

Social disadvantage and population control in India

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September 20, 2018

Extended Abstract for PAA annual meeting 2019

Abstract

India, home to one of the most aggressive and scrutinized family planning programs in the world, has the highest rates of female sterilizations in the world. However, demographers and social scientists have not paid enough attention to the role of social inequalities and disadvantages in shaping population programs in India, a deeply hierarchical and stratified society. Using data from the latest Demographic and Health Survey (NFHS 2015-16), this proposal documents that lower-caste and indigenous women are much more likely to be sterilized in India. They are also more likely to be sterilized at younger ages. Apart from showing the continued influence of eugenicist population policies in the developing world, these findings may also help explain why sterilization remains the dominant form of contraception provided by the Indian state, or why such a large number of sterilizations happen in sub-standard conditions. We outline areas of further work, such as extending the analysis to earlier Demographic and Health Surveys, understanding parities after which sterilizations take place, and documenting the intersection of these social hierarchies with other forms of disadvantage.

keywords: gender, caste, ethnicity, contraception, sterilization, population control, India

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Introduction

India's family planning programme, one of the oldest in the world, has a long and controversial history, related to eugenics and malthusian concerns (Rao, 2004), ties with coercion and state-power (Tarlo, 2003), and substandard procedures to meet the targets (Sharma, 2016). However, the ties of India's family planning programs with social hierarchy remain less explored (Mamdani, 1972). In this paper, we show that women belonging to the Scheduled Castes and Scheduled Tribe groups, groups which have and faced discrimination in India, are significantly more likely to have been sterilized, compared to higher caste Hindu women. We analyze data from the latest round of India's Demographic and Health Survey, which measured contraceptive use and asked respondents to identify their social group.

Results

Figure 1 shows current use of female sterilization among women by age, for Scheduled Caste, Scheduled Tribe, and High-Caste Hindu Women. Starting age 20, sterilization rates among SC and ST women rise at rates greater than that of high-caste women. Lower-caste and indigenous women are sterilized earlier than higher-caste women. By age 40, however, higher-caste women do not have lower sterilization rates than ST women. SC women, however, have higher rates of sterilization across ages. Surprisingly, Figure 1 documents that by age 30, about 45% of SC and ST women are sterilized, a proportion higher than that of high-caste Hindu women.

Figure 1 suggests that among older women, sterilization rates may not be that different among social groups. Thus, the primary difference between disadvantaged social groups and those without social disadvantages may be the ages at which they get sterilized. Figure 2 tests this idea. It shows the proportion of women who got sterilized in the last five years by age, and by social group. Scheduled Caste and Scheduled Tribe women are similar to each other, while high-caste Hindu women have lower rates of sterilization in the last 5 years.

Differences in incidence of sterilization among women emerge in the early 20s, are most widespread between the ages of 25 to 35, and among older women, sterilization rates are not much different by social group.

Table 1 tests this in a regression setting, using logistic regression. Panel A shows odds-ratios for being sterilized in the last five years for Scheduled Caste and Scheduled Tribe women, relative to high-caste women. Column 1 shows odds-ratios for all women, while panels 2-6 present regressions stratified by age groups. Overall, as well as across age groups, women from disadvantaged social groups are significantly more likely to have been sterilized. The relative odds of being sterilized, however, lowest in the very young ages and very late ages of the child-bearing period. They are highest in the ages 34-39, but not much lower in the 25-29 and 30-34 ages, suggesting substantial incidence of contraception among younger women who are socially disadvantaged.

Panel B of Table 1 investigates the extent to which other forms of social disadvantage, such as living in a rural area, wealth, or education can explain inequalities by caste. Low caste and indigenous women are more likely to live in rural areas, be less educated, or have less household wealth, and social disadvantages often reinforce educational or wealth inequalities in India. Thus, in this analysis, even if wealth or education inequalities can explain the gap between social groups, this should not be seen as evidence that caste or tribe-status does not matter. The regressions show that accounting for rural residence, wealth quintiles and education can explain some of the difference between socially disadvantaged and advantaged groups, it cannot fully explain the gap, especially for scheduled tribes.

