ASS/BBS-18

AN ASSESSMENT OF THE COMMUNITY-BASED HEALTH PROGRAMME (CBHP) IN KWAZULU

M. Steyn, G. Huggins, A. Meyer, A. van Aswegen, E.C. van der Merwe

General Editor: Ina Snyman

Co-operative Programme: Affordable Social Security
Subprogramme: Affordable Social Provision

Pretoria
Human Sciences Research Council
1991

The Co-operative Research Programme: Affordable Social Security is managed within the Group: Social Dynamics of the Human Sciences Research Council. The research is being undertaken by means of several subprogrammes of which Affordable Social Provision is one.

The main emphasis in the overarching programme as well as in the subprogrammes is on aspects of affordability, responsibility and accountability in the field of social security and the provision of social services.

The matter of whether a community-based health programme can influence the health status of rural communities, constitutes the subject of this report.

The KwaZulu Department of Health's extensive contribution to salaries, accommodation and transport is gratefully acknowledged.

The HSRC, particularly the committee for the Subprogramme: Affordable Social Provision, does not necessarily agree with the views expressed and the conclusions reached in this publication.

ISBN 0 7969 1022 7

Printed and distributed by the HSRC Publishers
134 Pretorius Street
Pretoria

EKSERP

Primêre gesondheidsorg moet hoër voorkeur geniet en meer bronne moet daarheen gekanaliseer word. Dit is een van die vernaamste gevolgtrekkings van 'n navorsingspan van die RGN wat die gemeenskapgebaseerde gesondheidsprogram (CBHP) in KwaZulu bestudeer het. Hulle bevind dat die CBHP 'n belangrike element in primêre gesondheidsorg is, en meen dat dit kan bydra tot groter gemeenskapsdeelname in die verbetering van die gesondheidstand van geïsoleerde landelike gemeenskappe.

"Gesondheidsorg" in sodanige gemeenskappe impliseer aandag aan skoon water, sanitasie, voor- en nageboortesorg, voeding, kinderspasiëring, basiese medieseselfsorg-maatreëls en algemene sosio-ekonomiese behoeftes.

Die navorsing dra baie daartoe by om in hierdie verband die waarde van aanvullende gesondheidspersoneel soos gemeenskapsgesondheidswerkers en gemeenskapsgesondheids-komitees te bevestig.

ABSTRACT

Primary health care should be given a higher priority and more resources should be channeled to it. This is one of the main conclusions of an HSRC research team who studied the Community-Based Health Programme (CBHP) in KwaZulu. They found that the CBHP was an important element in primary health care, and suggest that it can be a means of ensuring community participation in improving the health status of isolated rural communities.

"Health care" in such communities implies attention to clean water, sanitation, pre-natal and post-natal care, nutrition, spacing childbirth, basic medical self-care measures and general socio-economic needs.

This research goes a long way toward establishing the value of auxiliary health personnel, such as community health workers and community health committees, in realizing this broader definition of health care.

CONTENTS

1. DEVELOPMENT AND HEALTH

1.1 Background

A particularly high standard of living for certain sectors of the South African population contrasts sharply with the abysmal poverty that characterizes other sectors. The present health-care system reinforces the differentiation inherent in South African society. For example Susser (1985) analyzes the disparity in levels of health and health services between the adjacent "white" and "black" cities of Johannesburg and Alexandra. In Johannesburg children are generally well fed and seldom die of endemic childhood diseases. Alexandra in comparison has a high incidence of TB while 10 % of the infant population dies of gastro-enteritis and the average child's growth is stunted, with up to 40 % of the preschool children showing the stigmata of malnutrition.

Statistics on development and health in Southern Africa serve to catalogue the disparity in resource allocation. The Human Awareness Programme's Update 1989 reveals the following data:

- In South Africa, 50 % of the total population (including those in the black states) lives on incomes below what is regarded as the minimum subsistence level. Among the Africans, 60,5 % are living below this level, and in the homelands the figure has been put as high as 81 %.

- African children are eight to ten times more likely to die before their first birthday than are white children. The infant mortality rate for the Africans is between 94 and 124 per 1 000 live births; for the whites, Indians and coloureds the rate is 12, 18 and 52 respectively.

- There is one doctor for every 2 320 people nationally, but only one for up to 40 000 people in the black states. The estimate according to racial classification is that there is one doctor for every 400 whites and one for every 90 000 blacks.

- There are 1,4 nurses per 1 000 population in the six non-independent black states, compared with 6,8 in the major towns in South Africa.

- There are fewer than 700 black doctors, 20 black dentists and 90 black pharmacists in South Africa.

- Among the Africans and the coloureds 50 % of all deaths occur under the age of five years; the corresponding figure for the whites is 7 %.

- The leading cause of death among African and coloured children, particularly those under 12 months, is gastro-enteritis, manifesting as acute diarrhoea. Malnutrition, poor hygiene and overcrowding contribute to the spread of the illness.

The poor socio-economic conditions prevalent in South Africa's black states (and KwaZulu is no exception) have been well documented. Land is limited and jobs are scarce, resulting in a structured process of marginalization into which many of the peoples of these states become entwined. This situation is perpetuated by the limited participation that people have in the political system of the black state, and is further exacerbated by the fact that while the governments of these states make decisions that affect the daily lives of the people they (the governments) lack the authority to redress the fundamental problems of unequal access to resources and power.

The poor socio-economic conditions of these states are evidenced by the prevalence of poverty-related diseases, including typhoid, tuberculosis and malnutrition. Combined with a general dearth of infrastructure - particularly health infrastructure - the health situation shows

signs of being among the worst in the world. In the light of the evident disparities and the detrimental effects these have on people's socio-economic conditions, it became imperative to alleviate the conditions in a humane but practical and economically viable manner. This led directly to the acceptance of the guidelines laid down by the Alma Ata Declaration in the late 1970s.

1.2 The concept of Primary Health Care (PHC) and the development of an alternative health strategy for KwaZulu

PHC originated against a background of almost universal inequality, particularly as regards the availability of health care. In September 1978 the Alma Ata Declaration was made. It dealt with the right of all people to primary health care: "... education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries, and provision of essential drugs" (Midgley 1986).

Implicit in the declaration is the contention that primary health care is more than the distribution of health facilities to areas where it is unavailable or inadequate. It is ultimately the foundation of the development of a health conscious community, able to fulfil its own basic health requirements. This should be accomplished through educating the whole community, if it is to succeed. The provision of PHC to deprived and poor communities through the aid of the community thus leads to the allegedly cheapest possible form of providing health services, namely "community health". In an Oxfam Manual for development workers, Pratt and Boydon define community health as "... the delivery of primary health care to a community with the active training and participation of that community both in the planning and practical execution of the programme ... Community health is normally the cheapest method of providing primary health care" (1985:342).

