Consequences of Access to Legal Abortion for Women's Socioeconomic Wellbeing in Nepal

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Abstract

Background: Nepal has one of the world's most progressive abortion laws, yet legal, safe services remain inaccessible to many Nepali women, particularly those who are poor, marginalized, or geographically isolated.

Methods: We assess the effect of being denied a wanted abortion on socioeconomic outcomes among 1832 women who sought an abortion between April 2019 and December 2020 from government-approved health facilities across Nepal and completed semiannual interviews over the next 60 months. We examined the changes in socioeconomic outcomes over time using mixed-effects regression models with propensity score weighting to distinguish economic disparities that predate abortion denial from hardships that result.

Findings: Denial of abortion is associated with increased economic precarity among those who were unable to get an abortion later and carried the pregnancy to term. The greater number of children in the household may explain increased reports of income inadequacy and food insecurity. This hardship can be seen in increased long-term chance of women being underweight.

Interpretation: Lack of equitable abortion access perpetuates and exacerbates household economic and food insecurity.

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Introduction

The Nepali government has taken steps to provide comprehensive pregnancy options as part of women's reproductive health services. In 2002, abortion was legalized in Nepal[1] and the passage of the Safe Abortion Policy in 2004 resulted in services being established at almost all government hospitals, and designated private and non-governmental organization (NGO) facilities in a phased manner. The law, with amendment in 2018, allows for medication abortions until 10 weeks of gestation; abortion procedures are available until 12 weeks of gestation upon request and until 28 weeks of gestation in cases of rape, incest, or physical and mental health complications, such as incurable diseases (e.g., HIV/AIDS) or the presence of a fetal condition incompatible with life.[2] Only physicians and midlevel providers certified in safe abortion care by the government are eligible to provide abortion services under the amended law. Since 2017, all abortions at public sector facilities are to be provided free of cost.

Despite the expansion of abortion services under Nepali law, legal, safe abortion services remain inaccessible to many Nepali women, particularly those who are poor, marginalized, or geographically isolated.[3] Barriers to accessing abortion services include poverty, stigma, insufficient knowledge of the law, poor referral systems, lack of roads or infrastructure, and geographic distance from an approved provider.[4] Nepali women living in rural areas face particular challenges accessing services.[5,6] Although abortion services can be obtained from certified private facilities, the fees charged for abortion care are not regulated and can be prohibitively expensive.[7] Lack of knowledge among providers regarding eligibility criteria for abortion care between 12 and 28 weeks of gestation can lead to the incorrect screening of women who should be able to access services.[8] Previous studies indicate the uneven enforcement of Nepal's abortion policies.[9,10]

One in ten women seeking abortion in Nepal is denied care from certified clinics.[11] Nearly three-quarters of those denied care were legally eligible for abortion, based on gestation stage and pre-existing mental health conditions.[12] Abortion denial is often unrelated to the women's characteristics, including the availability of a clinician or medications on the day

of care-seeking. Yet, there is a clear evidence of a socioeconomic gradient to who is able to access abortion services in Nepal.[13] Young women (under age 25), unmarried women, women who do not earn outside income were more likely to be denied an abortion. Among those denied care from certified clinics, 32% carried the unwanted pregnancy to term; the rest reported miscarriage or sought abortions elsewhere or later. Women were more likely to carry to term if they were under age 30, had low levels of education, did not earn outside income or were in the least advantaged Dalit caste (OR=2.01) than women in the Brahmin and Chhetri castes. The greatest magnitude of effect are seen by wealth: those in the lowest quintile of wealth were somewhat more likely to be denied an abortion (OR=1.78) and they were vastly more likely to carry an unwanted pregnancy to term (OR=4.38 compared to the highest quintile).

Nepal is an important context for examining the health and socioeconomic impact of access to abortion. Women in Nepal have some of the poorest health and empowerment indicators in the world, leading to adverse intergenerational health outcomes. In Nepal, 10% of non-pregnant women aged 20–49 years are underweight (body mass index [BMI] < 18.5 kg/m^2).[14] Only 60% of women reported being currently employed compared with 77% of men, and women are more likely to be employed in agriculture (67% vs 27% of men). Socioeconomic drivers of access to abortion likely compound the consequences of abortion denial since those who carry pregnancies to term may be least able to materially support them. The aim of this paper is to measure the impact of abortion denial on women's socio-economic status. We hypothesize that women who are denied abortions will have lower socio economic status (labor force participation, household income, etc.) five years later.

Methods

Data collection

The Nepal Turnaway Study is a longitudinal, prospective study of women who sought abortion care at 22 facilities across the 7 provinces of Nepal, including 8 public government hospitals and 14 NGO facilities. Sites were randomly selected with weights for client volume to represent the population of women seeking care. Women who sought abortion care at one of the study facilities, were at least 15 years old, and lived in Nepal were eligible for study enrollment. After 1-month of recruiting all eligible participants, we restricted eligibility to those who self-reported their last menstrual period (LMP) as 10 weeks prior or who did not know the date of their LMP (regardless of reason for abortion). Our intention was to limit recruitment to a narrower population at high risk of denial of care and reduce selection effects whereby people with fewer resources present later in pregnancy and are more likely to be denied care. Recruitment began April 16, 2019, and ended December 31, 2020 (with a 3-month suspension due to COVID-19 travel restrictions). Interviews were conducted in Nepali, Maithali, Tharu, Hindi, or Bhojpuri and lasted an average of 40 minutes. Participants received financial compensation of approximately $4 for each interview.

