

ZAMBIA'S PARTICIPATION IN THE WHO COLLABORATIVE PROJECT ON RECORDING HEALTH PROBLEMS TRIAXIALLY:

The Physical, Psychological and Social Components of Primary Health Care*

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INTRODUCTION

There has been increasing recognition by health researchers and clinicians of the importance of social and psychological factors in illness. Moreover, the recent emphasis on primary health care has prompted many health care workers to seek a more comprehensive approach to health problems. Such an approach would necessarily require a clearer conceptualization of psychological and social problems which would serve not only to assist health workers in problem recognition and clinical management of patients but also aid in describing the health status and health care needs of populations. This would in turn assist health planners and governments to set priorities and allocate scarce resources.

It was with these goals in mind that the World Health Organization engaged in an international research programme under the direction of Dr Norman Sartorius (Division of Mental Health) to establish cross-culturally valid criteria/classifications and to develop a recording system which would provide a method for rapid assessment of the physical, social and psychological dimensions of primary health care contacts. Zambia was invited to collaborate in the study through Prof. Robert Serpell (Director of the Institute for African Studies) who attended a workshop on psycho-social factors affecting health assessment, classification and utilisation (WHO, 1979 assessment, classification and utilisation (WHO, 1979) in Bellagio, Italy.

The first meeting of the collaborating countries, including Canada, USA, Brazil, Colombia, Thailand, Malaysia and Zambia, was convened in 1981, again in Bellagio, Italy. The purpose of the meeting was to discuss theoretical issues, develop provisional classifications of social and psychological problems along

with their definitions, to work out methods for testing the validity of these classifications, and to outline tasks and establish a time schedule for activities to be carried out by the participating countries.

After reviewing a number of alternatives the investigators decided upon the case vignette as a useful methodological device which could be used in the project. A case vignette consists of a one-page description of a patient including age, sex, occupation, education, a brief account of the physical complaint(s), relevant socio-economic background data, results of clinical examination, laboratory and other diagnostic tests, and treatment prescribed. The vignette should be written in non-technical language and employ a behavioural form of descriptive labels (e.g. "the patient looked tearful" instead of "the patient was depressed"). The case vignette would be used along with the preliminary classifications of social and psychological problems developed during the first Bellagio workshop. These classifications were to be revised at various stages of the project, based on the combined experiences of the countries. The physical classification scheme to be used as a condensed version of the ICHPP-2.

THE FIRST ZAMBIAN WORKSHOP

In January 1982 a workshop was held at the University of Zambia which was attended by representatives from the Ministry of Health, the Department of Community Health (School of Medicine), and medical assistants and physicians from the rural and urban centres who had agreed to participate in the study.

The purpose of the workshop was to discuss the objectives of the project, its implications for health care, to develop lists of psycho-social problem

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types in Zambia and to describe the case vignette method.

A 'brainstorming' session was used to develop an agreed list of the most important/common problem types. Seventeen problems were eventually selected from a list of thirty-four. These included nutritional problems, heart palpitations, broken marriages, drinking, and sexual failure. A similar process was used to obtain a list of less common problems. These included spirit possession, consequences of bereavement and acute psychotic states. Finally, a list representing difficult and demanding problems was elicited. These included epilepsy, senile dementia, infertility and mental subnormality.

The next step involved dividing the work (i.e. collection of vignettes) among the five participating centres. This was done by the representatives themselves who chose from the lists of problem types those which would be most likely to appear at their respective centres. The task for the participating centres would be to generate ten vignettes representing the problem types assigned.

THE CASE VIGNETTE COLLECTION PHASE

Approximately three months were required for the collection of the fifty vignettes which would represent Zambia's major problem types. Each of the five centres wrote up either in note form or in vignette form examples of the problem types they were assigned in the January workshop. The majority of the cases came from actual patient histories seen during the three-month period and a few represented cases from records of patients seen at the centre at other times. This particular phase brought out a number of potential difficulties which could limit or constrain the project and its expected outcome. For example, several of the physicians complained that it was very time-consuming to record even a minimum of relevant social/psychological history on the patients. Even though physicians regularly record and use this type of information mentally in treating patients, it is difficult to write it down given the high patient case loads they encounter. In addition, clinicians noted that many of their patients became upset when asked about personal history or any other data which they felt was unrelated to their immediate problem.