Given the current political economy of KwaZulu the institution of a Community-Based Health Programme (CBHP) is appropriate. The following document by Prozesky (1987) is reproduced here in order to give a brief background to the implementation of the CBHP in KwaZulu:

Department of Health KwaZulu: Information document on the Community-Based Health Programme (CBHP) (D. Prozesky)

1. *On 1985.06.03 the Minister for Health and Welfare KwaZulu approved a policy for CBHPs in KwaZulu. This document is a summary of the more detailed policy document.*

2. *The World Health Organization has set a target of "Health for all by the year 2000". The means whereby this target is to be reached is Primary Health Care (PHC) which is defined in the Declaration of Alma Ata. For the developing countries community participation is seen as essential in making PHC available to every person and family. In addition, lay community health workers (CHWs) are seen to be an essential part of such community involvement. This realization led to the introduction of a CHP in several health wards in KwaZulu from 1977 onwards, on an informal basis, and mostly by non-government organizations.*

3. *Definitions*

   * *A CBHP is a programme which aims to enable local communities to shoulder the responsibility for their own preventive and promotive health care effectively.*

   * *A CHW is a person from the community who is trained to function in the community in close relationship with the health care system.*

4. *The CBHP and community development*

The CBHP forms part of the overall community development strategy of KwaZulu. It is therefore the concern of the District Co-ordinating Committees for community development. Since this is primarily an exercise in community development, great care needs to be taken that this programme will be community supportive (helping communities to be self-reliant, genuinely encouraging responsibility, initiative and decision making) and not community oppressive (authoritarian, paternalistic, encouraging greater dependency, servility and unquestioning acceptance of outside regulations and decisions).

5. *Proposed model for the CBHP*

Local authorities become properly functioning health authorities. They receive government subsidies for this and employ their own staff (initially CHWs).

6. *Local health authorities*

* *The CBHP should be perceived to be part of, and responsible to, the communities it serves. It arises from within the communities, and works in conjunction with other structures of society (e.g. traditional healers). Accordingly, responsibilities must begin to be shouldered by community groups at two levels:*
  - *At local authority level (tribal authorities, township councils): CHWs are employed and health work is planned.*
  - *At local isigodi level: local health authorities delegate local responsibility to community health committees, who supervise CHWs and plan local health programmes.*

* *Health service staff will actively enable these community groups to funtion effectively. Every effort will be made to increase self-sufficiency and local decision making and accountability.*

7. *CHWs employed in the CBHP*

7.1 Functions of CHWs

* *The basic function of CHWs is making PHC more fully available to the community. Selection of priority functions is undertaken by communities themselves.*

* *The following activities could be undertaken by CHWs:*
  - *Health education and motivation (for maternal and child health, immunization, nutrition, spacing childbirth, sanitation, water supply, etc.)*
  - *Community organization (for water supply, clinics, etc.)*
  - *Prevention and control of endemic disease (cholera, etc.)*
  - *Treatment of common diseases and injuries (increasing families' self-sufficiency in this area)*
  - *Data collection (for self-evaluation, and for use by the health service).*

* *CHWs will fulfil their functions through home visiting.*

7.2 Selection of CHWs

CHWs are elected democratically by properly informed local communities.
The basic criteria for selection are

- *maturity and dedication,*
- *education preferably to Std 6 level,*
- *age between 21 and 45 years.*

7.3 Remuneration of CHWs

The local authorities that employ CHWs receive grants for this purpose from the Department of Health. The transfer and control of these funds is arranged in co-operation with the relevant departments.

8. *Health service support of the CBHP*

The health service organizes the CBHP on a health ward basis. Health ward management teams are responsible for planning and implementing such programmes in their whole health ward. The key health service figure in the CBHP is the Community Health Facilitator (CHF). CHFs are enrolled nurses or health assistants with special training, who have the following functions:

- *enabling community health committees and local authorities to implement the CBHP*
- *training CHWs (initial and ongoing)*
- *continued professional supervision and evaluation of the CBHP.*

The overall responsibility for the PHC and the CBHP in KwaZulu lies with the KwaZulu Primary Health Care Committee. This committee consists of PHC workers from different parts of KwaZulu.

* *A support centre for the CBHP has been developed at Amatikulu, with the following functions:*

- *training the CHFs and other categories of health personnel*
- *orientation of the health service toward the CBHP*
- *providing resources, such as appropriate health education materials and models of appropriate technology for home sanitation, water supply and energy use.*

9. *It is believed that full implementation of the CBHP will contribute significantly to achieving the target of "Health for all by the year 2000" in KwaZulu.*

1.3 Summary

In summary, the implementation of a CBHP involves the following important aspects:

- the training of a new category of health worker to organize the programme in each community
- community consultation and mobilization
- community health committees and community health workers
- provision of administrative, technical and training backup.

At present the programme is active in various health wards in KwaZulu. The number of people involved in the programme is estimated at approximately 250 000. Only about 400 community health workers have been trained so far and it is estimated that 8 000 will be needed in KwaZulu by the year 2000. The cost involved in the CBHP is very high and the Department of Health believed that a thorough evaluation of the programme was necessary before it could be expanded. Against this background the Department of Health of KwaZulu requested the HSRC to undertake research in order to evaluate the existing programme.

REFERENCES

CHAMBERS, Robert. 1983. *Rural development. Putting the last first.* Longman, United Kingdom.

HUMAN AWARENESS PROGRAMME PUBLICATION. 1989. *Info '89. A folder of facts and figures about South Africa.* Westro Publications, Johannesburg.

MIDGLEY, J. 1986. *Community participation, social development and the state.* Methuen & Co., London.

PRATT, B. & BOYDEN, J. (eds) 1985. *The field directors' handbook: An Oxfam manual for development workers.* Oxford University Press, Oxford.

PROZESKY, D. 1987. *Information document on the Community-Based Health Programme (CBHP).* Department of Health, KwaZulu.

SUSSER, M.W., WATSON, W. & HOPPER, K. 1985. *Sociology in medicine.* (3rd edition) Oxford University Press, New York.

CONTENTS

2. RESEARCH DESIGN

2.1 Introduction

The KwaZulu Department of Health originally identified the following aspects of the CBHP for evaluation:

(1) The effectiveness of the CHWs' performance on the ground: do their activities lead to positive changes in communities' health-related knowledge, attitudes and practice?

(2) Are adult education techniques being used effectively at all levels of the programme, and does this lead to more independent action and greater self-sufficiency in the families and community groups the CHWs work with?

(3) Are the various support systems for the programme functioning correctly?

(4) Is the audiovisual material (flip charts) being utilized effectively, and is it adequate?