Analysis

Our initial analysis of predictors of being denied an abortion documents differences in socioeconomic status at baseline between those who received and those who were denied abortion.[9] To isolate the effect of being denied an abortion from pre-existing disadvantage, we employ inverse probability of treatment weights using propensity scores, propensity scores. Propensity scores were predicted using baseline covariates believed to differ between those who received an abortion and those who carried the pregnancy to term. We include social indicators which have been identified as affecting access to care in existing literature, such as age, marital status, nulliparity, education, employment, caste/ethnicity, and household wealth quintiles. We also include variables which directly predict access to care such as gestational age, time to reach the recruiting abortion facility, and whether the facility was a public or private non-profit facility. Because abortion for reasons of sex selection is not permitted in Nepal and some women are turned away for that reason, we included a variable for whether the woman reported sex selection among the reasons for wanting to end this pregnancy. We included a measure of pregnancy intentions (the London Measure of Unplanned Pregnancy) to identify pregnancies for which the woman may have been more or less motivated to terminate. Finally, we included four variables which may affect a woman's ability to achieve desired healthcare and fertility goals: a history of anxiety or depression, experience of intimate partner violence in the past year, and two measures of women's empowerment:

decision-making power and mobility. Decision-making refers to whether the woman has a say in decisions about healthcare or about purchasing items for the household. Mobility refers to whether the woman is allowed to leave her house to go to a health facility, market or outside their village. Propensity scores from this baseline model predicting abortion denial were then converted to treatment weights and employed in all analysis models. Differences in post-abortion care-seeking socioeconomic trajectory without use of propensity score weights thus measure the crude association between abortion denial and economic hardship, while differences after weighting isolate the additional hardship from carrying an unwanted pregnancy to term over and above the disadvantage which predisposes some to be denied care.[15]

We explore two household composition measures (number of children and cohabitation with husband), two economic outcomes (household income adequacy and employment outside the home) and four measures of household and personal nutritional inadequacy. Participants were asked to rate their overall household income as not adequate, adequate, or more than adequate. The latter two responses were combined to create a dichotomous outcome. Labor force participation was captured in the question "Aside from your own housework, are you currently working? If yes, what kind of work do you do?" In every interview starting at the six-week interview, we also included measures of nutritional adequacy including reporting that, specifically due to lack of resources, a household member was not able to eat the kinds of food they preferred, a household member ate fewer meals per day, or went a whole day and night without eating. Our final measure of resource scarcity, measured at every interview, is whether the respondent is underweight (BMI<18.5).

To examine how disadvantage may affect both the chance of being denied an abortion as well as the economic hardships that result, we examine household income inadequacy in a three-group unadjusted model – those who received an abortion at the recruiting clinic, those who were denied but ended their pregnancy elsewhere or later, and those who carried the pregnancy to term. Using propensity score weighting, we evaluate whether those who were initially denied but did end their pregnancy share a trajectory with those who received an abortion at the recruitment facility. The rest of our analyses employ a two-group comparison of birth vs abortion, combining those who received an abortion at the recruitment facility with those who were denied but ended their pregnancies subsequently. To assess changes in economic outcomes over time, we fit mixed-effects regression models with random intercepts for individual and recruitment facility. We assessed whether trajectories were curvilinear by testing whether including quadratic and cubic terms for time improved the model fit.

Results

During our recruitment period, 1,916 eligible women sought an abortion at our 22 recruitment sites, of whom 1,832 (96% of eligible women) agreed to participate and complete a baseline interview at the recruitment facility. Among participants, 1,746 (95% of enrollees) completed at least one subsequent interview at home or another location, which occurred 6 weeks after baseline and then at 6-month intervals over the next five years. In December 2024 when we ceased data collection, 58% completed their 60-month interview, 26% were censored and 12% had been lost to follow-up. In the first month of recruitment during which we recruited *all* women seeking abortion, 11% were denied care from the clinic. Over the entire recruitment period, 49% were denied an abortion at the recruitment facility and 32% of those denied carried the pregnancy to term. We excluded from analyses 86 individuals who were lost after the baseline survey and 4 who reported that they were still pregnant at their 6-week interview but were subsequently lost to follow-up before we could ascertain their pregnancy outcome. The analytic sample for this paper (N=1,742) is women who participated in at least one subsequent interview and for whom we know the outcome of the pregnancy: 890 women who received an abortion from the recruitment facility, 577 who were turned away from the recruitment facility but successfully obtained an abortion later or reported that they were no longer pregnant, and 275 women who were denied the abortion and later gave birth.

