Pregnancy and delivery-related complications in Rwanda: prevalence, associated risk factors, health economic impact, and maternal experiences

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Akademisk avhandling

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Avhandlingen kommer att försvaras på engelska

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Prevalence of anaemia, hypertension, diabetes mellitus during pregnancy, and severe bleeding during pregnancy and labour were estimated to be 15.0%, 4.9%, 2.4%, and 3.7%, respectively (Paper I). In total, 56.4% of the participants were transferred and the majority were transferred from health centres to district hospitals, with caesarean section (CS) as the main reason for transfer. Almost three-quarters of the women started labour spontaneously; 5% had induced labour and 28.4% of all pregnant women were delivered by CS (Paper II). Pre-eclampsia/eclampsia, PPH, and caesarean section (CS) due to prolonged labour/dystocia represented 1%, 2.7% and 5.4% of all participants, respectively (Paper II). Risk factors for CS due to prolonged labour or dystocia were poverty, nulliparity, and residence far from health facility (Paper II). The prevalence of poor-self rated health (poor-SRH) for participants who gave birth within the past 14 months prior to time of data collection was 32.2% at one day postpartum, 7.8% at one month, and 11.7% at time of the interview (Paper I). Most participants who had experienced PDCs reported that they were previously unaware of the complications they had developed, and they claimed that at discharge they should have been better informed about the potential consequences of these complications (Paper II). Most participants blamed the health care system as the cause of their problems due to the provision of inadequate care. Participants elaborated different strategies for coping with persistent health problems (Paper III). PDCs negatively affected participants’ economic situation due to increased health care expenses and lowered income because of impaired working capacity (Paper III). The estimated total societal cost of a normal uncomplicated vaginal delivery was 107 United States dollars (USD). The incremental cost of a vaginal delivery followed by PPH was 55 USD. The incremental cost of prolonged, dystocic or obstructed labour resulting in a CS was 146 USD. The incremental cost of pre-eclampsia with vaginal delivery and pre-eclampsia with CS were 289 and 339 USD, respectively. The major cost categories of the estimated costs for each mode of delivery were staff, the hospitalisation rooms, and household expenditures (Paper IV).

Conclusions A high prevalence of poor self-rated health status was reported in the early postpartum period. Identified factors associated with poor-SRH were severe bleeding, hypertension, infection, and anaemia during pregnancy and postpartum haemorrhage. The estimated prevalences of specific pregnancy and delivery-related complications were relatively low, probably in part due to underestimation. Rwandan women experiencing PDCs are facing many challenges and problems during pregnancy, delivery and postpartum period. The costs of PDCs were calculated to be very high in comparison to the net median monthly wage in Rwanda. In addition, the Rwandan health system presents weaknesses in relation to the prevention of PDCs. Above all, there is an insufficient postpartum health care provision and community support to women experiencing PDCs. The results from this thesis call for interventions, to improve the postpartum health care services and call for the community sensitisation for the increased support to women who face difficult living circumstances because they have experienced severe pregnancy and delivery-related complications.

Keywords
Pregnancy and delivery-related complications, cross-sectional study, qualitative method, costing study, health economics, epidemiology, self-rated health status, pregnancy, childbirth, postpartum, Rwanda, prevalence, experiences