After consultation between the representatives of the KwaZulu Department of Health, the HSRC Co-operative Research Programme: Affordable Social Provision and the researchers, it was decided to consider the evaluation as a two-phase project. Phase one would consist of an intensive "pilot study" relying heavily on qualitative research methods. Upon completion of the pilot study and if finances became available the second, more quantitatively-based phase would be undertaken. This report considers the findings of the pilot study.

Two teams of researchers were involved in the study, namely one from the former Institute for Communication Studies (ICOMM) and one from the former Institute for Sociological and Demographic Research (ISODEM). A project proposal incorporating a research design was drawn up by the researchers and accepted by the two sponsors.

A research committee consisting of the researchers and an adviser from the University of Natal Medical School held regular meetings to define the scope of the research.

2.2 Fieldwork

Fieldwork was carried out by both teams over the same two periods. The week of 22-26 January 1990 was utilized for the initial field trip. The aim at this stage was to orient the researchers to the field and to test the interview schedules. A meeting with representatives from the KwaZulu Department of Health on the last day of the field trip enabled the researchers to make final logistical arrangements with the client.

Four health wards were selected for the main survey: two in which the CBHP had been well established and two in which it had not been as well established. Where applicable and possible (i.e. where there were more than the required number of people to draw from), the samples were drawn randomly. The sample planned for each health ward consisted of

- personnel directly involved in the CBHP
  - one supervisor of the facilitator
  - one CHF
  - five CHWs
  - five CHC members
- health ward management team members (42 in all areas)

- community members
  - 60 respondents (evaluation of flip chart)
  - 20 household representatives.

Staff at the KwaZulu Department of Health made the necessary arrangements that enabled the main fieldwork to be effectively carried out. The main field trip was carried out from 19 March 1990 to 5 April 1990. This trip entailed stays by the fieldworkers at the KwaZulu hospitals in the various health wards.

2.3 Emphasis of each team

2.3.1 ICOMM

The ICOMM team concentrated on an evaluation of the personnel directly involved in the CBHP. To this end extensive qualitative interviews in four KwaZulu health wards (Nkandla, Charles Johnson (Nqutu), Mosvold and Manguzi) formed the methodological core. Interviews were held with the Community Health Facilitators (CHFs), the Community Health Workers (CHWs), the CHFs' supervisors and members of the local Community-based Health Committees (CHCs). The team observed health education sessions conducted by CHFs and CHWs. The aim here was to evaluate the functioning of the various support systems and the effectiveness of the CHW programme. In addition the team evaluated a "flip chart" used as a teaching aid by the CHWs.

2.3.2 ISODEM

The ISODEM team carried out research in 16 areas within the four health wards. Twenty interviews were conducted in each of the health wards. Interviews were aimed at assessing the health knowledge of people in areas with CHWs in order to compare it with the knowledge in areas without CHWs. The aim here was to evaluate the effectiveness of the CHWs at the local level interface. The latter is discussed in the next section.

CONTENTS

3. EVALUATION OF THE IMPACT OF COMMUNITY HEALTH WORKERS AT THE LOCAL LEVEL (ISODEM team)

3.1 Introduction

It is primarily at the interface between local health workers (CHWs) and the community that the CBHP should function effectively if it is to have merit. Therefore the research, carried out among the 80 households in the four health wards, attempted to evaluate the extent to which the CBHP meets its basic educational aims, particularly the extent of the CHWs' impact upon the local health knowledge of the communities with which they are involved.

Presented below is an analysis of the data generated through the survey of 80 households in four KwaZulu health wards.

3.2 Methodology

3.2.1 Literature study

A specific contextual knowledge is necessary to obtain an appreciation of the problem. To this end the researchers utilized a comprehensive catalogue of sources that were found relevant to the problem in both a national and an international context.

3.2.2 Pilot study

As mentioned in Section 2 the project leaders conducted a pilot study in one of the health areas falling under the control of the KwaZulu Department of Health. The study consisted of a "trial run" of the interview schedule - conducted with the aid of an interpreter from the Amatikulu Health Training Centre.

3.2.3 Fieldwork (19 March 1990 - 4 April 1990)

The ISODEM team began its interviews for the main study in the Nkandla health area and then proceeded to Charles Johnson (Nqutu), Mosvold and finally Manguzi. The Community Health Facilitators (CHFs), who also guided the team to all research areas, provided assistance to the team. An interview schedule was used throughout the research period except for those instances where informal interviews were held with the facilitators, hospital doctors and superintendents, and tribal authority officials. The facilitators did not take part when the researchers conducted interviews. Two interpreters from the Amatikulu Health Training Centre helped with the interpretation of questions. The ISODEM researchers trained these two interpreters on the contents of the interview schedule, as well as on the context of the questions in the interview schedule. On the second evening of fieldwork the team had a debriefing session when the questions that puzzled the respondents were identified and the interview schedule was slightly revised. Besides the facilitators who guided the team, the local Community Health Workers (CHWs) assisted in the delimitation of the areas where the programme was being implemented.

3.2.4 Interview schedule

An interview schedule was compiled by the ISODEM team in order to obtain the required data for this part of the study. The interview schedule, which was printed in English, consisted of closed questions (questions with a limited number of response options) as well as open-ended questions (questions to which respondents could respond freely). After some adjustments to the original used in the pilot study and some additional questions suggested by the KwaZulu Department of Health, the latter approved the interview schedule in its final form.

3.2.5 Selection of respondents

In selecting the respondents, preference was always given to adult female respondents because this category of household members was deemed more likely to be present in their homes whereas the males were more likely to be away from their homesteads as "migrants" for much of the time. It was thought that adult females were more likely to have been exposed to the health programme in their area. However in some households males were selected as respondents because females were unavailable in these homes.

3.2.6 Informal interviews

In order to obtain information that was not yielded by the formal questionnaire and to acquire some new perspectives on the running and operation of the health scheme, several informal interviews were held with different people during fieldwork. Doctors and hospital superintendents were interviewed, as well as facilitators, CHWs and tribal chiefs or other tribal authority officials. While it was hoped to interview tribal chiefs in all the areas, it was not possible as the research period coincided with a meeting of the tribal authorities in Ulundi. Only one chief (in the Nkandla area) was available.

3.2.7 Expertise of fieldworkers

The fieldwork team consisted of three ISODEM researchers, two of whom were assisted by interpreters who worked at the Amatikulu Health Training Centre. The interpreters' background knowledge on health matters proved an invaluable asset during interviews, and they gave the ISODEM team some insight into related health matters. The facilitators, although not involved in the fieldwork proper, nevertheless provided valuable logistic information as well as a picture of health activity in their areas. This included the problems encountered, and the progress made, by the CHWs and the attitudes of the local authority officials toward them.