The population of women who received a wanted abortion, either at the recruitment site or elsewhere differed by socioeconomic status. Those denied abortions who gave birth were more likely than those able to end their pregnancy

to be under 25 years of age (40.0 % vs. 32%), more likely to be in a disadvantaged caste (24.5% vs 13.1%), more likely to report inadequate household income (39.0% vs 24.4%). They were more likely to have sought abortion for sex selection (18.5% vs 7.9%) and less likely to report a fetal diagnosis as reason for abortion (2.5% vs 11.9%). Those who gave birth after being denied abortions were more likely than those who ended their pregnancy to have low empowerment – having little freedom to leave their home unaccompanied (30.5% vs 22.4%) and less likely to be involved in household decision-making (28.7% vs 35.1%). Table 1 describes the sample at the time of recruitment into the study by whether participants eventually were able to end their pregnancy or were denied and gave birth. These variables were included in our propensity score weighting and differences are insignificant after applying these weights.

Figure 1 shows the fraction of people who report household income inadequacy by whether they received an abortion at the recruitment clinic, were turned away but got an abortion elsewhere and were turned away and gave birth – with and without propensity score weights. The first uses no weights or controls to document the experience of abortion denial leading to birth including both pre-existing and consequent hardship. The second uses propensity scores to balance the distribution of observed baseline covariates between study groups, thus isolating the causal effects of abortion denial on economic wellbeing**.** Our exploration of the relative contributions of pre-existing disadvantage and the causal effects of carrying an unwanted pregnancy to term in Figure 1 shows that those who were initially denied but did not carry the pregnancy to term started with similar reports of household income inadequacy as those who were denied but did not manage to get an abortion elsewhere. Over time, those who were able to get an abortion are statistically indistinguishable from those who received an abortion at the recruitment site while those who give birth are more likely to report household economic hardships. See also Table 1. Given the similarity in trajectory between those who did not carry the pregnancy to term, we examine two groups (abortion versus birth) for our main analyses. Appendix table 1 contains the model output for these longitudinal models of household income inadequacy.

Longitudinal analyses show that those who gave birth had more children in the household after 6 weeks and a larger total household size. They were more likely to live with a husband until 36 months and were more likely to report that the household lacked money for basic living expenses from 6 months to five years. By 18 months, nearly 50% of those who gave birth report insufficient household income compared to less than 40% for those who received abortions. We do not see significant differences in the chance that women work outside the home based on whether they received an abortion or carried an unwanted pregnancy to term. See Figure 2 and Table 2. Appendix table 2 shows the output of these mixed effects longitudinal models.

The effect of abortion denial on household economic scarcity is observed in our measures of food inadequacy and reports of being underweight. Women who carry unwanted pregnancies to term are two percentage points more likely than those who received abortions to report that someone in the household has gone at least a day and a night without eating due to lack of food in the household between 18 months and 48 months after study recruitment. Skipping individual meals is more common than going a whole day without eating. We find significant differences between those who carry an unwanted pregnancy to term those who received an abortion: from six months to 48 months, those who give birth are approximately 4 to 5 percentage points more likely to report household members skip meals. Many women report not being able to afford the types of food that they prefer, an outcome that is statistically more common among those who were unable to get an abortion between three and five years. Women who carry unwanted pregnancies to term are less likely than those who receive abortions to be underweight for the first year after abortion seeking, consistent with this group continuing to be pregnant. However, from 18 months to 42 months, we see higher rates of underweight among those who give birth.

Conclusions

The Nepal Turnaway Study aims to examine the effect of access to abortion on individuals' and families' economic wellbeing, health and life trajectories; this paper focuses on the socioeconomic consequences. In Nepal, those who are turned away from a certified abortion facility are more likely to be socially disadvantaged. Young women, those from

disadvantaged castes, those with low levels of education and those with the least household wealth are more likely to both be denied an abortion and carry an unwanted pregnancy to term[9]. Abortion denial is associated with additional adverse economic outcomes. In studying women's report of household income inadequacy, we see that childbirth following abortion denial is associated with twice the odds of reporting household income inadequacy up to five years later. After balancing the sample of women who received an abortion to reflect the pre-existing hardship of the birth group, we see that birth is associated with additional economic insecurity over years, with a greater number of children in the household, higher likelihood of household income inadequacy, household food insecurity, and women becoming underweight.

This study is the first to examine the long-term consequences of abortion receipt and denial on economic security in Nepal. The study was in the field during the COVID-19 pandemic, which affected households' economic wellbeing, however the effect was likely shared across study groups. Some measures, such as wealth and food insecurity were not measured at the time of recruitment and therefore, could not be included in our propensity score. We cannot determine whether differences at 6 weeks are a consequence of continued pregnancy or reflect unmeasured confounding.

