

# **Investigating antenatal care services, intimate partner violence and non-psychotic mental health disorders among postpartum women in Rwanda**

Akademisk avhandling

Som för avläggande av medicine doktorsexamen vid Sahlgrenska akademien, Göteborgs universitet kommer att offentligen försvaras i hörsal Arvid Carlsson, Academicum, Medicinaregatan 3, Göteborg

Tisdag den 12 juni 2018 kl. 09:00

av

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Fakultetsopponent:

Birgitta Essén, Professor

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Avhandlingen baseras på följande delarbeten

- I. Rurangirwa AA, Mogren I, Nyirazinyoye L, Ntaganira J, Krantz G. Determinants of poor utilization of antenatal care services among recently delivered women in Rwanda; a population based study. *BMC Pregnancy and Childbirth* (2017) 17:142 DOI 10.1186/s12884-017-1328-2.
- II. Rurangirwa AA, Mogren I, Ntaganira J, Krantz G. Intimate partner violence among pregnant women in Rwanda, its associated risk factors and relationship to ANC services attendance: a population-based study. *BMJ Open* 2017; 7:e013155 doi: 10.1136/bmjopen-2016-013155.
- III. Rurangirwa AA, Mogren I, Ntaganira J, Govender K, Krantz G. Intimate Partner Violence during Pregnancy in Relation to Non-Psychotic Mental Health Disorders in Rwanda: A Cross-Sectional Population-Based Study. (In press)
- IV. Rurangirwa AA, Mogren I, Ntaganira J, Govender K, Krantz G. Quality of Antenatal Care Services in Rwanda: Assessing Practices of Health Care Providers. (Submitted manuscript)

# Investigating antenatal care services, intimate partner violence and non-psychotic mental health disorders among postpartum women in Rwanda

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Sweden, 2018.

## Abstract

**Background:** Although maternal mortality has decreased in the past years and more women visit antenatal care (ANC) services during pregnancy in Rwanda, initiation and completion of the recommended number of visits remain a problem. It has also been suggested that the quality of health care pregnant women receive may be inadequate and that some maternal conditions may be overlooked.

**Aims:** The aim of this thesis is to investigate pregnant women's attendance and timing of ANC visits and the occurrence of intimate partner violence (IPV) with associated factors. A further aim is to investigate the prevalence of non-psychotic mental health disorders (MHDs) during pregnancy and after childbirth and to what extent violence exposure would contribute to poor mental health. Healthcare providers' (HCPs) practices in prevention, detection and management of maternal conditions were investigated quantitatively including patients' records (quality control sub-study).

**Methods:** Studies were cross-sectional population and facility based. Data collection was performed using an interviewer-administered questionnaire. Simple random sampling was done to select villages and households. In total, 921 women who gave birth  $\leq 13$  months before being interviewed were included. Additionally, 312 HCPs were interviewed and 605 ANC medical records were scrutinized by use of a structured observation checklist. For the analyses, descriptive statistics and bi- and multivariable logistic regression modeling were used.

**Results:** In total, 22% of participants did not make any visit to ANC services during the first trimester of pregnancy while 54% did not complete the WHO recommended four visits. The prevalence rates of physical, sexual, psychological violence and controlling behaviour during pregnancy were 10.2%, 9.7%, 17.0% and 20.0%, respectively. Usage of ANC services was less common among pregnant women reporting exposure to controlling behaviour (AOR) 1.93 (95% CI: 1.34, 2.79). Generalized anxiety disorder, suicide ideation and PTSD were reported by 19.7%, 10.8% and 8.0% of the women, respectively. Exposure to all individual forms of IPV during pregnancy was associated with each of the non-psychotic MHDs investigated. HCPs failed to mention a number of pregnancy-related conditions that, according to WHO recommendations, need urgent referral to a higher level of health care. Of the ANC medical records that were checked, there was no report on tetanus immunization in 12%, of anthelmintic treatment in 13% and of syphilis testing in 15%.

**Conclusions:** There are numerous deficiencies in utilization and quality of ANC services in Rwanda. Strategies aimed at improving awareness of ANC services and early identification and prevention of violence and MHDs should be enhanced at all levels of care in Rwanda. Both IPV and MHDs may be integrated into guidelines for perinatal care. Finally, HCPs need to be educated and trained in a consistent manner in order to be able to provide quality ANC services.

**Keywords:** antenatal care, intimate partner violence, non-psychotic mental health disorders, pregnancy, quality of care, health care providers, Rwanda

ISBN: 978-91-7833-065-2 (PRINT)

ISBN: 978-91-7833-066-9 (PDF)

<http://hdl.handle.net/2077/55972>