Table 1 Metadata on factors influencing the number ANC visits and choice of birthplace among women in Uganda

Author	Purpose of the study	Sample size	Research methodology	Institutional factors	Socio-economic and demographic factors
Kawungezi CP et al.[9]	Factors associated with late booking and inadequate utilization of ANC services in upcountry areas of Uganda.	401	Mixed research methods of interviewer administered questionnaires, focus group discussions and key informant interviews.	Health workers attitude and influence, poorly implemented ANC program, long waiting hours	Late antenatal care attendance, geographical location, history of obstetric care, parity, religion, perceived costs, culture, age, perceptions around the quality of care provided in health facilities, presence of TBAs, awareness about pregnancy and its complications
Ainomugisha PP[7]	To analyze the determinants for ANC and delivery care service utilization among women in Uganda during the period 1995 to 2012	Not reflected	Quantitative using both descriptive and analytical approaches	Less access to ANC, attitude of health workers attested physically and verbally, inadequate training of health workers, Insufficient management of delivery, poor maternal health care, inadequate essential health care	Age, socio-economic background, level of education, religion, birth order, distance from the nearest health center, residence (rural- urban)
Rutaremwa G et al.[29]	To determine maternal health services utilization in Uganda.	1728	Quantitative using a multinomial logistic regression model	Desirability maternal health services package, location of the facility, and health workers' attitude, availability of community infrastructure	Level of education, mother's occupation, residence (region and whether rural or urban), age, cultural values and norms, wealth index, marital status, children ever born, distance to health facility, having visited health facility in the past few years
Kaguna A et al.[32]	To understand factors influencing choice of delivery site in Rakai district of South-Western Uganda.	32 women and 32 men took part in focus group discussion. -211 women participated in a	Mixed research methodology	Access to maternal health services, influence of health workers, attendance of ante-natal care	Social influence from the spouse, other relatives, TBAs, self-efficacy; habit (previous experience) and the concept of normal versus abnormal pregnancy. Attitudinal beliefs towards various delivery sites.

		semi-structured interview			
Okurut D[30]	Challenges women face in accessing and utilizing antenatal care services using Uganda Demographic and Health Survey data	5,035 women of reproductive ages 15-49 years	Quantitative using 2006 Uganda Demographic and Health Survey (UDHS).	Conservative and political influence, quality of care	Economic factors, socio-cultural, religion, costs involved, women's autonomy to access and utilize health services.
Kyomuhendo BG[12]	To enhance understanding of why, when faced with complications of pregnancy or delivery, women continue to choose high-risk options, leading to severe morbidity and even their own death.	808	Mixed research methodology of quantitative (survey) and qualitative (Focus group discussion and key informant interview)	Inadequate resources, incompetent medical workers, political instability that result into destruction of health facilities, stock-outs of emergency drugs, blood, anesthesia, and other supplies.	Community perception and expectations of the pregnancy and childbirth, socio economic factors such as lack of transport fees and means and funds to foot medical bills, lack of knowledge of the physiology of pregnancy.
Anyait A et al.[31]	To identify the independent predictors of health facility delivery in Busia, a rural district in Uganda with the view to suggest measures for remedial action	500 women who had a delivery in the past two years from November 16 2005 to November 15 2007	A cross-sectional survey	Accessibility of health services, attendance of antenatal care and discussion held with health workers, their attitude and the charges incurred, availability of drugs, health personnel, equipment and supplies.	Reproductive history, preferred delivery positions, preference for disposal of placenta and mother's autonomy in decision making, cultural, socioeconomic, perceptions of health facility delivery educational attainment, socio economic status, residence, young maternal age, and births order
Bbaale E[3]	To investigate the factors associated with the use of antenatal care content	A nationally representative Uganda Demographic and Health Survey (UDHS) 2006	Quantitative using both descriptive and community fixed effects approaches	Nature of the health facility in terms of service delivery and utilization of professional care.	Level of education of the mother and her partner, wealth status, location disparities, access to media, family planning, timing and frequency of antenatal visits