The full magnitude of the effect of unequal and inadequate access to abortion can be seen in the unadjusted and unweighted models. In these models, we see that the experience of someone who is disadvantaged and who cannot access wanted abortion care is a product of both pre-existing hardship and additional hardships associated with having a birth under adverse circumstances. The additional hardships associated with childbirth after abortion denial are measured in increased household scarcity in food and income to meet basic living needs. In households where there has been a new birth, we see higher cohabitation of husbands that lasts for three years. Given the high levels of emigration for work to India and the Middle East, co-residence of a husband when he otherwise might be abroad and sending home funds may contribute to household income inadequacy. We do not find differences in employment for those who received and those who were denied abortions, perhaps because one group has the freedom to work given lighter childcare responsibilities and the other must work to meet the increased needs. Despite similar levels of employment outside the home, being unable to access wanted abortion worsens household economic insecurity.

Table 1. Baseline sociodemographic characteristics by abortion denial, unweighted and weighted								
	Unweighted				Overlap Weighted†			
	Received abortion/miscarried	Denied abortion and gave birth	OR	p-value	Received abortion/miscarried	Denied abortion and gave birth	OR	p-value
Demographic characteristics								
Age, years								
<25	32.0	40.0	ref		38.7	38.7	ref	
25-29	28.3	32.4	0.9		32.7	32.7	1.0	
30-34	22.6	17.5	0.6		17.9	17.9	1.0	
35+	17.1	10.2	0.5	0.002	10.8	10.8	1.0	>0.999
Marital status								
Unmarried	2.9	2.2	ref		2.5	2.5	ref	
Married	97.1	97.8	1.3	0.528	97.5	97.5	1.0	
Caste								>0.999
Brahmin/Chhetri/Thakuri	40.6	32.6	ref		34.7	34.4	ref	
Hill Janajati	23.7	25.3	1.3		24.8	24.9	1.0	
Dalit/other	13.1	24.5	2.3		21.7	21.8	1.0	
Terai Janajati	22.6	17.6	1.0	<0.001	18.7	18.8	1.0	>0.999
Education								
None or some formal schooling	15.7	17.9	ref		17.1	17.3	ref	
Primary	13.9	23.4	1.5		21.2	21.3	1.0	
Secondary	63.0	54.6	0.8		57.0	56.7	1.0	
Higher	7.4	4.0	0.5	<0.001	4.6	4.6	1.0	>0.999
Parity, by sex of existing children								
no kids	13.6	11.3	ref		12.0	12.0	ref	
1+ boys	58.6	57.1	1.2		56.2	56.2	1.0	
1+ girls, no boys	27.8	31.6	1.4	0.326	31.8	31.8	1.0	>0.999
Income adequacy								
Not Adequate	24.4	39.0	ref		34.6	34.9	ref	
Adequate	73.0	59.6	0.5		63.9	63.6	1.0	
More than adequate	2.6	1.5	0.4	<0.001	1.5	1.6	1.0	0.999
Pregnancy factors								
Seeking abortion for sex selection	7.9	18.5	2.7	<0.001	16.6	16.6	1.0	>0.999
Seeking abortion for fetal anomaly	11.9	2.5	0.2	<0.001	3.4	3.4	1.0	>0.999

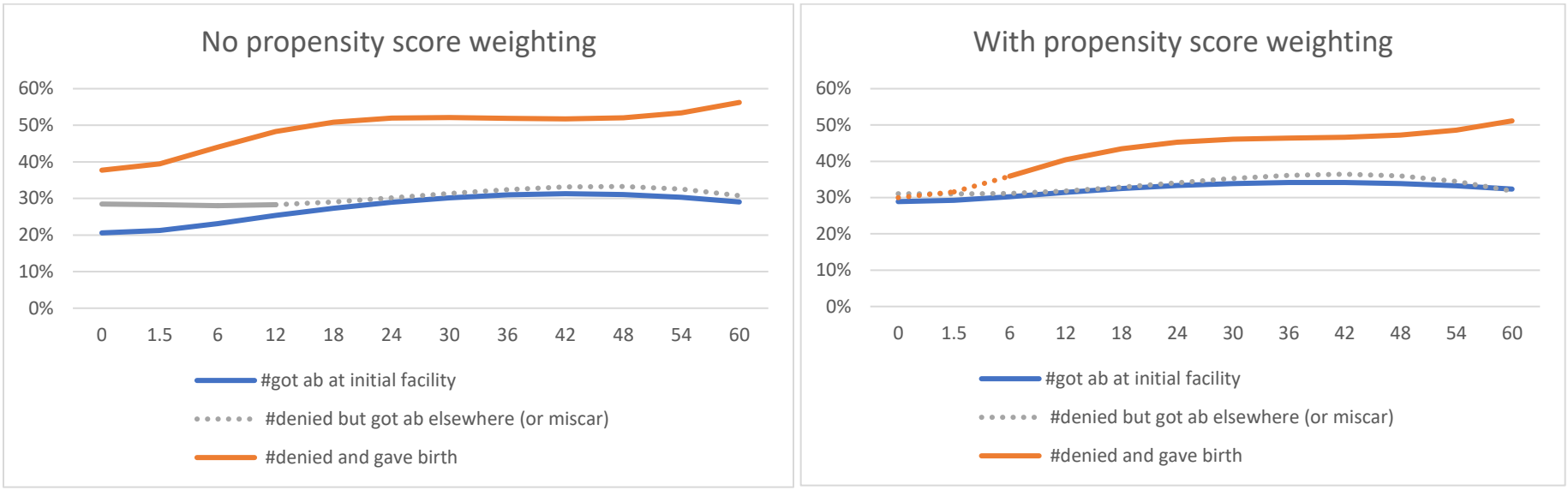
Gestational age								
at or below 10 weeks	41.8	12.7	ref		16.3	16.3	ref	
above 10 weeks	33.1	54.2	5.4		51.1	51.1	1.0	
don't know gestation	25.1	33.1	4.3	<0.001	32.6	32.6	1.0	>0.999
Health and empowerment factors								
Any violence*	20.2	25.0	1.3	0.080	50.0	50.0	1.0	0.947
Any history of anxiety or depression	31.4	33.6	1.1	0.477	32.4	32.4	1.0	0.993
Limited mobility	22.4	30.5	1.5	0.004	28.2	28.2	1.0	>0.999
Decision-making power								
Not involved in any household decisions	49.9	59.3	ref		58.1	58.2	ref	
Involved in one type of household decisions	15.0	11.9	0.7		12.3	12.2	1.0	
Involved in both types of household decisions	35.1	28.7	0.7	0.018	29.7	29.6	1.0	>0.999