3.2.8 Sampling

The research team selected four health regions from a list of research areas in which the CBHP was operating. Four areas from each region were randomly chosen by a representative from the KwaZulu Department of Health. Of these four areas, two were without a CHW, while the other two had a CHW.

REGION/HEALTH WARD*	AREAS WITH CHW*	AREAS WITHOUT CHW*
Charles Johnson (Nqutu)	Mhlangeni Magogo	Ezibomvu Bhekumthetho
Mosvold	Manyiseni Tembalihle	Kwaliweni Bhekindoda
Manguzi	Muzi Mahlungulu	KwaMazambane KwaMashudu
Nkandla	Gwegweni Sikhaleni	Inkonisa KwaChwezi

* For the sake of confidentiality symbols and figures are assigned arbitrarily to indicate the health wards and the relevant areas in a health ward. The letters A, B, C and D are used to represent the wards, and A1 to D4 to represent the areas. The figures 1 and 2 indicate areas with CHWs (A1, A2 to D1, D2), and the figures 3 and 4, areas without CHWs (A3, A4 to D3, D4). In those cases where using the name would not affect confidentiality, the names were used.

Extreme care was exercised in ensuring randomness in the sampling of households in the selected areas. In certain areas this was not always possible due to the topography of the areas and because of particular local circumstances. Matters were further complicated by the fact that in almost all selected areas the houses had no numbers, making it impossible to use a random sampling table. Even if the "malaria team" had (as promised) provided the research team with the numbers assigned to houses in certain areas, it would not have alleviated the problem because all the available maps were outdated and did not accurately indicate the positions of and the numbers assigned to the households.

Ultimately sampling was done either by flipping a coin or by spinning a pen to select the direction that would be taken to start interviews once the research area had been reached. From this point the interviewer skipped a predetermined random number of households from the initial household, to select a household for the next interview. Where the households were few, scattered and distant from one another, the speedometer reading in the vehicle was used to determine fixed points along a "road/path" cutting through the centre of the area. In some cases the "cluster technique" of sampling was used. Where two or more "clusters" could be delineated the interviews were conducted in households in each "cluster". Again the households were initially chosen by spinning a pen or flipping a coin to determine a direction from a central point in each "cluster", and by selecting a random number of households to be skipped in each direction.

With the exception of an area in Region D, the interviewers visited all the preselected research areas. The inaccessibility of this particular area necessitated substitution.

In the end the total breakdown of the number of households that were interviewed was achieved in the following manner:

Six households in each area with a CHW and
Four households in each area without a CHW.

As each health ward had two research areas with and without CHWs respectively, this meant that a total of 12 households were interviewed in areas with a CHW and a further eight households in areas without CHWs. This totalled 20 households interviewed in each health region.. The grand total for the four health wards was 80 households.

3.3 Demographic introduction

The demographic breakdown of the households and the respondents in the sample serves as an introduction to the people who participated in the research. Furthermore it gives some indication of the prevailing socio-economic conditions.

3.3.1 Sex of respondents

The respondents were female in all but four of the cases. In two of the cases, although the male insisted on being the respondent, a female household member assisted him. In the two remaining cases, only males were present in the selected households.

3.3.2 Age of respondents

The respondents' ages ranged from 18-84 years with a mean age of 42,5 and a median of 41. Only those under 18 years of age were consciously excluded from the survey.

A breakdown of age categories of the respondents is as follows:

TABLE 3.1: AGE CATEGORIES OF RESPONDENTS

Age in years	N	%
18-29 years	23	28,7
30-39 years	12	15,0
40-49 years	16	20,0
50-59 years	11	13,7
60-69 years	10	12,5
70 years +	8	10,0
TOTAL	80	100,0

The average age in the various wards was:

A	49,7 years
B	37,1 years
C	49,0 years
D	36,5 years

3.3.3 Education

The respondents had an average of 4,1 years of completed education, ranging from no education to Std 10. The median education was four completed years. The breakdown of completed years of education by categories is as follows:

TABLE 3.2: COMPLETED YEARS OF EDUCATION OF RESPONDENTS

No. of years completed education	N	%
0 years	28	35,0
1-5 years	23	28,7
6-9 years	20	25,0
10 years +	9	11,3
TOTAL	80	100,0

The average number of years of education by ward was:

Charles Johnson	5,6 years
Mosvold	2,6 years
Manguzi	3,3 years
Nkandla	4,6 years

Noteworthy are the effects of relative isolation and relative degrees of regional infrastructural development. Thus the most isolated and the least infrastructurally developed wards (Manguzi and Mosvold) returned the lowest education rates.

3.3.4 Household size

The average *de facto* household size was 8,4 with a range of 1-24 members.

Households consisted of an average of 1,7 children under the age of five, an average of 2,5 children between five and 16 and an average of 4,2 adults over 16 years. The average room density was 3,0.

The following regional differentiation in terms of household size and room density was found:

Ward	Size	Room density
Charles Johnson	9,3	3,1
Mosvold	9,6	3,2
Manguzi	6,1	2,4
Nkandla	9,4	3,2

Manguzi was the least densely populated area and had the richest supplies of natural building resources. It appeared to have more structures per household than the other areas, and this probably accounted for the relatively low room densities.

3.3.5 Migrants and pensioners

Rural homeland households tend to rely heavily on two sources of cash income, namely migrant remittances and pension payments. The research data reveal an average of 1,2 migrants per household, a figure that is not out of place for rural Southern Africa. The *de jure* household size was therefore about 9,6. The absence of males as migrants from the researched areas is reflected by the fact that of the household total of 685 people "permanently present" (i.e. excluding migrants) in the 80 households, 59,5 % were females and 40,5 % males.

The average number of migrants per household by ward was:

Charles Johnson	1,55
Mosvold	1,15
Manguzi	0,95
Nkandla	1,25

The regional differentiation possibly reflects the proximity of the particular areas to employment centres and also the relative impoverishment of the agricultural resources with consequent reliance on migrant earnings. Charles Johnson and Nkandla, which were densely populated and relatively poor in local natural resources but quite close to major employment centres, had higher migrancy rates than Manguzi where the opposite situation occurred.

There was an average of 0,6 pensioners per household. As is typical of many of the rural areas, the average number of people qualifying for a pension was actually much higher than the figure of 0,6 but many of those qualifying did not receive a pension.

If access to cash income is used as the norm for determining the dependency ratio, then the survey data indicated a dependency ratio of 1:5,3. However this is a very general indicator with several flaws. For example it is based on migrant numbers and presupposes that the migrants designated as such by the household do remit money regularly, and that the migrants owe financial allegiance to only one household. Furthermore it takes no cognizance of the informal income generation by household members.

