

Training field workers to observe hygiene-related behaviour

A study is reported from Nigeria on the training of field workers in the making of structured observations on hygiene-related behaviour with a view to improving the control of diarrhoeal diseases. The programme led to a high degree of consistency in the perception and description of such behaviour by the participants.

Researchers using structured observation as a major tool in assessing hygiene-related behaviour that has a bearing on diarrhoeal diseases have to take account of inter- and intra-observer reliability. The collecting of unreliable data as a result of varying levels of observational skill has to be avoided. Hygiene-related practices may be complex and rapid, and consequently untrained field workers may fail to detect critical aspects of such behaviour. Moreover, if all field workers are expected to perform the same tasks it is reasonable to orientate and train them together so that defects can be corrected. They should be involved in the planning and execution of data collection so as to achieve maximum participation and training appropriate to their background. Training should match the expected tasks of the trainees and harmonize with the social and cultural setting (1).

These requirements were borne in mind during the execution of a study on diarrhoeal disease risk factors in Nigeria, described below.

Trainee recruitment

Meetings were held with village leaders and communities in the Oluyole local government area of Oyo State to explain the purpose of the project and to gain their cooperation. The recruitment of trainees initially involved interviewing young women from Ibadan. The six who were selected spoke Yoruba, the local language, and their ages ranged from 21 to 38 years; four had previous experience in conducting community-based interviews and home visits. All six went with investigators to village meetings and thus familiarized themselves with the setting in which they would be operating. Each village leader was then asked to nominate three or four girls who had received a secondary education, could read and write, and could work in

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villages other than their own. These girls were interviewed by the investigators and four of them were selected as trainee field workers.

Thus all the trainees were females who spoke Yoruba. This met the cultural requirement that males should not be engaged in observing the hygiene-related behaviour of women in the absence of their husbands. By encouraging village leaders to participate in the selection of trainees it proved possible to secure more support from villagers than might otherwise have been forthcoming. The leaders helped to obtain suitable rented accommodation for the project staff and provided security for their lives and property.

A supervisor was employed to oversee the day-to-day activities of the field workers. She was a sociology graduate of the University of Ibadan who spoke Yoruba and had a good relationship with community members.

Training

All training activities were competence-based, by which the trainers analysed task performances in terms of knowledge, attitude, and skills. The tasks were specified, the training sessions dealt with each one, and evaluations were made.

The first phase of training covered the control of diarrhoeal diseases and the expected roles of observers. The primary objectives were to increase the knowledge and influence the attitudes of the trainees. The following components were included:

- objectives;
- roles of health workers;
- definitions of terms related to different types of diarrhoea and symptoms;

- qualities of an observer working in a village setting;
- behaviour and ways of assessing it.

Lecture and discussion meetings were held, in which both English and Yoruba were spoken. Posters and blackboard illustrations were used, and stories and proverbs were recounted as an aid to comprehension and the building of positive attitudes. “Brainstorming” sessions proved beneficial, especially those relating to different types of diarrhoea and their symptoms, and others concerned with observers’ qualities.

Even though some of the trainees had previously participated in community-based studies involving home visits and techniques of observation, all were given practical training in these matters on an individual basis. As a first exercise the participants were asked to contemplate a given area for five minutes and then to write down what they had observed. There were large differences between them in what was noted. It emerged that most of them had observed the same things but had put different levels of importance on them. A discussion was held on items that should have been highlighted. The trainees were

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subsequently asked to do similar exercises in different locations and eventually to observe the hygiene-related behaviour of mothers and their children in an outpatient department, without using structured questions.

This approach enabled the trainees to become aware of their observational strengths and weaknesses. At the end of this phase the degree of correlation on the observed items and hygiene-related behaviour was about 55%, which was considered to be fairly high.

Training in the local communities helped the participants to adopt new skills and put them into practice.