Notes: Data are presented as percentages for categorical measures and means for ordinal measures. Odds Ratio (OR) estimates and p-values derived from univariate logistic regressions of baseline violence or sociodemographic/pregnancy characteristic on abortion denial. P-values obtained through global tests for sociodemographic or pregnancy characteristics with more than two levels.

† Overlap weights derived from propensity scores predicting exposure (abortion denial), full methodology at XXXXX. Overlap weighted results apply to artificially balanced sample and thus counts are not shown.

*Any violence includes physical, emotional, sexual, or economic violence within the past year

Figure 1. Predicted probability of inadequate household income, with and without PSW (Margins from mixed effects models)



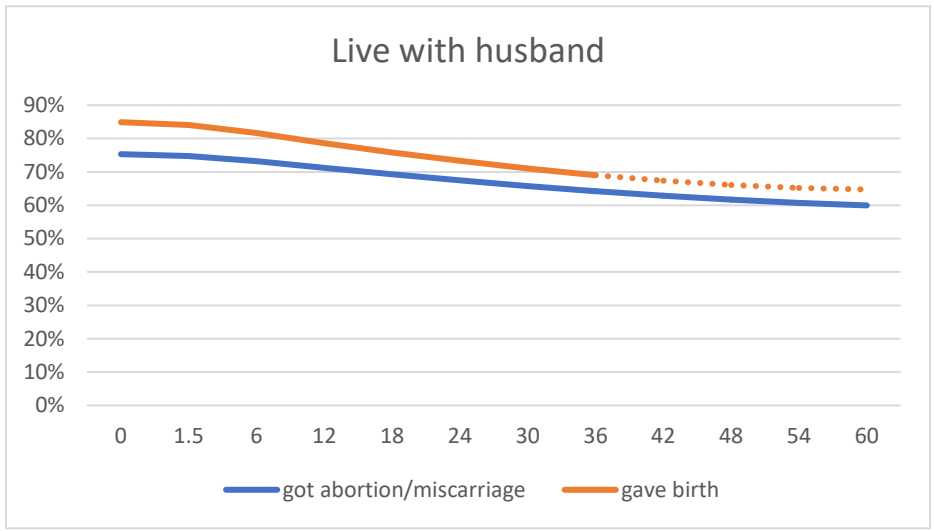
Note: Solid lines indicate points where the group is statistically different from those who got the abortion at the recruitment facility

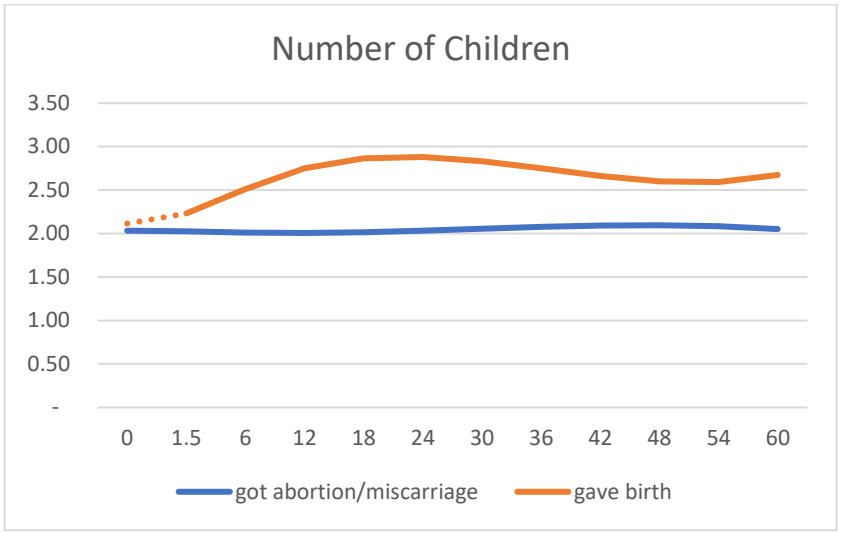
Table 2. Household composition, economic status and food adequacy by outcome of pregnancy: Predicted probabilities from longitudinal models with propensity score weighting

