Quality of Maternal Health Care at the Public Health Facilities in India: Does Clients Background and Structural Attributes in Facilities Matter?

The public sector is the primary source of maternal health care services in India. There are critical concerns over the quality of services provided, deaths, failures, and complications following delivery. The World Health Organization defines the quality of care (QoC) as "the extent to which health care services provided to individuals and patient populations improve desired health outcomes. To achieve this, health care must be safe, effective, timely, efficient, equitable, and people-centred".

The QoC does not act in isolation, but governance, management, social and community, and structural factors also determine the performance of a health care system. Previous studies have shown that inequalities exist in health care delivery and differentials in the QoC based on wealth, ethnicity, socio-economic status, age, marital status, family status, sex, and disability which put vulnerable sections at a disadvantage. Many studies have identified that lack of structural facilities is a major impediment to public health facilities in providing better health care services in India.

In this paper, we study the complexities around the quality of maternal health care at public health facilities and identify strategies for improving such quality measurement. A better understanding of these issues could inform pragmatic strategies for enhancing quality.

This study uses data from the National Family Health Survey (NFHS) 2015-16 and District Level Household and Facility Survey (DLHS) 2012-13. The study is limited to only districts whose data are available in both DLHS 2012-13 and NFHS 2015-16.

The outcome variable for this analysis is a process-outcome variable, an index measurement composed of variables related to process and outcome-related variables on the QoC of maternal health care. These variables include skilled health care, sufficiency, timeliness, and appropriateness. We considered two types of variables as the independent variables: variables related to infrastructure and the readiness of the facilities and the variables on background characterizes of the clients.

In the first stage of statistical analysis, the socio-demographic and facility-level characteristics were described using descriptive statistics. Pearson chi-square tests were used to compare the differences in receipt of QoC across women of different background characteristics. And two-

level mixed-effects logistic regression was used to find the association between the quality of the care received and the independent variables.

We found that the quality of maternal health care received at the public health facilities is associated with facility readiness and the socio-economic characteristics of the clients. The quality of care is more deficient in rural areas. There is a significant association between household wealth and the QoC received.

Overall, the availability of infrastructure and facility readiness in districts of India is poor. Percentage of facilities which had the readiness for human resources is the highest and most of the item regarding infrastructure were not available in the facilities. Overall, the CHCs showed better readiness than the district hospitals in terms of infrastructure and human resources availability. Out of 560 districts covered, 200 districts had a 'low' structure score for infrastructure and readiness.

Our study provides empirical evidence on the role of structural attributes in delivering better quality services. The spatial analysis revealed those areas where the QoC and structural facilities are low. Policymakers and public institutions should focus on these areas and identify the location-oriented problems and reasons for the low performance. The results inferred through this study are consistent with the previous studies.

Quality should be an overriding priority to establish the credibility of any health care delivery system. It is very much essential to measure how well the client's expectations and providers' technical standards and their adherence to those standards are being met to ensure better quality services.

The quality of health services plays a vital role in its acceptance. Poor quality of services leads to the client's dissatisfaction and resulting in under-utilization of services. It is essential to provide them safeguards against adverse events to build the client's confidence. QoC cannot be understood fully without acknowledging the social norms, relationships, and values within and across the communities and societies where care is provided. As countries continue to progress towards universal health coverage, developing more standardized replicable and comparable metrics for measuring the quality of medical care should be prioritized.