BACKGROUND

This work addresses practices related to quality control in the first Portuguese National Health Examination Survey (INSEF). We aimed at identifying errors and difficulties in an early survey stage to improve data quality.

INSEF is a cross-sectional population-based study representative at regional (7 Regions) and national level that aims to expand knowledge on health status, health determinants and health inequalities. It is developed by the National Health Institute Doutor Ricardo Jorge in cooperation with five mainland Regional Health Administrations and the Regional Health Offices of the Autonomous Regions of the Azores and Madeira and the Norwegian Institute of Public Health.

The survey encompasses three components:

- Core physical measurements
- Blood collection
- Interview (CAPI)

INSEF target population comprised community-dwelling individuals aged between 25 and 74. Survey sample was based on two-stage stratified cluster design. Sample size was established in 4200 at national level.

Data collection takes place between February – December of 2015 in 49 collection sites. It is carried out by trained teams each composed by two nurses, one laboratory technician and one administrative clerk (n=104).

METHODS

To ensure accurate and high quality data, a monitoring system was implemented as part of internal quality assessment. It includes:

- Recruitment of participants
- Core physical measurements
- Blood collection & sample processing
- Interview (CAPI)

For each region we carry out a first survey quality assessment at the end of the second week of fieldwork.

RESULTS

Results regard quality assessment of the first 3 collection sites with 88, 84 and 58 participants respectively (n=230 participants overall).

- Monitoring of all appointments scheduled about 84% resulted in participation. Based on monitoring data overbooking was adopted to adjust for “no show”.

- Correct registry of time spent on blood pressure measurement was challenging for 3 interviewers, whose time measurements were below the expected minimum of 8 minutes.

- Monitoring allowed detection of errors on the evaluation of waist circumference, which was associated with interviewers terminal digit preference.

CONCLUSIONS

- The data quality in a survey is of prime importance for accurate, reliable and valid results.
- Monitoring and systematic assessment of fieldwork are essential to guarantee standardized and high quality data and to early detect errors for rapid correction in health surveys with physical examination.
- Fieldwork teams’ engagement is key to succeed in survey quality assessment and improvement.

REFERENCES


FUNDING

The Portuguese National Health Examination Survey is developed as a part of the project “Improvement of epidemiological health information to support public health decision and management in Portugal. Towards reduced inequalities, improved health, and bilateral cooperation”, that benefits from a 1.500.000€ Grant from Iceland, Liechtenstein and Norway through the EEA Grants.