

Assessment of Surveillance Systems Attributes for Leprosy in Mpulungu District of Zambia

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Abstract

Background: Neglected tropical diseases continue to remain in the shadows of many health systems globally and locally due to the growing burden of other infectious and emerging diseases with a duo burden of non-communicable diseases. Despite achieving elimination status in 2010, leprosy cases continue to be reported with chances of underreporting due to the structure of health surveillance systems. Gray data demonstrates that at least 120 cases of leprosy were reported annually between 2019 and 2021 in Northern province alone. Though the numbers may seem insignificant the burden placed on patients and their families is huge and not limited to physical health but also family economics.

Objective: The study aimed to assess the attributes of the surveillance systems currently in place for leprosy in Mpulungu district.

Methods: We carried out a cross-sectional descriptive survey at five health facilities. Sixty four purposively sampled respondents were administered a five Likert point questionnaire adapted from Centre for Disease Control and prevention (CDC). Descriptive analysis was done and median scores were used to estimate if each attribute was sufficiently met. We applied the Pearson's chi-square and Fisher's exact test to measure associations between categorical variables.

Results: The study showed that of the 64 respondents, majority worked at the district hospital 27 (42.19%) and the Mpulungu urban clinic 22 (34.38%). Twenty one (32.81%) of the respondents had been in practice for three to five years. Sufficiently met attributes were acceptability (64.04%) and usefulness (54.69%) while simplicity (29.69%), stability (29.69%), flexibility (32.8%) and data quality (37.5%) were not sufficiently met. Years of experience and facility of origin was associated perceived sufficiently met flexibility (0 – 2 years, 31.58% vs. 2 – 3 years, 33.33% vs. 52.38%, $p=0.40$), (Lupongwe, 100% vs. Mpulungu clinic, 63.64% vs. Mpulungu District Hospital, 22.22% vs. Kaizya, 0% vs. Kasakalawe, 0%, $p=0.001$) and usefulness (Lupongwe, 100% vs. Kasakalawe, 87.5% vs. Mpulungu clinic, 59.09% vs. Mpulungu District Hospital, 51.85% vs. Kaizya, 0% vs., $p=0.001$). Timeliness and sensitivity were not assessed due to lack of data standardised reporting structures at all surveyed facilities.

Conclusion: This study shows that the current surveillance system is perceived only as acceptable and simple. Regular assessment of the surveillance system attributes and trainings of health personnel responsible for leprosy surveillance is therefore important for improving the overall performance of the surveillance system.

Key words: Surveillance system attributes, Leprosy, Stability, Simplicity, Flexibility, Usefulness, Data quality