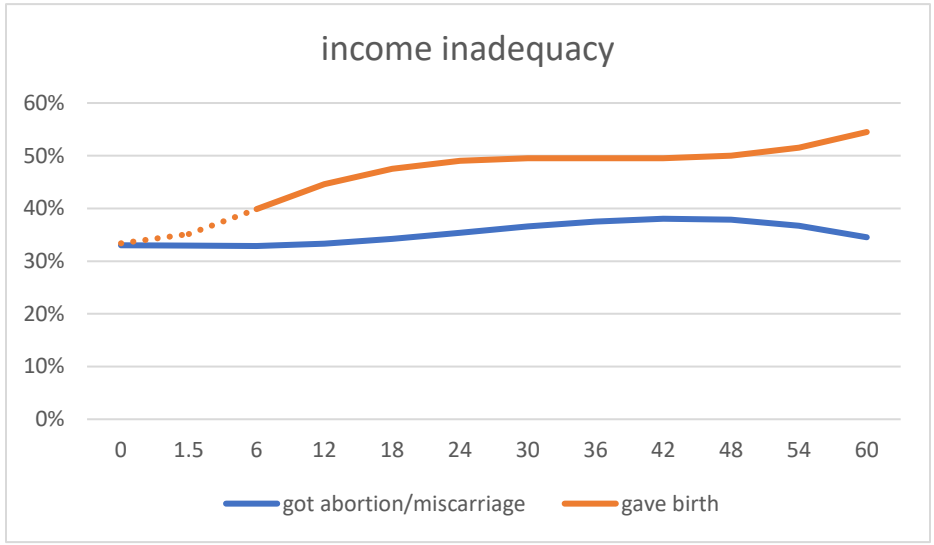
	Received abortion	Denied abortion	p-value	Difference	95% CI	Model of time	Period of significant difference
Household composition							
Respondent lives with husband	67%	73%	0.005	0.06	(0.02, 0.10)	quadratic	0 to 30 months
Number of people in the household	5.19	5.83	0.000	0.65	(0.34, 0.95)	cubic	6 weeks to 60 months
Number of children in the household	2.05	2.67	0.000	0.62	(0.41, 0.82)	cubic	6 weeks to 60 months
Household economic status							
Household income inadequacy	35%	47%	0.000	0.12	(0.07, 0.16)	cubic	6 months to 60 months
Respondent works outside home	53%	51%	0.524	-0.03	(-0.11, 0.05)	linear	none
Food Adequacy							
Respondent is underweight	11%	12%	0.536	0.01	(-0.02, 0.04)	cubic	6 weeks -12 months, 24-36 months
Household member goes who day and night without eating	3%	4%	0.028	0.02	(0.00, 0.03)	quadratic	18-48 months
Household member eats fewer meals per day	9%	13%	0.005	0.04	(0.01, 0.07)	quadratic	6-48 months
Household member doesn't eat kind of food they prefer	34%	40%	0.053	0.06	(0.00, 0.12)	quadratic	42-60 months

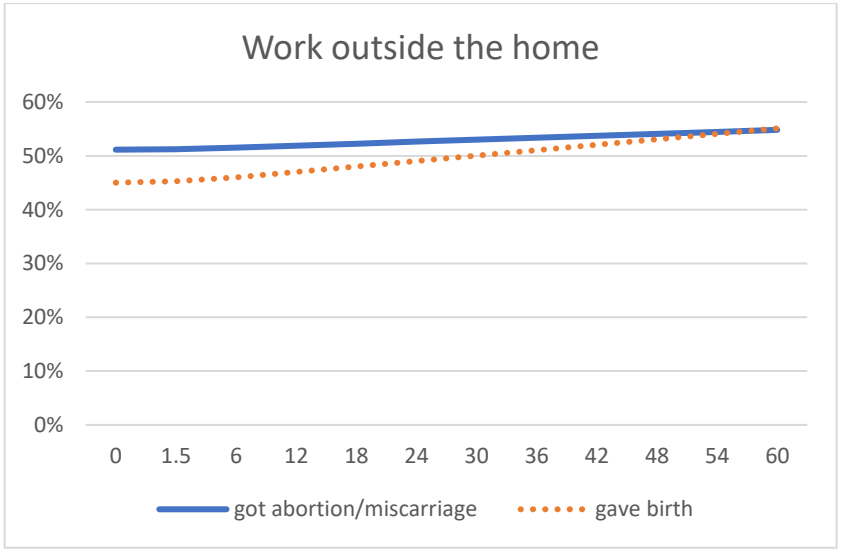
Note: Mixed effects models include fixed effects for individuals, clustering by recruitment site and propensity score weighting. Time is measured as a linear, quadradic or cubic term based on goodness of fit. Predicted probabilities refer to an average over observed time. Changes over time can be seen in Figures 2 and 3.

