EVALUATION OF MNCH KEYS INDICATORS TRENDS ACCORDING TO DHS AND ROUTINE DATA FROM 2001 TO 2012 IN MALI

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The National Evaluation Platform (NEP) is a country-led and country-owned rigorous approach to compiling and analyzing data from diverse sources so that countries can get strategic, evidence-based answers to Millennium Neonatal, Children Health and Nutrition (MNCH&N) policy and program questions. NEP is being implemented in four Sub-Saharan African countries. Mali is one of them. It builds local capacity to answer evaluation questions. In Mali, the NEP has a Steering Committee (CP) chaired by the Secretary General of the Ministry of Health and Public Hygiene (MinPH). It includes national MNCH&N institutions and key partners as well as civil society. It has a Technical Working Group (TWG-NEP) formed by staff from 5 institutions called NEP Home Institutions that coordinate activities in country. The CP validates country priority question and the TWG-NEP answer them with financial and technical support from IIP-USA. For NEP Cycle 2, the CP validated 6 evaluations questions. This poster is about the fifth one, which is “Are the time trends for MNCH&N indicators from 2001 to 2012 consistent for routine and survey data?” This is a particularly important question due to the frequent use of routine data in planning processes in the country.

METHODS

To answer the question: “Are the time trends for MNCH&N indicators from 2001 to 2012 consistent for routine and survey data?”, the NEP team identified 8 MNCH&N indicators that were weak in Mopti comparatively to Kayes, Koulikoro, Segou, Sikasso and Bamako. We used HIS data to calculate indicator coverage from 2001 to 2012 and Demographic and Health Surveys (DHS) to get estimates in 2001, 2006 and 2012, corresponding to DHS years of edition. To get indicator estimates for district level, we disaggregated DHS data using a disaggregation protocol developed by the STATFRAM team at JHU-IIP. The disaggregation protocol uses household survey data and displayed geographic coordinates, provided by DHS, to calculate indicator coverage estimates for each district by associating households with a district, and then uses variables of households within a district to calculate estimates and variances. Eight MNCH&N indicators were identified as having the weakest levels in the Mopti region compared to other regions in the 2012-13 DHS. In this poster we decided to present Contraceptive Prevalence Rate (CPR), DPT3 coverage rate, institutional delivery rate and vitamin A supplementation rate. All of them are key indicators for saving mothers’ and children’s lives, but they are also often reported differently in survey and routine data. This is the case for CP and vitamin A supplementation. In other cases, the indicators are reported in the same way (e.g. institutional delivery, DPT3). Finally, vitamin A is not consistently reported in routine data. Some inconsistencies in definitions across the two types of sources are present.

Survey estimates and routine estimates were used to approximate the four indicators’ evolution over time using State Report", a web-based app developed by IIP. We assumed that survey data reports the true values of indicators than routine data more accurately.

RESULTS

Figures 1 and 2 show that the level of contraceptive prevalence rate is low over time in all regions and districts except for Bamako according to survey and routine data. The two types of data show similar trends, even though the levels in survey data are greater. For DPT3 coverage rate, routine data present some variability at both region and district level but the levels are higher compared to survey data (Fig. 3 & 4). Institutional delivery rate presented similar levels and trends at region as well as at district level. With regard to vitamin A, the trends are the same for region and district, increasing between 2001 and 2006 and decreasing between 2006 and 2012 (Fig. 5 & 6). Vitamin A routine data almost does not exist. Data have been collected only for 2010 and 2011. The levels in survey data are not very high and the trends are similar to institutional delivery k increasing then decreasing (Fig. 7 & 8).

CONCLUSION

The results allow for an appreciation of MNCH&N indicator trends according to survey and routine data together. In some cases the trends are similar - except for DPT3 - but the levels are in some cases significantly different since the routine data curves are outside of DHS estimate confidence interval boundaries. Among the four indicators, institutional delivery rate seems to have the best fit between survey and routine data. In fact, routine estimates are often within survey estimate CI boundaries. However, there is a need to take into account differences in indicator definitions between survey and routine data. That can explain in part the differences between indicator estimate levels. In all cases, these analyses give Malian planners the tools to make decisions about how and for which situation to use routine data in programs planning. The decision to use routine data in program evaluation should consider indicator definitions, especially if routine and survey indicator definitions vary.

REFERENCES

1. Rapport du Cycle 2 de la NEP - partie 1, p.23 (available at CREDOS’ library)

Fig. 1 Contraceptive rate by region, Mali
Fig. 2 Contraceptive rate by region and by district, Mali
Fig. 3 DPT3 rate by region, Mali
Fig. 4 DPT3 rate by region and by district, Mali
Fig. 5 Institutional delivery rate by region, Mali
Fig. 6 Institutional delivery rate by region and by district, Mali
Fig. 7 Vitamin A supplementation rate by region, Mali
Fig. 8 Vitamin A supplementation rate by region and by district, Mali