Although the researchers noticed no real distinction between the socio-economic status of areas with and without CHWs, it is worth bearing in mind that rural households in KwaZulu do not form a homogeneous entity. In fact quite large degrees of differentiation within regions were noticed and this almost certainly forms an important variable in many of the response patterns. A sample of 80 is however too small to allow a meaningful breakdown of responses by socio-economic indicators.

3.4 Local health knowledge in the areas

Several health topics on the CHWs' syllabus were selected for inclusion in the questionnaire. By administering the questionnaire to areas with CHWs and then to areas without CHWs the

researchers hoped to obtain an idea of the differential in health knowledge between the areas. This would then be used as an indicator of the impact made by the CHWs.

3.4.1 Water purification

As part of their syllabus the CHWs are instructed in methods to purify drinking water. These purification methods include boiling, mixing the water with household bleach, and filtering the water through a sieve. Respondents were asked about their knowledge of water purification in order to evaluate the transfer of knowledge from the CHWs. The response by the number of methods known is given below.

TABLE 3.3: NUMBER OF WATER PURIFICATION METHODS KNOWN

No. of methods known	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil methods	7	14,6	3	9,3
One method	11	22,9	15	46,8
Two methods	28	58,3	13	40,6
Three methods	2	4,2	1	3,1
TOTAL	48	100,0	32	100,0

No clear distinction in health knowledge between areas with or without CHWs emerged here. The researchers then asked the respondents about the source of their knowledge of water purification methods. The results by area with and without CHWs is as follows:

TABLE 3.4: SOURCE OF KNOWLEDGE OF WATER PURIFICATION METHODS

Source of methods known	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil	7	14,5	3	9,4
Clinic	18	37,5	10	31,3
CHW	12	25,0	1	3,1
Radio/Other media	1	2,1	8	25,0
Hospital/Doctor	3	6,2	3	9,4
General knowledge	5	10,4	4	12,5
Other	2	4,2	3	9,4
TOTAL	48	100,0	32	100,0

Roughly a third of the respondents in areas with and without CHWs reported that the clinics had informed them about the different methods of purification. This may indicate the importance of this kind of infrastructure as the broker of health knowledge. In areas with CHWs it was the CHW who was reported to be the second most important source of knowledge while in areas without CHWs, radio and the media appeared to be second in the order of importance as the source of information.

Furthermore, the respondents were asked to give the formula for purifying water by using a household bleach called Jik. Among the respondents in areas where CHWs were working, 30

respondents (or 62,5 %) could recite the formula exactly, but surprisingly in areas where there were no CHWs 24 respondents (or 75,0 %) could give the precise mixture of Jik to water.

It may be argued that the presence of the CHW tends to relieve the individual of the burden of remembering the formula, as the CHW is always there to be asked; but people in areas without the CHW need to remember the formula, hence the higher positive percentiles in the areas without CHWs.

Those who could recite the formula as opposed to those who could not, figure by area as shown in Table 3.5.

TABLE 3.5: NUMBER OF RESPONDENTS WHO KNEW FORMULA, BY HEALTH WARD

Health ward	Knew formula	Did not know formula
A	10	10
B	5	15
C	3	17
D	8	12
TOTAL	26 (32,5 %)	54 (67,5 %)

The one respondent from the area without a CHW who reported being informed about water purification methods by a CHW, had recently married and moved to this area from an area where a CHW was working.

3.4.2 Sanitation

Part of the CHWs' syllabus teaches the importance of sanitation and the advantages of the VIP latrine. This knowledge was evaluated by asking firstly about the use of toilets, knowledge of the VIP latrine and about rubbish pits, and then about the causes, cure and prevention of diarrhoea.

Respondents were asked if they had a pit latrine in their yard. A total of 50 respondents or 62,5 % reported that they did. In areas with CHWs, 62,5 % of the households said they had pit toilets, while in areas without CHWs the same percentage (62,5 %) reported having built pit toilets for their household use. In fact the most significant variable in terms of the presence or absence of pit toilets was the health ward. The results are presented in Table 3.6.

TABLE 3.6: HOUSEHOLDS WITH AND WITHOUT PIT TOILETS BY HEALTH WARD

Health ward	Areas with pit toilets		Areas without pit toilets	
	N	%	N	%
Charles Johnson	19	95,0	1	5,0
Mosvold	4	20,0	16	80,0
Manguzi	7	35,0	13	65,0
Nkandla	20	100,0	0	0,0

People in Manguzi and Mosvold did not appear to the researchers to be any less informed about pit toilets; but they complained about the difficulty of digging toilet pits in the terrain where they lived. In Mosvold most people complained about the difficulty of digging in the rocky ground

that characterizes large parts of the area. In Manguzi many people complained that the sandy ground made it almost impossible to dig pits because they collapsed during building.

On the matter of the VIP toilets, most respondents were unaware of the existence of these structures. In the areas with CHWs 35,4 % of the respondents knew about the pit latrines, while in areas without CHWs this dropped to 18,8 %. Of the 80 respondents only 10 % were well informed about the construction and advantages of VIPs. Six of these respondents were in areas with CHWs and two in areas without CHWs. A further nine knew of the VIP but were less clear on the advantages of constructing these toilets. None of the respondents had VIP toilets in their yards.

Most of the respondents interviewed knew of the importance of proper methods of rubbish disposal. The most popular form of rubbish disposal was the digging of rubbish pits. The breakdown of rubbish disposal by method and areas with and without CHWs is as follows:

TABLE 3.7: METHOD OF RUBBISH DISPOSAL BY AREA WITH/WITHOUT CHW

Method	Areas with CHW		Areas without CHW	
	N	%	N	%
Burial in rubbish pit	38	79,2	16	50,0
Burning of rubbish	1	2,1	1	3,1
Burning and burial	1	2,1	1	3,1
Nil method of disposal	8	16,7	14	43,8
TOTAL	48	100,0	32	100,0

It would appear from the above table that the CHWs are having an impact on motivating people to dig rubbish pits. The very marginal households who have little access to more wasteful consumer items appeared to be less likely to see the need for rubbish pits. In other words, once again the absence of a certain practice might not have indicated the absence of knowledge on the matter.

On the importance of sanitation, respondents were asked about the causes, treatment and prevention of diarrhoea. The results of the responses about the causes of diarrhoea are presented in Table 3.8.

TABLE 3.8: KNOWLEDGE OF CAUSES OF DIARRHOEA BY AREAS WITH/WITHOUT CHW

Knowledge of causes	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil causes	20	41,7	18	56,3
One cause	10	20,8	10	31,1
Two or more causes	18	37,5	4	12,5
TOTAL	48	100,0	32	100,0

Here again the respondents in areas with CHWs displayed slightly more knowledge of the causes of diarrhoea than respondents in areas without CHWs. Some regional differentiation was however found and this could perhaps be accounted for by the differential impact of the 1982/3 cholera outbreaks: the areas that had been most severely hit would possibly have a greater knowledge of the causes of diarrhoea. The breakdown by health ward is as follows:

Health ward	Nil causes	One cause	Two or more causes
A	13	5	2
B	10	3	7
C	6	10	4
D	9	2	9

Questions about methods for the prevention of diarrhoea elicited similar response patterns, but even fewer people knew about the preventative measures than the number who knew about the causes.