Discussion & further work

These findings show that women from socially disadvantaged groups continue to bear the burden of India's obsession with population control. While expansion of choices of birth control and effective provision of general healthcare services remain neglected in India, female

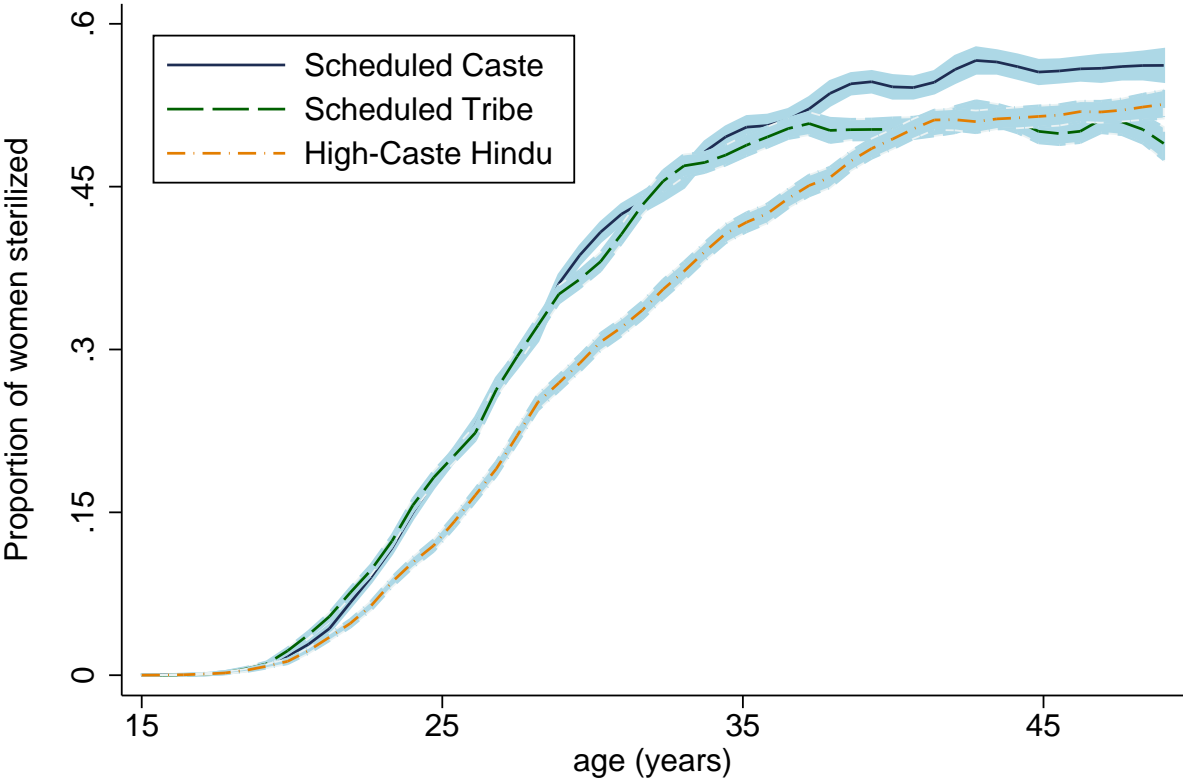
sterilizations as the mainstay of family planning are aggressively pushed. Along with substandard conditions and lack of supportive healthcare structure, women's social and health disadvantages contribute in making sterilization a dangerous method. The social disadvantaged position of the women undergoing sterilization may explain the place sterilization has in India's population control programs - it is easier to sterilize marginalized women, who may not have the power to challenge these policies. Similarly, this analysis also helps in understanding why many sterilizations continue to occur in substandard health conditions - because the women undergoing sterilizations have little social power, the Indian state has little incentive to improve conditions in which they sterilize women.

In further work, we will seek to extend this analysis to earlier rounds of India's DHS, namely NFHS 1 (1992-93), NFHS 2 (1998-99), and NFHS-3 (2005-06). This analysis will help in understanding social disadvantage and sterilization have become more or less tied together over time. Similarly, we will analyze the parities at which women from different social groups are likely to be sterilized. Finally, in regression analyses, we will explore interactions between caste, tribe, and other forms of disadvantage.

