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Research Issues in Child Health and Child Care

Proceedings of a workshop
held in Accra, Ghana,
22-26 September 1986

Proceedings



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Abstract

This workshop brought together West African health scientists and social scientists to discuss methodological and conceptual issues in the study of infant and child health and mortality, and to identify new research needs. Health and social scientists from the Gambia, Ghana, Nigeria, and Sierra Leone attended the workshop. Emphasis was placed on evaluation of research design and procedures for analyzing the determinants of child health rather than on the presentation of findings. Discussions and papers focused on four central themes: conceptual frameworks more appropriate to local contexts, questions of scale and measurement, the search for indicators of child health, and directions for future interdisciplinary research. This publication is intended to serve as a record of the proceedings of the workshop and to promote further communication and interaction among researchers working in the area of infant and child mortality and health.

Résumé

Cet atelier réunissait des spécialistes de la santé et des sciences sociales de l'Afrique occidentale qui ont discuté de problèmes méthodologiques et conceptuels liés à l'étude de la santé et de la mortalité du nouveau-né et de l'enfant, et qui ont cerné de nouveaux besoins en matière de recherche. Des spécialistes des sciences de la santé et des sciences sociales de la Gambie, du Ghana, du Nigéria et de la Sierra Leone y participaient. On a mis l'accent sur l'évaluation de la conception de la recherche et sur les procédures d'analyse des déterminants de la santé des enfants, plutôt que sur la présentation des conclusions de travaux de recherche. Les discussions et les communications ont porté sur quatre grands thèmes : paramètres conceptuels mieux adaptés au contexte local, questions d'envergure, la recherche d'indicateurs de la santé des enfants et les orientations futures de la recherche interdisciplinaire. Cette publication a pour objet de faire le compte rendu des délibérations et en même temps de promouvoir la communication et les interactions entre les chercheurs dans le domaine de la mortalité et de la santé des nouveau-nés et des enfants.

Resumen

Este taller reunió a científicos del campo de la salud y las ciencias sociales para discutir cuestiones conceptuales y metodológicas en el estudio de la salud y mortalidad infantiles y para identificar nuevas necesidades investigativas. Asistieron al taller científicos de la salud y las ciencias sociales de Gambia, Ghana, Nigeria y Sierra Leona. Se hizo más énfasis en la evaluación del diseño y los procedimientos investigativos para analizar los determinantes de la salud infantil que en la presentación de los resultados. Las discusiones y documentos se centraron en cuatro temas: marcos de trabajo conceptuales más apropiados para los entornos locales, cuestiones de escala y medición, búsqueda de indicadores de salud infantil y pautas para la investigación interdisciplinaria futura. El propósito de esta publicación es el de registrar las sesiones del taller y promover una mayor comunicación e interacción entre los investigadores que trabajan en el campo de la salud y mortalidad infantiles.

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task of compiling a Register of Births and Deaths in their area, and 10 key villages were chosen as an initial target. Volunteers (interested residents, farmers, school teachers, traditional birth attendants) were recruited and given special training to become VERAs. Their prime responsibility is to collect details of all births and deaths. They record information on a daily basis for the village in which they reside. This information is collected each month by a member of the health team who checks the work, then enters the details in the vital events register. Data are validated both internally by cross-checking with monthly returns from midwives and traditional birth attendants (TBAs), and externally, through a survey to be conducted semiannually in two randomly chosen enumeration areas. The health team is encouraged to use the information in planning its work.

To achieve greater success, a public education program was introduced in early 1986, and in recognition of the vital role of VERAs and to maintain morale, a method of compensation for their work was to be reviewed in late 1986. Estimated coverage of births and deaths in the pilot area during 1986 was 72 and 32%, respectively.

Survey of Correlates of Mortality in Sierra Leone

H.B.S. Kandeh

This survey was the third in a series of mortality studies that had been undertaken by the University of Sierra Leone since 1977. The general objective of the Correlates of Mortality Research Project was to examine in greater detail the factors responsible for the high levels of infant and child mortality that had been revealed by the 1974 national census.

The specific objectives included:

- estimating infant, child, and adult mortality levels in the study areas to determine whether there had been any significant changes in the levels since the 1974 census;
- identifying demographic, social, economic, and environmental factors responsible for the existing levels and patterns of mortality;
- evaluating availability, quality, and user-effectiveness of medical facilities within the selected areas and the effect on mortality levels; and
- examining perceptions of mortality by respondents in the study areas.