TABLE 3.9: KNOWLEDGE OF PREVENTION OF DIARRHOEA IN AREAS WITH/WITHOUT CHW

Knowledge of prevention	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil preventive measures	22	45,8	23	71,9
One measure	12	25,0	5	15,6
Two or more measures	14	29,2	4	12,5
TOTAL	48	100,0	32	100,0

Again the areas with CHWs showed some advantage over areas without CHWs in that 54,2 % of the respondents in areas with CHWs knew of steps that could be taken to prevent the spread of diarrhoea, as opposed to 28,1 % in areas without CHWs.

In addition to questions about the causes and prevention of diarrhoea, respondents were asked if they knew of the water, salt and sugar solution used in the treatment of diarrhoea; and then to recite it. The results are presented in Table 3.10.

TABLE 3.10: KNOWLEDGE OF REHYDRATION SOLUTION BY AREA WITH/WITHOUT CHW

Knowledge of solution	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil knowledge of treatment	8	16,6	11	34,3
Know of method but not formula	6	12,5	0	0,0
Know formula	34	70,8	21	65,6
TOTAL	48	100,0	32	100,0

It is striking that in both groups, more people knew of the formula for the treatment of diarrhoea than about the causes and prevention, possibly indicating a transfer of knowledge without proper education or explanation. The respondents were then probed for the sources of their knowledge about the treatment formula. The breakdown by source of knowledge is presented in Table 3.11.

TABLE 3.11: SOURCE OF KNOWLEDGE BY AREA WITH/WITHOUT CHW

Source of knowledge	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil	8	16,6	11	34,3
Clinic	26	54,2	16	50,0
CHW	6	12,5	0	0,0
Radio/media	0	0,0	0	0,0
Hospital/Doctor	1	2,1	2	6,2
General knowledge	2	4,2	2	6,2
Other	5	10,4	1	3,1
TOTAL	48	100,0	32	100,0

3.4.3 Weaning and other aspects of postnatal care

Knowledge about the weaning of children may not be an entirely accurate indicator of general health knowledge, as younger women without children and older women beyond child-bearing age could not be expected to be as interested in the topic as women with young children or babies. Certainly the researchers gained the impression that where the respondent was a young mother she almost invariably had a very good idea of how to wean children.

The marginal status of many of the households also became evident on asking this question. On more than one occasion the mothers, when asked how they would wean their children, replied "with anything we can afford" or "with all that we have available". It was also striking that some of the facilitators mentioned that it did little good to hospitalize malnourished children since the condition recurred when they were returned to their mothers. These facilitators were unanimous in feeling that the problem lay not with the ignorance of the mother but with the poverty of the household. The research findings tended to concur with the facilitators' assessment. Important in this regard is the fairly negligible difference in knowledge between the areas with and without CHWs. Little regional differentiation was found in this instance.

TABLE 3.12: KNOWLEDGE OF WEANING OF CHILDREN BY AREAS WITH/WITHOUT CHW

Source of weaning	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil knowledge	12	25,0	6	18,8
Some knowledge/Ambiguous answer*	22	45,8	12	37,5
Good knowledge	14	20,2	14	43,8
TOTAL	48	100,0	32	100,0

* Denotes answers where respondents knew that the food they were feeding their children was probably not correct according to what they knew to be proper nutrition, but they could not afford anything else.

The respondents also showed a high degree of awareness of the importance of postnatal care. In areas served by CHWs, 47 (97,9 %) of the 48 respondents were convinced of the importance of mothers' and babies' attending the antenatal/postnatal clinics. In areas not served by CHWs the figure was practically identical, with 31 (96,9 %) of the 32 respondents agreeing that the antenatal clinics were important.

Probing for reasons why the respondents felt the antenatal clinics were important elicited the responses presented in Table 3.13.

TABLE 3.13: KNOWLEDGE OF BENEFIT OF CLINIC BY AREA WITH/WITHOUT CHW

Benefits of clinics	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil knowledge of benefits	1	2,1	1	3,1
Some knowledge of benefits	25	52,1	20	62,5
Good knowledge of benefits	22	45,8	11	34,4
TOTAL	48	100,0	32	100,0

Further probing attempted to elicit information about the respondents' knowledge firstly of the immunization of children and then of the "under-five cards" for the children in the households. The benefits of immunization were widely appreciated by the respondents, with 47 (97,9 %) of the respondents in areas with CHWs in favour of the process and 29 (90,6 %) of the respondents in areas without CHWs in favour. In all the cases where the respondents felt immunization was a bad idea they gave as reason that immunization made the children sick. It was significant that none of the respondents who were against immunization lived in households with young children. The respondents were asked to name the illnesses that children should be immunized against to further assess the understanding of immunization. The results of this question are presented in Table 3.14.

TABLE 3.14: KNOWLEDGE OF IMMUNIZATION BY AREAS WITH/WITHOUT CHW

Number of diseases named	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil knowledge	8	16,6	5	15,6
One disease named	5	10,4	3	9,4
Two diseases named	18	37,5	10	31,3
Three diseases named	8	16,6	8	25,0
Four diseases named	9	18,8	6	18,6
TOTAL	48	100,0	32	100,0

The researchers asked to see the "under-five cards" for the children in the households. Respondents were then asked about their understanding of the "under-five card" and in particular their understanding of the weight path of the child. The results of this inquiry are presented in Table 3.15.

TABLE 3.15: KNOWLEDGE OF "UNDER-FIVE CARD" BY AREAS WITH/WITHOUT CHW

Status of knowledge of "under-five card"	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil card	12	25,0	9	28,1
Have card but little understanding	14	29,2	9	28,1
Have card and understand it	22	45,8	14	43,8
TOTAL	48	100,0	32	100,0

Of those households where there were no cards (21 in all), 15 had no children under the age of five years. The remainder were households where the respondents either could not find the cards or where they stated that the cards were at other households.

In situations of extreme poverty it is not unusual for children to be "fostered" in households other than their natal one, as part of a range of household strategies aimed at managing minimal resources (Spiegel 1986). These cases were encountered and possibly many of the "missing" "under-five cards" really were at other households. Again the relatively small difference in the understanding of cards between the areas with and those without CHW is apparent. Little regional differentiation was found.

The final stage of the evaluation of knowledge about postnatal care was asking the respondents for their source of knowledge about such care. The results of this enquiry are presented in Table 3.16.

