# **Generation and Use of Gender and Social Stratifiers through Strengthened Health Management Information Systems: the case of Nepal**

This briefing paper highlights the main findings and recommendations from a pilot study that assessed the availability of gender and social stratifiers (such as age, ethnicity, occupation, geography, economic status, marital status) in the existing health Information Management Systems (IMS) in Nepal. We explored this in both public and private health providers. The study also summarizes factors affecting generation and use of disaggregated data in health planning at health facilities and municipalities. Based on the findings, the study has proposed a framework to inform policy makers and managers about the generation and use of evidence in equitable health service planning to improve health services for marginalised and disadvantaged people.

The research was carried out by HERD International (www.herdint.com) in collaboration with its sister organisation, HERD (www.herd.org.np), both based in Nepal. The study is one of a series of pilot studies exploring how public services could be more inclusive of disadvantaged social groups in ODA-eligible contexts. These studies are supported by an international partnership of academic, policy and non-government organisations collaborating to produce new knowledge and solutions to exclusion and disadvantage. More details of the PEI collaboration and a full report for this project can be found [here](https://medicinehealth.leeds.ac.uk/directory_record/1366/partnerships_for_equity_and_inclusion).

## BACKGROUND

HMIS (Health Management Information System) is the main information platform implemented throughout Nepal in the public sector to record and report health service utilization data. The availability of disaggregated data based on gender and other social stratifiers in HMIS allows policy makers to conduct gender and intersectional analysis to improve health outcomes and address inequities. There is a growing concern and recognition that gender and intersectionality should be included in the routine HIMS, however, it is less known whether, how and to what extent information management systems in the public and private sectors provide gender and intersectionality focused evidence and how this data informs health planning and decisions.

## FINDINGS

The study findings are based on a review of national and local policy documents, IMS of public and private health facilities in two municipalities of Kathmandu district (Chandragiri Municipality and Kathmandu Metropolitan City), and interviews with key informants from the municipalities, public and private health facilities and district health office.

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| **KEY POINTS**  IMS is an integral part of overall health systems, and routine, reliable and timely disaggregated data from IMS informs policy and planning process. Key to this are:   1. The public sector recording and reporting forms (HMIS) require major reforms from federal and sub-national governments to consider gender and social stratifiers. 2. Conducive environment to generate quality data should be assured by all levels through:    1. Designated and trained staff for IMS    2. Availability of functional resources    3. Strong and dedicated leadership    4. Capacity strengthening for understanding data with gender and intersectionality perspective 3. Complete and increased reporting through HMIS/DHIS2 from private health facilities have to be ensured through enforcing both supportive and regulatory mechanisms at municipality level. 4. Data from other information systems and periodic surveys should be acknowledged and complemented with public and private sector IMS during planning processes. |

## Overview of Gender and Social Stratifiers in IMS

Both public and private health facilities in the pilot study were using HMIS and District Health Information System (DHIS2), which is an online platform, for reporting the data although online reporting through DHIS2 is largely missing in the national context. A review of documents and findings from qualitative research revealed limited availability of social stratifiers in IMS of public and private health facilities. Gender and equity have received importance in national health policies, strategies and programs, however inclusion of social stratifiers in IMS is less reflected in policy documents. With the current available information in the IMS, health facilities and municipalities were not able to identify the marginalised populations left behind in terms of service access.

*“Third gender is also a Nepali citizen. They are human and they also face health problems. When they visit us, we also get confused where to record their gender identity. It does not seem good that our HMIS does not include that [Third gender] although the government has started giving them citizenship certificate.”*

Health Worker3\_PublicHF2

## Unavailability of focal person and resources for HMIS

Neither municipality offices nor the health facilities had formal sanctioned positions for HMIS; existing staff were managing HMIS/DHIS2. Unavailability of the internet and functional computers were other challenges for health facilities to effectively execute data recording and reporting functions.

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| *“We enter data in health facility but sometimes we face internet problem. We are using the internet from ward office. The internet is poor. I try to open the server time and again. It works but sometimes we get trouble.”*  Health Worker2\_PublicHF1 |

## Gaps in training and capacity on HMIS/DHIS2

Health workers in public and private health facilities had not received training on DHIS2 and received HMIS training during their job placement that was years ago. Because of lack of formal training and technical backstopping from municipality, health workers have less knowledge and confidence in using DHIS2, which is likely to affect quality of captured data. Despite realization that health facilities staff do not have sufficient capacity in using DHIS2, municipality however, did not have any training plans for health workers.