The second phase of training began with role-playing, in which a village scenario was set up: three trainees acted as a family, which another trainee visited to observe the mother's hygiene-related behaviour. The other participants assessed what were considered vital elements in the building of a relationship, such as greeting, showing respect, explaining the purpose of the visit, displaying friendliness, cultural communication, and occasional help with the mother's work. A discussion followed and suggestions were made for improvements in certain aspects of the visitor's behaviour. This exercise was repeated until each participant had filled the visitor's role. The trainees were thus enabled to appreciate the value of skills connected with cultural matters and the building of interpersonal relationships when making observations in village settings.

Field training

The trainees were then taken to Idikan, a poor urban community where there was a field station with preventive and curative services and where research projects were conducted by staff of the Department of Preventive and Social Medicine of Ibadan's

University College Hospital. The trainees worked in pairs for about two weeks, observing the behaviour of mothers and children in their homes. Each pair observed a mother with her under-5-year-old child for four hours; each trainee recorded, in an unstructured manner, her observations on hygiene-related behaviour in respect of food preparation, feeding, defecation, and self-contamination by the child. This exercise was repeatedly conducted over about two weeks until there was 90% agreement between the responses of the members of each pair. Training was then shifted to Lagun, a nearby village, so that the techniques of observation could be practised in a rural setting very much like the study villages. By this time the trainees were working individually. They were taught how to map communities and give each house a number. Throughout the training period, discussions were held at the end of each day with the supervisor and the investigators.

Training in data collection

The third phase of training focused on data collection with the use of draft structured questionnaires specially prepared by the investigators. These included diarrhoea surveillance forms and observation forms concerned with food preparation, feeding episodes, defecation episodes and child behaviour.

This training was more focused because the trainees were by now living in the villages and could share experiences and identify practical issues that might affect data collection. In group discussions each of the structured questionnaires was introduced, operational definitions of each variable were accepted, and important concepts were examined. The trainees were then taken to the poor urban community of Idikan again,

where they sat in people's homes for two to three hours and observed the mothers and children, using the questionnaires designed for the study. The supervisor and one of the investigators were also present for part of the observation period, and they compared notes afterwards. Discrepancies were highlighted and discussed.

The trainees worked in pairs initially, using the questionnaires: two of them would go to a house to observe a child and its mother at the same time but recorded their findings independently on separate forms, which were checked by the supervisor or an investigator. This continued until 95% agreement was achieved. The procedure was followed for another week in Lagun. This phase, lasting two and a half weeks, was actually one of pretesting the instruments, which were revised to take account of behaviour observed in Lagun but not covered in the questionnaire.

The supervisor spent two extra days with three trainees whose performances were comparatively poor. After this additional training, tests were administered and satisfactory results were obtained.

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The participation of the trainees in discussion sessions helped to increase their knowledge. The trainees also reviewed and analysed their skills after trying them out in various settings. This both increased their involvement and yielded substantial feedback. Training in the local communities helped the participants to adopt new skills and put them into practice. This approach also led to the trainees gaining a thorough grasp of behavioural techniques and skills in a sequential, meaningful manner. Without the continuous and direct use of skills, some of them, although understood in theory, could not easily have been put into practice.

The use of both Yoruba and English boosted understanding, helped to familiarize the trainees with local concepts, and facilitated the completion of the observation forms.

After the trainees moved back to the villages and were allocated mothers and babies to observe it emerged that the relationships that developed were rated by most mothers as very satisfactory. It is worth noting that the field workers' attire was very like that of the mothers. Communication with mothers was considered satisfactory by the supervisor.

When the supervisor and the investigators made unscheduled visits to the field workers it was found that observations were being properly recorded. The investigators' observations corresponded closely with those recorded by the field workers. At the end of each day the supervisor collected and checked the observation forms. Those that had not been properly completed were returned to the field workers on the same day for correction.

The study clearly demonstrated the importance of properly defining terms and of training field workers to observe and report in a consistent manner.

Reference

1. Brieger, W. R. & Akpovi, S. U. A health education approach to training village health workers. *International quarterly of community health education*, 3: 145-152 (1991).

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