

USING LQAS FOR BASELINE SURVEYS AND REGULAR PERFORMANCE MONITORING IN HEALTH CARE

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With decentralization, Local Governments require data to facilitate planning because surveys like demographic and health surveys, national health surveys, sero-behavior surveys and malaria surveys are conducted after three to five years and provide regional and national values not district specific. Health management information system (HMIS) is facility-based and does not give a picture based on the community. To assess the performance of community social development programs, social sector workers and managers routinely monitoring their activities using simplified methods. This presentation will highlight how Lot Quality Assurance Sampling (LQAS) addresses this problem. LQAS is an analysis method that can be used locally in supervision areas to identify priority areas; those not reaching an established performance benchmark for an indicator, measure coverage at an aggregate level (e.g., program catchment area or district or national level), to generate data to inform management decision making; and for sharing information across supervision areas and for reporting purposes. LQAS uses small samples; most frequently used size is 19 per Supervision area. Larger sizes are seldom needed. This methodology works by division of district into 5 or more supervision areas, random selection of 19 locations for interview within each supervision area using the population census village / enumeration area lists, training the district program team members in LQAS, field Work (data collection), hand tabulation and data analysis and finally dissemination of LQAS survey results and implementation of strategic decisions for program improvement. LQAS has been used in various areas like assessing youth friendly services in health facilities, assessing immunization coverage, assessing compliance with health policy and guidelines (patience screening practices), post disasters assessment, women's health, growth and nutrition, diarrheal disease control, quality management, neonatal tetanus mortality, HIV/AIDS and STIs and routine HMIS data quality assessment

Keywords; supervision areas, sample size, random selection, hand tabulation.

Introduction

LQAS is a simple random sampling methodology originally developed in the 1920s to control the quality of output in industrial production processes. Researchers around the world are using LQAS techniques to assess public health parameters and evaluate program outcomes. It is increasingly being used in monitoring and evaluation of health services such as HIV/AIDS (Ethiopia, Mozambique, Nigeria, Haiti), Neonatal Health Program (Bangladesh, Zimbabwe, Namibia,), Child Survival (Uganda, Mozambique), Immunization coverage (Bangladesh) and Contraception coverage (Kenya, Senegal. LQAS in health applications, it is used to identify populations with low/high coverage of health services (immunization coverage; access to a health facility), low/high prevalence of disease, low/high levels of health knowledge or health practices (ORT use; hand washing) and it uses small samples, which are statistically sufficient to make judgments (e.g., 19 vs. 30). The most frequently used size = 19 per supervision area, larger samples are seldom needed.

Results

A sample size of 19 provides an acceptable level of error for making management decisions; at least 92% of the time, it identifies whether a coverage benchmark has been reached or whether an SA is substantially below the average coverage of a program area. Samples larger than 19 have practically the same statistical precision as 19. They do not result in better information, and they cost more.

The random sample of 19 can tell us what are the higher-performing supervision areas to learn from it is good for deciding what are the lower-performing supervision areas in which to invest resources and good for differentiating knowledge/practices that have high coverage from those of low coverage.

In the districts, LQAS brings about change of mindsets towards reliance on data for Evidence-Based planning. They have relied on LQAS data to identify priority target areas for implementation and to focus work Plans. Districts can use LQAS to do own evaluations in different technical areas e.g., education, agriculture and it strengthened partnership between districts and NGOs in provision of related services

Conclusion

In conclusion, it is important to note that despite the merits of 19 as a sample, it is not good for calculating exact coverage in a supervision area (but can be used to calculate coverage for an entire program area)

References:

Talc. (2003) *Assessing Community Health Programs: Using LQAS for Baseline Surveys and Regular Monitoring*.

Harvard University Press. (1991) *Assessing Child Survival Programs in Developing Countries: Testing Lot Quality Assurance Sampling*.

WHO. (1996) *Monitoring immunization services using the Lot Quality Technique*. Global Programme for Vaccines and Immunization.

WHO. (2002) *Protocol for assessing neonatal tetanus mortality in the community using a combination of cluster and lot quality assurance sampling*. Department of Vaccines and Biologicals.