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Predictors of adverse outcomes of pregnancy in South African women

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A review of the relevant literature shows that teenage pregnancy and adverse outcomes of pregnancy constitute a major public health problem in South African women of the childbearing age of 15 to 49 years. A longitudinal study was conducted in Tshwane, South Africa in order to identify factors that affect utilization of modern contraceptives and adverse pregnancy outcomes in women of the childbearing age of 15 to 49 years. Data analysis was conducted by using statistical methods such as binary logistic regression analysis, survival analysis, multilevel analysis and Bayesian analysis. The study showed that the percentage of women who regularly used modern family planning methods such as condoms, pills, injections, intra-uterine devices and sterilization was 41.74%. The average ages of women at first sex and pregnancy were 18.72 and 19.36 years respectively. Adverse outcomes of pregnancy occurred in 12.19% of women. Based on Odds Ratios (OR) estimated from binary logistic regression analysis, utilization of contraceptives was significantly influenced by easy access to family planning services, level of support from sexual partner, and young age at first pregnancy. Based on hazard ratios (HR) estimated from the Cox Proportional Hazards Model, the occurrence of adverse outcomes of pregnancy was significantly influenced by easy access to family planning services, unwanted pregnancy, and young age at first pregnancy. Women who experienced adverse outcomes of pregnancy were characterized by poor utilization of reproductive health and modern family planning services. Based on results estimated from multilevel analysis, there was a significant difference among the 20 health service delivery wards and 11 health service facilities in which reproductive health services were delivered to women with regards to the quality of service delivery.

Biography

Zelege Worku is a South African Academic working at the Business School of Tshwane University of Technology (TUT) in Pretoria, South Africa and Associate Professor of Statistics and Coordinator of the MBA programme of study at TUT Business School. He holds a PhD in Statistics (University of the Orange Free State in Bloemfontein, South Africa) and a second PhD in Sociology (Aalborg University, Denmark). His key research interests are in monitoring and evaluation, statistical data mining, biostatistics, epidemiology, public health, sociology, demography, econometrics and business sciences. Before he joined TUT Business School in 2010, he has served the University of Natal in Durban, South Africa (1998 to 1999), Vista University in Pretoria, South Africa (2000), the University of Pretoria, Pretoria, South Africa (2001 to 2007), and the University of South Africa in Pretoria, South Africa (2008 to 2009).

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