Figure 2 Household composition and income adequacy by outcome of pregnancy: Predicted probabilities from mixed effects models with propensity score weighting, clustering by facility type.



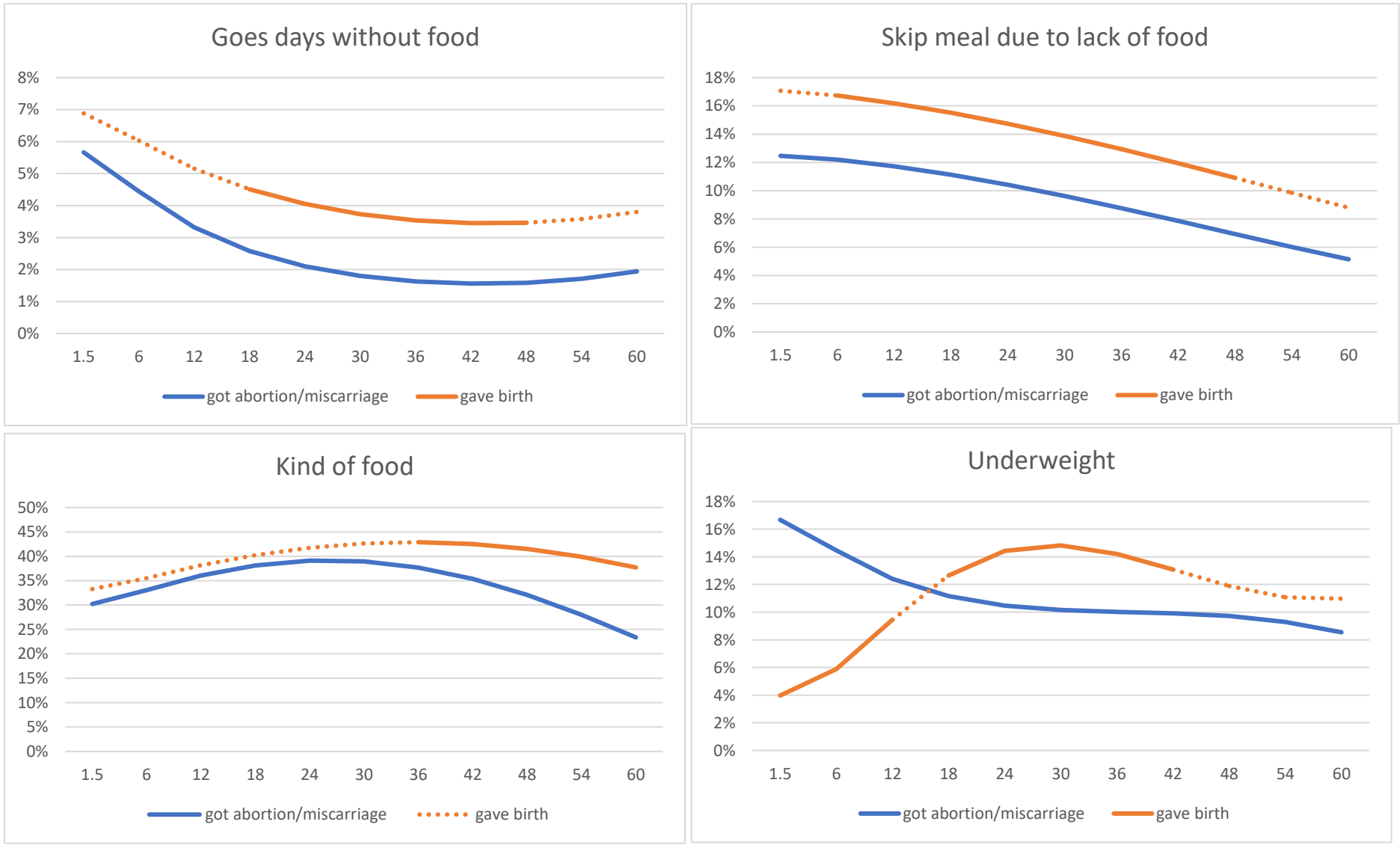






Note: Solid lines indicate points where those who gave birth are statistically different from those who received an abortion or miscarried

Figure 3. Nutritional Adequacy by outcome of pregnancy: Predicted probabilities from mixed effects models with propensity score weighting, clustering by facility type.