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| *“I do not have knowledge to use computer.. We have a staff member, she has some computer knowledge. She has been doing data entry [in DHIS2] without any training since she joined this health facility.”*  Health Worker1\_PublicHF1 |

## Gaps in use of evidence

The study found that routine data at health facilities were not analysed from a gender and intersectional lens, although current data allow some forms of analysis. Annual planning at health facilities mainly use aggregated data to show total program-wise trends over a period of time. Likewise, municipal level planning was more guided by federal and provincial budget and health programs and plans shared by local health facilities were reported to be less incorporated. Moreover, one of the crucial steps in planning is the engagement of multisector concerned stakeholders, including the private sector and communities, to identify real problems and needs. However, community participation in planning was found to be uncommon in both municipalities. None of the private and only one of the public health facilities were involved in planning processes.

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| *“There is no use of plans formulated locally by utilizing all the available health data because that plan will remain only in the paper as municipality do not value any plans prepared by local health units.”*  Health Facility Incharge\_PublicHF1 |

-Lack of Inter-connection between different Info system and other data sources

**Stressors**

**Planning at Municipality**

**Data Sources**

**HMIS Recording**

-Unavailability of functional computers, internet, etc.

-Lack of designated and trained HR for MIS

**Existing stratifiers in recording**

**Other stratifiers to be incorporated in recording**

- Age

- Sex/Gender

- Ethnicity

- Address

- Contact

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| -Sex/Gender with sexual orientation | - Marital status  - Religion |
| - Education | - Disability status |
| - Occupation | - Migration status |

STEPS

NFHS

NDHS

MICS etc

**HMIS Reportingting**

-Lack of routine training on HMIS/DHIS2

-Insufficient capacity and confidence in reporting through DHIS2

-Lack of technical backstopping

**Existing stratifiers in reporting**

**Other stratifiers to be incorporated in Reporting**

-Total aggregated data

-Male/female disaggregation

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| --- | --- |
| - Age categories | - Occupation |
| -Sex/Gender with sexual orientation | -Geography (Rural/urban wise) |
| - Education | - Migration  - Religion/ethnicity |

HMIS

(Public)

Household and Facility based Surveys

**Data Use and Planning**

* Availability of wider social stratifiers will allow detail gender & intersectional analysis
* Promoting participatory need-based planning
* Including voices of community

-Insufficient capacity for disaggregated analysis & planning

-Planning guided by federal & province budget & vertical program target

-Lack of data quality assessment

Lack of dedicated leadership and controls

* Incorporating plans shared by HF/wards, which are based on detailed local analysis
* Performing further analysis to understand contextual data
* Engaging multi-sectors including private providers in planning

**Planning at Municipality**

(Annual & longer term plan)

* Planning based on total aggregated data from health facilities
* Plan shared by wards/HFs are less commonly incorporated

-Insufficient capacity for data analysis

-Lack of importance of disaggregated analysis & planning

**Planning at HF**ting

**Planning at Health facility**

* Current data allow some form of gender & intersectional analysis but is rarely happening.
* Planning is evidence-based, but use of total programmatic data; no disaggregated analysis done

**Immediate:** Need-based and evidence-informed plans are developed

**Long term:**

* IMS System strengthened with more gender & equity related data
* Increased access of poor & marginalized groups to health services

**Figure 1: Framework to incorporate gender and social stratifiers in IMS for evidence based planning and equitable delivery of health services**

**KEY RECOMMENDATIONS**



A HERD International researcher conducting discussions with the staff members of a health facility in Kathmandu. Photo: HERD International

1. Existing HMIS recording and reporting forms and formats require major reforms in order to consider diverse gender and social stratifiers. This would promote better evidence informed planning and decision making. This is a major step for federal government and needs to ensure coordination with sub-national governments to make such revisions during routine HMIS amendment process.
2. A conducive environment to generate quality data through designated and trained HR and resources should be assured at all health facilities through strong and dedicated leadership at all level of governments. Capacity strengthening of health facility staff not only on HMIS and DHIS2, but also in understanding data with a gender and intersectionality perspective is equally important to help them perform routine analysis from available data. This could be included in training curricula and manuals related to information systems.
3. Ensuring complete reporting with quality of data from both public and private health facilities is key to strengthening the overall IMS system. In order to achieve complete and increased reporting through HMIS/DHIS2 from private health facilities, both supportive and regulatory mechanisms are needed at municipality level. A supportive mechanism would involve informing, orienting, following up and promoting participation of the private sector in review meetings and planning processes and a regulatory mechanism would involve introducing mandatory reporting in HMIS that can be linked with the licence renewal process of the private organizations.
4. Routine data from HMIS alone cannot generate and fulfil all information need and thus data from other sources like periodic surveys, different IMS, etc need to be acknowledged and careful planning should focus on complementarity of different data sources. The proposed framework from this pilot study can be helpful to generate data disaggregated by gender and other social stratifiers, its analysis and use in health planning processes.