References

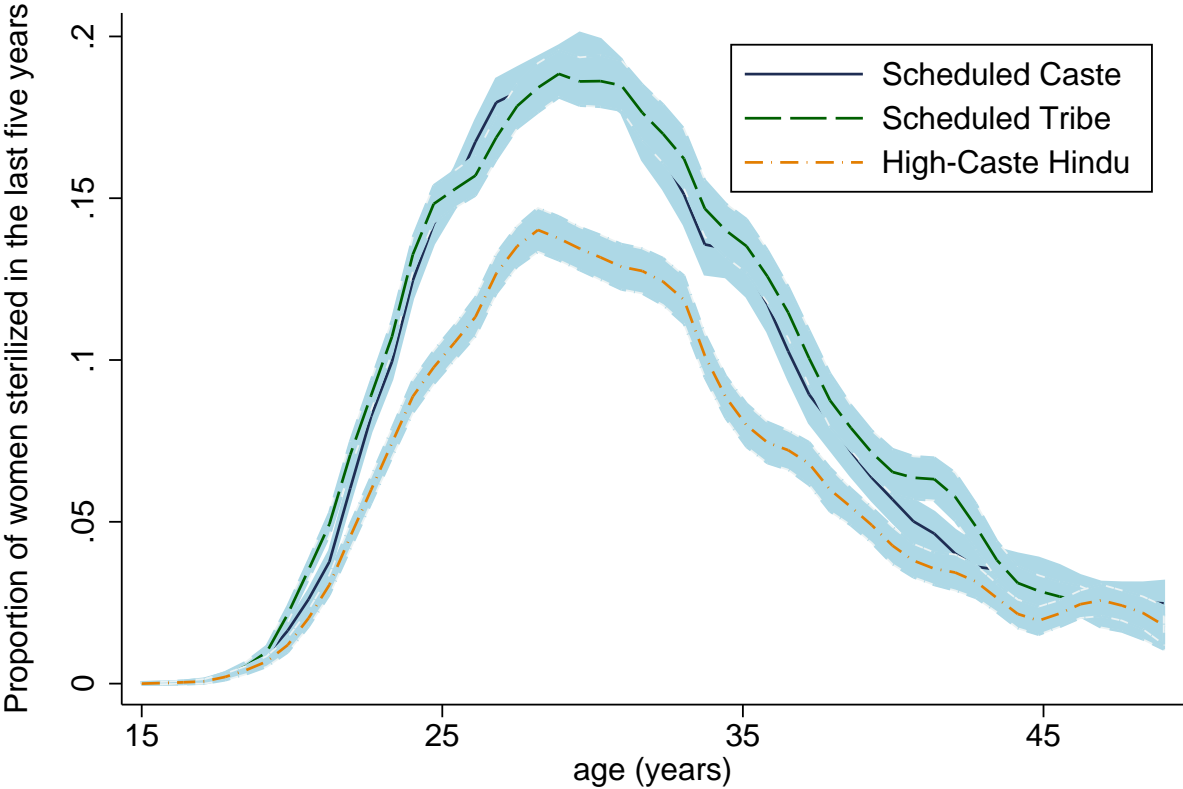
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Figure 1: Women from socially disadvantaged groups are more likely to be sterilized (India, 2015-16)



Source: India DHS 2015-16 (NFHS-4).
Observations are weighted using survey weights.

Figure 2: A larger proportion of women from socially disadvantaged groups are sterilized at younger ages (India, 2015-16)



Source: India DHS 2015-16 (NFHS-4).
Observations are weighted using survey weights.

Table 1: Estimated odds-ratios from logistic regression, for being sterilized in the last five years, for Scheduled Caste and Scheduled Tribe women, relative to Hindu High-Caste women (India, 2015-16)

Panel A: By Age

	Ages					
	All (1)	18-24 (2)	25-29 (3)	30-34 (4)	34-39 (5)	40-49 (6)
Scheduled Caste	1.348*** (0.0424)	1.318*** (0.0933)	1.473*** (0.0808)	1.464*** (0.0894)	1.592*** (0.133)	1.288* (0.165)
Scheduled Tribe	1.397*** (0.0504)	1.493*** (0.120)	1.424*** (0.0871)	1.513*** (0.0985)	1.713*** (0.154)	1.357* (0.183)
N	299669	88427	56722	40117	30933	37148

Panel B: Among 25-40 year old women

	(1)	(2)	(3)	(4)	(5)	(6)
Scheduled Caste	1.500*** (0.0545)	1.485*** (0.0544)	1.378*** (0.0502)	1.214*** (0.0453)	1.181*** (0.0447)	1.151*** (0.0438)
Scheduled Tribe	1.509*** (0.0614)	1.502*** (0.0611)	1.315*** (0.0530)	1.131** (0.0491)	1.101* (0.0465)	1.079+ (0.0472)
age dummies		X	X	X	X	X
rural			X	X	X	X
wealth quintiles				X		X
education categories					X	X
N	135841	135841	135841	135841	135841	135841

Exponentiated coefficients from logistic regressions. Standard errors, clustered at the level of the primary sampling unit, in parentheses. All regressions are weighted using national survey weights. Source: India DHS 2015-16 (NFHS-4). + p<.1, * p<.05, ** p<.01, *** p<.001.