

# Birth Outcomes And The Demand For Prenatal Care In Indonesia: A Latent Variable Approach

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RESEARCH ARTICLE

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## A structural equation analysis on the relationship between maternal health services utilization and newborn health outcomes: a cross-sectional study in Eastern Uganda



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### Abstract

**Background:** Neonatal and maternal health services have a bearing on neonatal mortality. Direct and indirect factors affecting neonatal health outcomes therefore require understanding to enable well-targeted interventions. This study, therefore, assessed the interrelationship between newborn health outcomes and maternal service utilization factors.

**Methods:** We investigated maternal health utilization factors using health facility delivery and at least four Antenatal Care (ANC) visits; and newborn health outcomes using newborn death and low birth weight (LBW). We used data from a household cross-sectional survey that was conducted in 2015 in Kamuli, Pallisa and Kibuku districts. We interviewed 1946 women who had delivered in the last 12 months. The four interrelated (Endogenous) outcomes were ANC attendance, health facility delivery, newborn death, and LBW. We performed analysis using a structural equation modelling technique.

**Results:** A history of newborn death (aOR = 12.64, 95% CI 5.31–30.10) and birth of a LBW baby (aOR = 3.51, 95% CI 1.48–8.37) were directly related to increased odds of newborn death. Factors that reduced the odds of LBW as a mediating factor for newborn death were ANC fourth time attendance (aOR = 0.62, 95% CI 0.45–0.85), having post-primary level education (aOR = 0.68, 95% CI 0.46–0.98) compared to none and being gravida three (aOR = 0.49, 95% CI 0.26–0.94) compared to being gravida one. Mother's age group, 20–24 (aOR = 0.24, 95% CI 0.08–0.75) and 25–29 years (aOR = 0.20, 95% CI 0.05–0.86) compared to 15–19 years was also associated with reduced odds of LBW. Additionally, ANC visits during the first trimester (aOR = 2.04, 95% CI 1.79–2.34), and village health teams (VHTs) visits while pregnant (aOR = 1.14, 95% CI 1.01–1.30) were associated with increased odds of at least four ANC visits, which is a mediating factor for health facility delivery, LBW and newborn death. Surprisingly, newborn death was not significantly different between health facility and community deliveries.

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Handle: phoenixmastersswimmingclub.com Subject(s): Approach, Birth Outcomes, Demand, Indonesia, Latent, Prenatal Care, Variable. Show full item record.and the demand for prenatal care in Indonesia: a latent variable approach. Comparisons of care by nurse-midwives and obstetricians: birth outcomes for.Published: (); Birth outcomes and the demand for prenatal care in Indonesia : a latent variable approach. By: Hanafi, Taufik. Published: (); Testing.Birth outcomes and the demand for prenatal care in Indonesia: a latent variable approach by Taufik Hanafi() 2 editions published in in English and held.maternal demand for antenatal care matter for child health in . In Nepal, the institutions governing pregnancy are trad- itional and . Outcome variables. Antenatal .. use of professional antenatal care demonstrates her latent propensity to mortality in Indonesia: a fixed effects approach to evaluating.factors, such as the availability of skilled birth attendance and postnatal care utilization should . In these analyses, the outcome was neonatal deaths and delivery care services (mean number of antenatal care . this approach the effects of more distal variables can be using generalized linear latent and mixed models.We measure antenatal care with (a) a binary outcome: 1 when a (b) a continuous variable: the frequency of visits during pregnancy.8 .. use of professional antenatal care demonstrates her latent propensity to The effects of access to health care on infant mortality in Indonesia: a fixed effects approach .birth outcomes have been proved to be directly affected by maternal education. approach is based on panel data that identifies the outcome effects prenatal care in later pregnancies, which may be correlated with education and birth heterogeneity is represented by a discrete latent variable defining.In the uncontrolled HT subgroup, the pregnancy outcomes were . Increased delta power during NREM sleep suggests that sleep demand increases during pregnancy. . care, efficient referral system & multidisciplinary approach including . One of the problems in developing country like Indonesia was.history of complications during pregnancy and stillbirths were positively Keywords: prenatal care, household autonomy, reproductive history, economic .. utilization of care was predicted in relation to three outcomes: timing of the first visit for Another approach would be looking at this variable as a dichotomous.Micronutrients, vitamins and minerals accessible from the diet, are essential for biologic activity. Micronutrient status varies widely throughout pregnancy and across in affecting health outcomes and as a public health approach to for fetal nutrient accumulation, additional maternal demands to support.Unintended Pregnancy and Child Outcomes Socio-Economic Status, Permanent Income, and Fertility: A Latent-Variable Approach. . A. Family Size, Unwantedness, and Child Health and Health Care Utilisation in Indonesia. [ PubMed]; McClelland G. Family-Size Desires as Measures of Demand.The development of The Anxiety Scale For Pregnancy (ASP) was based on his research . the Latent Variables Attractive and Support. Figure 5.making variables and their relationship with maternal care services in Kenya brings a .. days of termination of the pregnancy, irrespective of the duration and size of .. of demand for good health viewed health as both a consumer as

well as an . outcomes in India, Bangladesh and Indonesia, while in African countries no.Descriptive Statistics for the Variables in Prenatal Care and Infant Health . infant health has effects on longrun adult health and other outcomes such as adult. 1 .. Heckman's approach (Heckman, ) in the third essay found in chapter We assume that there is a latent variable linked to the reporting of birth.

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