TABLE 3.16: SOURCE OF KNOWLEDGE OF POSTNATAL CARE

Source of knowledge	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil knowledge	6	12,5	4	12,5
CHW	3	6,3	0	0,0
Clinic	32	66,7	20	62,5
Doctor/Hospital	0	0,0	3	9,4
Media	1	2,1	2	6,3
General knowledge	5	10,4	2	6,3
Other	1	2,1	1	3,1
TOTAL	48	100,0	32	100,0

The perceived importance of the clinic in delivering postnatal care is clearly reflected in the respondents' perception of the source of their knowledge about such care. This may explain the CHWs' relatively weak impact. Here again little regional differentiation was found.

3.4.4 Specific illnesses, and diet

Questions were put to respondents regarding their knowledge of the symptoms of tuberculosis and then about their knowledge of the food groups necessary for a balanced diet. The results of these questions are presented in Table 3.17.

TABLE 3.17: KNOWLEDGE OF SYMPTOMS OF TUBERCULOSIS

Symptoms of tuberculosis	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil knowledge	9	18,8	6	18,8
Knowledge of some symptoms	10	20,8	6	18,8
Good knowledge of most symptoms	29	60,4	20	62,5
TOTAL	48	100,0	32	100,0

Again little difference in knowledge was found in areas with and without a CHW and there was no real difference between regions.

The results of the inquiry about respondents' knowledge of the food groups are presented in Table 3.18 below.

TABLE 3.18: KNOWLEDGE OF FOOD GROUPS BY AREAS WITH/WITHOUT CHW

Knowledge of food groups	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil knowledge	14	29,2	10	31,3
Some knowledge of food groups	21	43,8	19	59,4
Good knowledge of food groups	13	27,0	3	9,4
TOTAL	48	100,0	32	100,0

Some difference in the levels of knowledge was evident here, but this disappeared when the categories "some knowledge" and "good knowledge" were combined.

The researchers asked the respondents a series of penetrating questions about their knowledge of AIDS, family size and family planning. AIDS was the initial topic discussed, but this led to the discussion of family planning.

The respondents were asked if they had heard of AIDS and then if they knew how it was spread. Figures reflecting knowledge about the existence of AIDS revealed the following. In areas without CHWs, 31 or 96,8 % of the respondents had heard of AIDS; in areas with CHWs, 46 or 95,8 % of the respondents had heard of AIDS. Furthermore 24 (75 %) of the respondents in areas without CHWs had a good idea of how the disease was spread, compared with 35 (72,9 %) of the respondents in areas with CHWs. The respondents were then asked about the methods of preventing AIDS. The results of this inquiry are presented in Table 3.19.

TABLE 3.19: KNOWLEDGE OF PREVENTION OF AIDS BY AREAS WITH/WITHOUT CHW

Knowledge of prevention of AIDS	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil knowledge	18	37,5	12	37,5
Good knowledge of prevention	30	62,5	20	62,5
TOTAL	48	100,0	32	100,0

No real difference in knowledge about the prevention of AIDS was found between the areas. This is probably not really surprising as AIDS is a relatively new topic to the CHWs, and their presence would not therefore bring exceptionable knowledge to an area.

The respondents were asked where they had first heard about AIDS, or alternatively whether they could remember where they had obtained most of their information about AIDS. The responses are presented in Table 3.20.

TABLE 3.20: SOURCE OF KNOWLEDGE OF AIDS BY AREAS WITH/WITHOUT CHW

Source of knowledge of AIDS	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil knowledge/Could not answer	9	18,8	1	3,1
Radio/Other media	19	39,6	20	62,5
Clinic	12	25,0	7	21,9
CHW	4	8,3	0	0,0
General knowledge/Community members	4	8,3	4	12,5
TOTAL	48	100,0	32	100,0

Of particular note in Table 3.20 is the relative importance of the radio (and other media) as an informational medium. Almost 50 % of all the respondents considered that to be their primary source of information.

Of importance here was the issue raised by many of the respondents regarding their vulnerability to contracting AIDS. Particularly striking was the number of married women with migrant husbands who raised the issue that they feared their absent husbands' infidelity and the resultant risk they ran of becoming infected with AIDS. Most of the women inquired as to how they could recognize the signs of the disease in their husbands when they returned home from their places of employment.

3.4.5 Family planning

A further issue discussed was that of family planning. The first question put to a respondent pertained to the number of living children she had. The average number of children per female respondent was 3,76. Given the wide range in the respondents' ages, this should be taken as a broad indicator rather than a specific fertility indicator. The respondents were asked how many children they thought someone in their position should have. The average figure given here was 3,39.

Respondents were then asked how many years apart their children should be spaced. The range of figures given here was 1 to 8 years with an average figure of 3,2 years. Probing about the possible reasons for the need to space children revealed the responses shown in Table 3.21.

TABLE 3.21: REASONS FOR SPACING CHILDREN

Reasons for spacing	Areas with CHW		Areas without CHW	
	N	%	N	%
Nil knowledge/Not important to space children	9	18,8	0	0,0
Spacing for sake of child's health	30	62,5	26	81,2
Spacing for sake of mother's health	1	2,1	3	9,4
Spacing for mother and child	3	6,3	0	0,0
Financial reasons	3	6,3	1	3,1
Other reasons	2	4,2	2	6,3
TOTAL	48	100,0	32	100,0

Respondents were then asked what they thought the best method was of restricting the number of children they had or of achieving the spacing between the children they desired. The results of this question are presented in Table 3.22.

TABLE 3.22: CONTROL OF FERTILITY BY AREA WITH/WITHOUT CHW

Methods of controlling fertility	Areas with CHW		Areas without CHW	
	N	%	N	%
Don't know/Refuse to answer	10	20,8	6	18,8
(Modern) family-planning methods	32	66,7	24	75,0
Traditional methods	5	10,4	1	3,1
Abstinence	1	2,1	1	3,1
TOTAL	48	100,0	32	100,0

The respondents were subsequently asked what they thought about the idea of family planning and family-planning clinics. The following data was elicited:

TABLE 3.23: RESPONDENTS' VIEWS OF FAMILY PLANNING

Views on family planning	Areas with CHW		Areas without CHW	
	N	%	N	%
Don't know/Refuse to answer	6	12,5	3	9,4
Good idea/In favour of it	33	68,8	22	68,8
Bad idea/Against it	9	18,8	7	21,9
TOTAL	48	100,0	32	100,0

The views on family planning to some extent mirror those prevalent in the white communities. The respondents who opposed family planning either had religious objections, felt it promoted promiscuity or felt that the user's health suffered. To gain a broader idea of some of the negative perceptions of family planning, the respondents were asked why they felt some people in the community opposed family planning. The responses are presented in Table 3.24.