THE NATIONAL RATING EXERCISE

The rating of the fifty Zambian vignettes from the five participating centres were rated in a two-day session held at Chainama College of Health Sciences in Lusaka. Fourteen raters participated in the exercise including seven medical assistants and seven nurses. Three physicians from the University Teaching Hospital also rated the vignettes whenever they had free

time over the course of a three-week period.

The procedure for the rating exercise followed guidelines provided by WHO. Approximately four hours were devoted to an explanation of the objectives of the project, the case vignette method, the nature of the classifications, the meaning of the terms used, and the mechanics of filling in the rating forms. Problems and difficulties were also sorted out by working through two practice vignettes before the actual rating began. The raters were then asked to rate forty vignettes and to underscore what they considered to be the main or most important problem in each case.

The second day was taken up by a rating of ten vignettes, selected by the researchers, because of their particular interest. After these were completed a group discussion of these cases followed. The purpose of the discussion was to give the raters an opportunity to share ideas and to provide the researchers with some idea of the thinking that went into the rating of vignettes. This aspect of the rating exercise proved to be very useful in that it stimulated a great deal of interest and led to a feeling that similar group discussions of the other vignettes could be a useful training device in the College programme. Moreover, the researchers did obtain interesting clues as to how raters interpreted the cases as well as revealed areas of confusion regarding classification terminology.

ANALYSIS OF THE NATIONAL RATINGS

Following the completion of the national ratings the tabulated results were submitted to WHO for analysis. The results were discussed at the second meeting of collaborators in Washington, D.C., attended by Katete Kalumba who presented a summary of Zambia's participation in the project (Kalumba & Freund, 1982). The investigators present discussed problems which they encountered in the project, including personnel (willingness to use system, and training), classification (clarity and comprehensiveness), integration of the system into routine reporting procedures, reliability and validity. In addition, issues regarding present case loads of health workers and the extent to which new information requirements would increase or reduce the work burden, were considered.

An analysis of the overall results on the social axis revealed that the social problems classification was adequate and covered the problem spectrum in all vignettes (the residual category 17 was rarely used). Moreover, there appeared to be little redundancy in the classification (all categories were used several times). Although family and financial problems appear to have a 'universal' character in health care, they occurred more frequently in Zambia than

in other countries.

Coverage and classification also seemed adequate on the psychological axis. However, redundancy did appear as more than three-fourths of all psychological categories were rarely used, particularly psychoses and related categories. It will remain for the life test phase to show whether this redundancy is real or reflects case selection bias. Four problems were generally 'universal' (i.e. appearing in all countries): feeling anxious, tense or nervous, feeling depressed, sleep disturbance and psycho-physiological problems. Zambian raters, however, did not frequently rate psycho-physiological problems as present, which may have been due to a misunderstanding of the meaning of the term.

Because there was no 'true' or absolute value for the ratings a relative measure of interrater reliability was developed by using a 50 per cent standard. In other words, if 50 per cent or more raters agreed on a presence of a category this was taken as majority positive agreement and if 50 per cent or more raters agreed on the absence of a category it was regarded as a majority negative agreement. A reliability coefficient was then defined as the per cent agreement with the majority rating. A statistical analysis of the data revealed that at first glance reliability coefficients were very high. However, this was due in part to the fact that it was generally easier to agree on the absence of a problem category than on its presence. Therefore, it made more sense to concentrate on those reliability coefficients based on positive problem categories.

