-being of pregnant women and their infants (WHO, UNICEF, UNFPA, and the World Bank, 2014). Access to antennal care has been assessed using two binary variables, for having at least one visit to health personnel before giving birth (ANC1) and for having at least four antenatal visits to skilled personnel (ANC4). Only visits to skilled health personnel such as nurses, doctors and trained midwifes were included as ANC visits. SBA was coded as 0 or 1 for not having or having been attended to by skilled health personnel during birth delivery, respectively.

For child immunization, Bacillus Calmette-Guérin immunization, (BCG), and measles and polio immunization were used as outcome variables for children aged between 12 months and 23 months (Table 2). Ideally these children should have completed their immunization according to WHO guidelines (ZIMSTAT, 2010). The selection of these three immunizations was motivated by anecdotal and qualitative evidence that some people of Apostolic faith object to immunization for children (UNICEF, 2010 and Maguranyanga, 2011). Evidence of child immunization was based on information copied from the child's immunization card and by mothers/caretaker's report. A child was considered vaccinated for BCG and measles after receiving one dose of each. A child was considered to be vaccinated against polio after receiving three doses excluding the dose given at birth. MIMS also collected data for Diphtheria, Pertussis and Tetanus (DPT) vaccination but this was not analysed due to data quality concerns.

MIMS 2009 asked household heads to report their religious affiliation which was then used as the key independent variable in both samples for our study. Around one third of household heads were female and a quarter of the household heads were mothers