Note: Solid lines indicate points where those who gave birth are statistically different from those who received an abortion or miscarried

Appendix Table 1 model output for income inadequacy three category							
unweighted				**Propensity score weighted**			
	odds ratio	p-value	95% CI		odds ratio	p-value	95% CI
got abortion at recruitment facility	reference			got abortion at recruitment facility	reference		
denied, no birth	2.39	0.000	(1.59, 3.59)	denied, no birth	1.23	0.452	(0.71, 2.13)
denied, gave birth	5.72	0.000	(3.43, 9.52)	denied, gave birth	1.11	0.745	(0.59, 2.10)
months	1.05	0.000	(1.02, 1.08)	months	1.02	0.274	(0.98, 1.07)
no birth*months	0.94	0.002	(0.90, 0.98)	no birth*months	0.97	0.399	(0.91, 1.04)
birth*months	1.05	0.059	(1.00, 1.11)	birth*months	1.09	0.035	(1.01, 1.17)
months squared	1.00	0.347	(1.00, 1.00)	months squared	1.00	0.754	(1.00, 1.00)
no birth*months squared	1.00	0.030	(1.00, 1.00)	no birth*months squared	1.00	0.293	(1.00, 1.00)
birth*months squared	1.00	0.016	(1.00, 1.00)	birth*months squared	1.00	0.077	(0.99, 1.00)
months cubed	1.00	0.722	(1.00, 1.00)	months cubed	1.00	0.883	(1.00, 1.00)
no birth*months cubed	1.00	0.087	(1.00, 1.00)	no birth*months cubed	1.00	0.234	(1.00, 1.00)
birth*months cubed	1.00	0.007	(1.00, 1.00)	birth*months cubed	1.00	0.078	(1.00, 1.00)
constant	0.07	0.000	(0.05, 0.09)	constant	0.18	0.000	(0.12, 0.26)

Appendix Table 2. Model output for all other outcomes

Respondent lives with husband	Odds ratio	p-value	(95% CI)	**Respondent is underweight**	Odds ratio	p-value	(95% CI)
gave birth	3.29	0.014	(1.27, 8.54)	gave birth	0.02	0.002	(0.00, 0.24)
months	0.96	0.003	(0.93, 0.99)	months	0.91	0.126	(0.80, 1.03)
birth*months	0.97	0.200	(0.93, 1.02)	birth*months	1.45	0.004	(1.13, 1.87)
months squared	1.00	0.120	(1.00, 1.00)	months squared	1.00	0.306	(1.00, 1.01)
birth*months squared	1.00	0.396	(1.00, 1.00)	birth*months squared	0.99	0.022	(0.98, 1.00)
constant	10.31	0.000	(6.16, 17.27)	months cubed	1.00	0.376	(1.00, 1.00)
Number of children in the household	Coeff	p-value	(95% CI)	birth*months cubed	1.00	0.054	(1.00, 1.00)
gave birth	0.08	0.423	(-0.12, 0.29)	constant	0.01	0.000	(0.00, 0.03)
months	-0.01	0.273	(-0.01, 0.00)	**Household member goes who day and night without eating**	Odds ratio	p-value	(95% CI)
birth*months	0.09	0.000	(0.07, 0.10)	gave birth	1.26	0.652	(0.46, 3.45)
months squared	0.00	0.050	(0.00, 0.00)	months	0.92	0.000	(0.89, 0.95)
birth*months squared	0.00	0.000	(0.00, 0.00)	birth*months	1.04	0.360	(0.96, 1.12)
months cubed	0.00	0.018	(0.00, 0.00)	months squared	1.00	0.000	(1.00, 1.00)
birth*months cubed	0.00	0.000	(0.00, 0.00)	birth*months squared	1.00	0.496	(1.00, 1.00)
constant	2.03	0.000	(1.86, 2.21)	constant	0.01	0.000	(0.00, 0.04)
Household income inadequacy	Odds ratio	p-value	(95% CI)	**Household member eats fewer meals per day**	Odds ratio	p-value	(95% CI)
gave birth	1.03	0.937	(0.47, 2.27)	gave birth	1.73	0.099	(0.90, 3.33)
months	0.99	0.735	(0.94, 1.04)	months	0.99	0.797	(0.95, 1.04)
birth*months	1.13	0.003	(1.04, 1.22)	birth*months	1.00	0.972	(0.95, 1.05)
months squared	1.00	0.260	(1.00, 1.00)	months squared	1.00	0.412	(1.00, 1.00)
birth*months squared	1.00	0.001	(0.99, 1.00)	birth*months squared	1.00	0.873	(1.00, 1.00)
months cubed	1.00	0.127	(1.00, 1.00)	constant	0.04	0.000	(0.02, 0.08)
birth*months cubed	1.00	0.000	(1.00, 1.00)	**Household member doesn't eat kind of food they prefer**	Odds ratio	p-value	(95% CI)
constant	0.26	0.000	(0.13, 0.50)	gave birth	1.33	0.423	(0.66, 2.64)
Respondent works outside home	Odds ratio	p-value	(95% CI)	months	1.06	0.000	(1.03, 1.10)
gave birth	0.65	0.136	(0.37, 1.15)	birth*months	0.98	0.483	(0.94, 1.03)
months	1.00	0.728	(0.98, 1.03)	months squared	1.00	0.001	(1.00, 1.00)
birth*months	1.01	0.371	(0.99, 1.02)	birth*months squared	1.00	0.202	(1.00, 1.00)
constant	1.08	0.835	(0.51, 2.32)	constant	0.21	0.003	(0.07, 0.59)

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