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Strengthening Data Systems and HMIS: A Pathway to Effective Family Planning in Pakistan

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ABSTRACT

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The relationship of social dynamics, cultural norms, and deficiencies in the structural health system influences the environment of family planning in Pakistan, which can subsequently result in low contraceptive acceptance. This letter to the editor discusses the capacity of existing data infrastructure and the Health Management Information System (HMIS) for the service delivery of reproductive health in Pakistan. It emphasizes the essential requirement for enhanced data collection and analysis to guide policy and practice, with the ultimate goal of increasing contraceptive utilization and reproductive health outcomes.

I would like to highlight that family planning is an essential aspect of public health, especially in Pakistan, where the fertility rate exceeds the replacement level¹. Notwithstanding the acknowledged need for family planning, the adoption of modern contraceptive techniques remains low, with merely 25% of currently married women taking advantage of such contraceptives². Barriers to effective family planning in Pakistan are complex, involving socio-cultural factors, healthcare accessibility, and the quality of services offered³⁻⁵. This letter seeks to examine the function of data systems and Health Management Information Systems (HMIS) in tackling these challenges and enhancing family planning outcomes.

The existing family planning initiative in Pakistan has always emphasized fertility limitation over the advancement of holistic reproductive health⁶. This limited focus has led to an absence of

efficient data systems capable of capturing the complexities of contraceptive usage and the obstacles encountered by women⁷. The literature demonstrates that social obstacles, especially biological opposition, considerably impede women's intentions to utilize contraception, and the quality of care offered to women pursuing family planning services is frequently inadequate, resulting in dissatisfaction and cessation of contraceptive usage^{4,5}.

An adequately resourced HMIS has significant potential to enhance the monitoring of contraceptive utilization and service delivery performance by equipping health managers with the granular information needed to identify unmet needs and direct targeted interventions. The present shortcomings of Pakistan's routine HMIS illustrate this gap clearly. National estimates of contraceptive prevalence and method discontinuation are still drawn primarily from

periodic household surveys conducted years apart rather than from continuous facility-level reporting³, leaving program managers with an outdated picture of demand and supply between survey cycles. Similarly, routine reporting formats rarely capture the family opposition and social barriers that drive discontinuation, so identifying these determinants has required dedicated case-control studies rather than data already flowing through the HMIS⁷. These examples underscore that without more frequent, disaggregated, and socially contextualized data capture, the HMIS will continue to fall short of the granular intelligence that effective family planning programming requires.

Besides this, evidence suggests that engaging male partners and wider family networks in counseling processes is associated with measurably greater acceptance of contraceptive methods, with enhanced satisfaction reported by service users⁵. Awareness among health professionals regarding the scope of family medicine and public health in Pakistan further strengthens the case for inter-professional coordination in improving reproductive health service standards, and when integrated health teams apply data-informed approaches, their capacity to respond meaningfully to the diverse reproductive health requirements of women and communities is significantly enhanced⁸. In view of that, data platforms must be redesigned to go beyond tracking method prevalence alone, capturing the underlying socio-cultural determinants that facilitate reproductive decision-making at the household level.

In conclusion, the integration of systematic data collection and thorough analysis into service delivery frameworks will increase programmatic efficacy and allow women and their families to access more help and make informed decisions over their reproductive life. The barriers to contraceptive use and to creating tangible gains in maternal care in the population can only be addressed by suitable policy based on trustworthy data. Hence, enhancing the capacity and breadth of data systems and HMIS representation is an essential step in modernizing family planning services in Pakistan.

Moving forward, a number of specific actions can help translate stronger HMIS data into improved contraceptive uptake and service delivery. First, routine HMIS indicators need to go beyond method prevalence to include method discontinuation and reasons for discontinuation, so that facility staff can identify and respond to dissatisfaction before women discontinue contraceptive use. Second, the HMIS reporting cycle should be reduced and tied to facility-level dashboards that health managers can act on in near real time rather than waiting for multi-year household surveys to be the main source of relevant data. Third, existing registers should be supplemented with data sections documenting partner and family involvement in counseling, so that programs can identify where inter-professional and family-inclusive counseling models are most needed. Incorporating these modifications into Pakistan's ongoing HMIS strengthening efforts will allow data to serve as both a monitoring tool and a direct driver of increased contraceptive adoption and reproductive health outcomes.

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