## ABSTRACT

**Background and objective:** The use of private healthcare is on the rise in Sri Lanka. Despite the availability of non-fee levying maternity services, pregnant women frequently combine public with private antenatal care (ANC), incurring out-of-pocket (OOP) expenditures. This study aims to describe ANC service utilization in public and private sectors, OOP payments, and associated sociodemographic and pregnancy-related factors among women with 'low-risk' pregnancies awaiting delivery at the De Soysa Hospital for Women.

**Methods:** This was a hospital-based cross-sectional study carried out among women with 'lowrisk' pregnancies awaiting delivery at the De Soysa Hospital for Women. The estimated sample size was 216. Consecutive sampling was used, ensuring representation of all obstetric units. Data were collected with an interviewer-administered questionnaire designed to collect sociodemographic and pregnancy details and data relevant to ANC use and OOP spending in relation to field, hospital, and private sector ANC. Data were entered and analysed on SPSS (v21). OOP spending was estimated by tallying expenses at each antenatal visit. Frequencies and percentages were used to describe ANC use. Mean, standard deviation, median, and interquartile range were used to describe the number of antenatal visits and tests, and summarize OOP spending data. Associations between private ANC use and selected factors were measured using the Chi Square test or the Fisher's Exact test. Median differences in OOP spending were measured using the Mann-Whitney U and Kruskal Wallis H tests.

Post-hoc pairwise comparisons were made applying the Bonferroni correction.

**Results:** In total, 216 women participated in the study with a response rate of 94%. The rate of everuse of private sector ANC was 95%. The median number of contacts with ANC providers was 16 (IQR 14-19); of them, 14 (IQR 11.5-16) were with medically qualified providers, and 1 (0-3) took place in the private sector. Median OOP spending was Rs. 8,160 (IQR 4,399-19,163) with spending on accessing public sector ANC (median Rs. 4560, IQR Rs. 2,655-7,420) exceeding private sector expenditures (median Rs. 1,034, IQR Rs. 0-9,657). Transport and tests contributed most to OOP spending incurred in the public sector; channeling accounted for a major share in the private sector.

Women from outside Colombo district were more likely to use private GP services (p=0.048), channeled consultations (p<0.001), private ultrasound scanning (USS) services (p<0.001), private

laboratory services (p=0.013) and private pharmacies (p<0.001), and spend more on ANC (p<0.001). Participants with a higher education level, higher spousal occupational skill level, and higher monthly household income were more likely to use channelled consultations, private USS services, private laboratory services, private pharmacies, and also spend more on ANC (p $\leq$ 0.05). Employed women were more likely to use channelled consultations (p=0.007), private USS services (p=0.007), and spend more on private ANC (p<0.001). Sinhala, Buddhist and Roman Catholic/Christian women were more likely to use private pharmacies and spend more on private ANC compared with Muslim women (p $\leq$ 0.05). Primiparous women were more likely to use channelled consultational diabetes mellitus were more likely to use private GP services (p=0.015), and spend more on public sector ANC (p=0.001), while women with anaemia were less likely to use private USS services (p=0.036) and spent less on private ANC (p=0.024).

**Conclusion and recommendations:** Although ever use of private ANC is high among women accessing ANC at the De Soysa Hospital for Women, the bulk of service delivery takes place in the public sector. Transport and laboratory investigations were the primary contributors to OOP spending. To reduce OOP spending, public sector primary care laboratories need to be strengthened in the long-term; a mechanism to reimburse expenses on diagnostic services that targets economically disadvantaged women may be helpful in the short-term. Research is needed to better understand the relatively high number of antenatal contacts among women accessing ANC at the De Soysa Hospital for Women in Colombo.