The following relationships were to be examined:

- between maternal age, birth order, length of birth interval, and survival chances of infants and children;
- between environmental factors (type of water supply, facilities for sewage disposal, household sanitation practices, endemic diseases) and level of infant, child, and adult mortality;
- between household income, type of economic activity, availability,

type, quality, and distribution of food within the household, and level of mortality;

- between sociocultural factors (education, ethnic group, religion, cultural beliefs) and mortality;
- between use of traditional/modern medical facilities, treatment patterns for diseases, and level of mortality;
- between nutritional habits of mothers before and after weaning and probability of children dying in infancy.

The conceptual framework for estimating mortality included indirect techniques using summary reports of children ever born/surviving and maternity histories and direct estimation from a baseline survey and registration of births and deaths. Information from maternity histories was used to construct broad birth cohorts and probabilities of children dying between birth and certain exact ages of childhood in these cohorts based on the reported ages at death of deceased children within the cohort. For the analysis of the correlates of mortality, contingency tables were to be used to obtain proportions that would show variations in mortality levels by various characteristics. In addition, the Trussell/Preston technique for estimating the association between child mortality and various characteristics of the family, household, and community into which the children were born was used.

The study was designed to incorporate a quasi-anthropological approach in the estimation of mortality levels and the identification of mortality differentials. Data were collected in three phases: a baseline survey of households in June 1982; a registration of births, deaths, illnesses, and treatment patterns from August 1982 to July 1983; and a household survey from September 1983 to June 1984. In this final survey, three questionnaires were used: community level, household head, and women's (12-50 years of age).

Methodological problems in the area of data collection included the small sample size that restricted the number of vital events that could be recorded. For example, the baseline survey yielded 15,020 persons over 2000 households, and the registration survey recorded 578 live births and 328 deaths, of which 81 were infant deaths and 79 were deaths of children aged 1-4 years. Such small numbers pose problems for the examination of mortality differentials. The cost of registration for such a small number of events was also high because the study areas were located a great distance from the project headquarters and were visited every month for the collection of completed questionnaires. Linking the various data sets to explain the estimated levels by the information on differentials collected from the household heads' questionnaire as well as from the women's questionnaire was also a problem. These last two questionnaires elicited information on perceptions about death in terms of whether individuals could explain why there were frequent deaths of infants and children and whether anything could be done to reduce such deaths. The results were disappointing because information was being collected by interviewers who were not particularly concerned about the issues. Success is more likely to have been achieved had the principal investigators carried out the interviews themselves. In addition, problems were associated with the bulky nature of the questionnaires used in the household survey, as they tried to obtain all the information listed in the research objectives.

Problems with the conceptual framework in relation to the estimation of mortality levels revolve around the appropriate model life table to be selected as this affects the estimated infant mortality rate. For example, in the case of Sierra Leone, the infant mortality rate obtained from the 1974 census results ranged from 206 to 241 depending on whether the South, North, or West family of model life tables was used. The study also failed to explain regional differences in mortality levels in terms of differences in social, economic, and environmental variables that were similar for most of the communities because they were largely rural.

Suggestions for future research include action-program oriented surveys to assess their impact on infant and child mortality, and micro-approaches to enable a more realistic conceptual framework to be formulated.

Culture and Health: Lessons from Data Collection on Child Health in Ghana

S.R. Ubomba-Jaswa

Many intervention programs and projects, which aim to reduce high levels of infant and child morbidity and mortality, are implemented without adequately considering people's beliefs and attitudes toward health issues. Thus, it is not surprising that health services may be underutilized, health and nutrition instructions may be ignored, and immunization programs shied away from.

With the aim of identifying more clearly the relationship between cultural values and child health practices, research was conducted in the urban district of Nsawam (population 31,900 in 1984) and the rural area of Dobro (population 679 in 1984) in Ghana during the first half of 1986. The specific objectives of the research were:

- to establish mothers' level of knowledge and use of health services;
- to ascertain maternal attitudes and beliefs on preventive health measures;
- to identify child eating patterns;
- to identify patterns of child disease; and
- to gauge maternal perceptions on childhood mortality.

The research was based on a household sample survey in which mothers aged 15-45 years who had had at least one live birth in the past 10 years were interviewed. A questionnaire comprising both structured and unstructured questions was used to collect basic data. In addition, in-depth interviews were conducted with health workers in government-run child-welfare centres, in well-baby clinics, and nutrition-demonstration classes. Markets were visited to find out how mothers combine work and child care. Observations of child-care practice were recorded as the questionnaires were administered.