In general, there was considerable agreement among Zambian raters (higher than 50 per cent), particularly on the psychological axis. However, it appeared as though nurses in Zambia were persistently more in disagreement on social categories than doctors or medical assistants. In addition, a number of vignettes had especially low agreement rates. Therefore, these 'problem' vignettes as well as the ratings by nurses were re-analysed by the research team to discover possible reasons for the discrepancy. As a result, several factors were identified which may have accounted for the disagreement. These include confusion of categories and terminology (e.g. conjugal and family problems). Family disruption by divorce, if it involves children living away, was treated as social isolation in spite of the fact that the patient may still be dependent on relatives. If the vignette indicated no formal or low education on the part of the patient or anyone else in the case, it was frequently rated as a problem with the educational system. Finally, there was also a tendency to under-rate other social categories once the rater identified one social category as primary (most severe). None of these problems seriously

detract from reliability, but they do signal a need to clarify terminology and to be aware of culturally specific interpretations of some problem types.

THE INTERNATIONAL RATING EXERCISE

The fifty international vignettes, selected by WHO, from the seven collaborating countries were rated in a two-day session held in Chainama College of Health Sciences. Four medical assistants and four nurses participated. In addition, four physicians were involved in the exercise in the three weeks following the rating at Chainama. The procedure followed the same format as the national rating with the exception of the use of a still more condensed version of ICHPP-2 for the physical dimension and a simplified summary rating form to facilitate recording. The results of the ratings are presently being analysed by WHO in Geneva and will be discussed at a third meeting of collaborating investigators in 1983.

FUTURE ACTIVITIES

Following the analysis of the international ratings the project centres will be asked to comment on problems with classifications, terminology, glossaries, and the problem of reliability. The next major activity will be a period of 'life testing' carried out in two stages. The first will be a feasibility study using 10-20 patients in each centre selected to participate within Zambia. The actual life test will take place after such problems as sampling, government clearance, intensive training of raters, and linking of existing instruments with routine reporting systems in the centres have been resolved. A minimum of 250 patients will be needed from each centre and will require at least six months to complete. Ultimately a rapid assessment form and technique will be developed which should have wide applicability and aid health care personnel in recording and management of primary health care contacts.

RELEVANCE TO HEALTH CARE

An important outcome of the comprehensive classification system relates to clinical management. The improvement of health recording systems and classification methods should suggest strategies to the clinician for the most effective, direct intervention or indicate a need for referral of the patient to an appropriate specialist or community resource. However, it should be stressed that changing the recording and classification methods does not automatically mean better treatment, although it does affect problem recognition.

Generally, the structuring of health assessment classification into three axes should help 'raise the consciousness' of the health care community in increasing its awareness of these important factors

related to physical health. This in turn should have an impact on training of health care personnel and on medical education. This has already occurred to some extent in the Chainama College of Health Sciences where the director and the students have requested copies of the triaxial rating materials and vignettes for their library. Moreover, the physicians who attended the first workshop agreed that an important outcome of the project would be the broadening of medical education to include more information or courses on the clinician's role in relation to the social/psychological context of health. Increased awareness on the part of health care personnel of the psycho-social aspects of health should also have an impact on public education because self-help and self-care in relation to these problems will be encouraged once they are recognised as influencing physical health. The triaxial project may also improve patterns of institutional management in hospitals, hospices and nursing homes. More complete and systematically-collected health data will enable effective staffing decisions as well as improved resource allocation within these facilities.

On the national planning level, the data resulting from the improved classification system should enable priorities to be set for more effective resource allocation which is based on a better knowledge of the health problems requiring particular attention. Another important use of the classification system and the data collected at the primary health care level is in the planning of epidemiological survey studies, particularly in longitudinal studies of households within a community.

In short, the project offers a number of exciting possibilities. For researchers it offers an opportunity to be at the forefront of a significant and possibly far-reaching development in health care. In addition, it raises a number of interesting research questions such as cross-cultural validity of problem recognition and a chance to explore the complex inter-play among the three dimensions.

NOTE: Anyone desiring more information on the project is advised to contact the authors at the Community Health Research Unit, I.A.S., University of Zambia, P.O. Box 30900, Lusaka, Zambia.

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