

Portuguese National Health Examination Survey: Lessons from data collection monitoring

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Issue

This work addresses practices related to quality assurance in the first Portuguese National Health Examination Survey (INSEF). INSEF is a cross-sectional population-based study that combines face-to-face interview, physical examination and blood collection and aims to obtain data on 4200 participants from all 7 regions of Portugal.

To ensure accurate and high quality data, a monitoring system was implemented as part of internal quality assessment. It includes participant recruitment, physical examination, blood collection and interview and consists of:

- daily check of recruitment and participation;
- monitoring of blood pressure and anthropometric measurements by interviewer and collection site;
- monitoring blood draw, sample haemolyses and laboratory processing;
- evaluation of average time spent on each survey component by interviewer;
- daily validation of collected interview data to verify completeness and identify duplicates;
- regular contact with fieldwork teams to clarify issues raised in questionnaire administration.

For each region we carried out survey quality assessment at the end of the second week of fieldwork (N = 230 participants). Regional meetings took place to discuss assessment results and propose recommendations for improvement.

Results

Monitoring allowed identifying items in higher risk of missing data and challenging issues such as employing exclusion criteria. Proper registry of measurements and time spent were difficult for 3 out of 6 interviewers. We observed junior laboratory technicians to have higher rates of haemolysed samples, 11% compared to 2% from the most experienced.

Lessons

Monitoring of each fieldwork procedure allowed to provide on time feedback so fieldwork teams are able to implement correction actions aimed at reducing total survey error and improving survey quality.

Key messages

- Monitoring and systematic assessment of fieldwork are essential to guarantee standardized and high quality data in health surveys with physical examination
- Fieldwork teams' engagement is key to succeed in survey quality improvement