Tann JC et al.[5]	To facilitate the researchers' understanding of the changing use of maternity care services in a semi-urban community in Entebbe Uganda and to examine the range of antenatal and delivery services received in health care facilities and at home.	413	Quantitative using a structured questionnaire	-the quality of antenatal service - Improvement in the range and consistency of services	Financial/transportation difficulties as the primary reason. Level of education with Less educated, poorer mothers choosing home birth
Kwagala B[33]	To examine maternal health-seeking behavior among the Sabiny people of Eastern Uganda in relation to health policy ideals.	60 (10 key-informant interviews, 9 in-depth interviews and 4 focus-group discussions (FGDs) were held each with 10 –12 participants	Qualitative (in-depth interviews with mothers, focus group discussions with mothers and fathers and key informant interviews.	Improved patient care, narrowing of the gap between health workers and Sabiny communities, promoting outreach and community-based health interventions	Self-efficacy to deliver at the health facility, cultural beliefs and practices, adherence to traditional birth practices, the use of herbs, non-supine delivery positions and placenta disposal
Kiwanuka NS et al.[28]	To determine access to and utilization of health services for the poor in Uganda	48	Systematic review	Availability of drugs, inadequate skilled staff, late referral, health workers' attitude	Poverty, vulnerability, distance from home to the health facility, perceived quality of care, costs of care, inadequate knowledge on maternal health services,
Kabakyenga JK. et al.[37]	To assess the influence of birth preparedness practices and decision-making and assistance by SBAs among women in southwestern	759 women	Quantitative using a safe motherhood questionnaire	None	Residency, distance between health facility and home, time taken to reach the health facility, mother's level of education, household assets, consultation of a partner/ a relative or a friend, ANC attendance, parity, and birth preparedness.

	Uganda.				
Wilunda C et al.[23]	To identify barriers to utilization of institutional delivery services in Moroto and Napak districts, Uganda	887 participants (459 women and 428 men) in 20 villages in Moroto and Napak districts.	Qualitative study	Lack of supplies, drugs and basic infrastructure at health facilities, poor quality of care, health workers' attitude, Shortage of staff,	Insecurity, poverty, socio-cultural factors, reliance on herbs, long distances to health facilities, lack of food at home and at health facilities, inadequate income, lack of participation in planning for health services and the readily available TBAs, perceived quality of care, inadequate knowledge of maternal health services
Atekyereza RP et al.[38]	To explore the influence of pregnancy perceptions on patterns of seeking antenatal care among women in reproductive age of Masaka District, Uganda	55 (45 mothers and expectant women, and 10 key informants)	Qualitative (FDGs and key informant interviews)	Quality of services offered,	Orientation towards pregnancy as either a source of joy or sorrow. Socio-cultural beliefs and personal definition of pregnancy, cultural taboos, mothers' occupation, level of education, transport costs, distance from home to the facility, maternal age, perception of pregnancy as a normal development process

Atuyambe L et al.[35]	To determine adolescent and adult first time mothers' health seeking practices during pregnancy and early motherhood in Wakiso district, central Uganda	762 women (442 adolescents and 320 adult)	Quantitative using a structured questionnaire	Facilitated public hospitals, free medical care, referral, health workers' attitude	Maternal age with adolescents being less likely to utilize maternal health package, distance from home to the health facility, mother's level of education, level of income, lack of funds for facilitation of transport and labor costs, advise by a relative, decision by partner, domestic violence, social stigma, available means of transport, fear of knowing one's HIV status, and preference of use of herbal or tradition birthing methods
Babirye J. 2011	To examine influences on immunization behavior using the attitude-social influence-self efficacy model.	Nine focus group discussions (FGDs) with mothers and fathers. Eight key informant interviews	Qualitative using content analysis	Inadequate sensitization on immunization program	Non-supportive role of male partners sometimes resulting into intimate partner violence, lack of presentable clothing which made mothers vulnerable to bullying, inconvenient schedules and time constraints
Atuhaire S[19]	To determine factors associated with homebirths among rural mothers in Uganda	133 mothers and fathers, 6 key informants	Mixed research methods	Not significant	Maternal age, parity, distance, level of education of both partners, culture and influence of VHTs, and partners
Stephenson R. 2006	To examine community-level influences on the decision to deliver a child in a health facility across 6 African countries	6 African Countries	Quantitative using multilevel models	Community level infrastructure Service provision	community-level influences, the climate of female autonomy, fertility preferences, demographic factors parities, maternal age, women's employment in skilled work outside the home, and husbands' level of education

Birungi S et al.[34]	To document the initial pattern of use and quality of the existing maternal healthcare services in order to generate baseline data against which the performance of the program	-1472 households -30 TBAs, 9 senior women leaders and a health facilities survey (1 hospital,1 HC IV, and 5 HC IIIs).	Mixed methods (survey and interview)	Availability of qualified staff	Birth interval, mothers' level of education, mother's age and parity, geographical access to health facilities, transport issues, affordability of care,