TABLE 3.24: RESPONDENTS' VIEWS OF REJECTION OF FP

Why some people reject FP	Areas with CHW		Areas without CHW	
	N	%	N	%
Do not know	9	18,8	3	9,4
Health of user at risk	12	25,0	13	40,6
Fear of sterility	7	14,6	7	21,9
Husband/Boy friend/*Gogo* objects	2	4,2	1	3,1
Moral objections	8	16,7	5	15,6
Political reasons	3	6,3	3	9,4
Other reasons	7	14,6	0	0,0
TOTAL	48	100,0	32	100,0

3.5 Respondents' perceptions of the CHWs

The respondents in the areas with CHWs were asked a series of questions pertaining to their perceptions of the CHWs. Respondents were asked to name the CHW in their area. In this instance it was found that only three or 6,3 % of the respondents were unable to name the CHW. In two of these cases the home had been very recently established in the area. The respondents were asked if they felt that the CHW could be considered a member of their community. In this instance, 44 (91,7 %) of the respondents answered in the affirmative, two (4,2 %) said they did not know, while the remaining two felt that the CHW was not really a member of the community. A final question probed the respondents' perception of the CHWs links to the tribal authority. The question was an attempt to ascertain whether the respondents felt that only people who were closely linked to the tribal authorities were likely to be selected as CHWs. It was found that 36 (75 %) of the respondents felt that there was no favouritism shown in selecting the CHWs. Four respondents (8,4 %) said that they did not know enough to form an opinion, while eight respondents (16,6 %) felt that there was a link. Five of these eight respondents were resident in the same health ward.

Perhaps the most crucial indicator with regard to the advantages of the CHWs came in a question asking the respondents whom they generally consulted for advice on health matters. The responses are tabulated below.

TABLE 3.25: SOURCE OF ADVICE ON HEALTH MATTERS BY AREAS WITH/WITHOUT CHW

Source of advice	Areas with CHW		Areas without CHW	
	N	%	N	%
CHW	31	64,6	0	0,0
Clinic	10	20,8	14	43,8
Hospital	0	0,0	2	6,3
A community member/Neighbour	5	10,4	11	34,4
Inyanga	1	2,1	0	0,0
No one	1	2,1	5	15,6
TOTAL	48	100,0	32	100,0

A follow-up question to the one above asked how easy it was to obtain the necessary advice when it was needed. In areas with CHWs, 45 (93,8 %) of the respondents stated that advice was easy to obtain, while the figure fell to 16 (50 %) for the areas without CHWs. **While many of the respondents in areas both with and without CHWs were relatively close to clinics and felt that advice was easily obtainable there, an analysis of the response patterns shows that the presence of the CHWs accounted for the greater percentage of positive responses in the areas with CHWs.**

3.6 Respondents' perceptions of the relative importance of health issues

A possibly crucial question asked the respondents to rank their fears. They were indirectly being asked to prioritize possible crises. This question was designed to give some indication of the priority that respondents gave to health-related issues. The respondents were asked to rank the crisis they would regard as most distressing first and the least distressing last. The figures indicate the average overall rankings.

TABLE 3.26: PRIORITY OF CRISES

Hypothetical crisis	Ranking in areas with CHW	Ranking in areas without CHW
That the household's breadwinner may lose his/her employment	1.2	1.4
That the family will suffer from ill health	3.8	4.0
That the family is in physical danger	3.4	3.5
That the household may be evicted from the area	3.5	4.0
That family members do not have enough to eat	3.0	3.3
That the family will suffer if respondent becomes ill	3.9	3.7

The fear of unemployment was prominent in the rankings. The respondents frequently said that the lack of employment would precipitate other crises, among them ill health.

3.7 Respondents' perceptions of health problems

An open question asked respondents what they thought were the major health problems in their community. Most people identified either poverty-related issues (45,5 %) or the lack of infrastructure (31,7 %). Some (15,0%) identified specific health problems. Interestingly, five of the 12 respondents involved in this last instance were residents of Area B4 and complained of a rash that people suffered, four were resident in Area A3 and complained of stomach cramps and diarrhoea, and two were resident in Area C1 and complained of the incidence of whooping cough. The last respondent was from Area D1 and said that TB was a common problem in the community. The remaining 7,5 % of the sample either denied that there were any health problems or were not prepared to answer the question.

Most respondents (88,8 %) felt that the community should be responsible for their own health care, but 32 respondents (40 %) added that they thought the state should also be responsible.

An open question aimed at determining the respondents' perception of the practical problems they experienced in keeping their families healthy, elicited the following responses (grouped into specific categories and subcategories).

- Poverty of the household. Fifty-seven cases (71,3 %) stated the following:

  Household too poor to buy proper food and thus suffer from ill health (37 cases: 46,3 %)

Unemployment/low wages means that household is too poor to care for itself (11 cases: 13,8 %)
Too poor to afford transport to clinic (6 cases: 7,5 %)
Poverty of household means that hygiene is compromised (3 cases: 3,8 %)

- Lack of infrastructure. Thirteen cases (16,3 %) stated the following:

  Clinic/hospital too far away (9 cases: 11,3 %)
  Clinics poorly equipped (3 cases: 3,8 %)
  Road to clinic very bad (1 case: 1,3 %)

- Difficulty in obtaining clean drinking water (5 cases: 6,3 %)

- Do not know/refuse to answer/no problems (5 cases: 6,3 %)

3.8 Overall impressions

The impressions that the researchers formed through their daily contact with the CHFs, CHWs and community members are given below. The impressions are necessarily somewhat subjective, but in keeping with the "pilot study" nature of the report it was decided to include them. They should be taken as broad indicators at best.

3.8.1 Project relevance

A poorly developed health infrastructure makes a programme that seeks to enhance access to health services highly relevant to the circumstances of many of the people in KwaZulu. As such the researchers felt that the programme fulfilled many of its initial aims. In addition the presence of the CHWs in the communities creates a link between the local people and formal health services that can serve as a two-way communication channel. The researchers felt that the possibility of enhancing the inherent "bottom up" communication channel had not been fully explored. The programme is designed to be flexible, and therefore it should have little difficulty, at an educational level, in adapting to changing circumstances. Perhaps the greatest indication of the project's relevance was the people's expressed desire for the programme. Thus people in areas without CHWs frequently inquired from the researchers about the possibility of *nompilos* being instituted in their areas.

3.8.2 Effectiveness

The project is effective since it meets many of its primary aims. It is also effective in appearing to enjoy some credibility among those it seeks to serve. The credibility is further enhanced by the apparent lack of bias in allocating the CHW resource within the areas where the CHW is operating. Where some respondents mentioned "favouritism" in the selection of CHWs they did not express this opinion in a way indicating that they felt that it compromised the effectiveness of the programme. Inasmuch as the programme optimally utilizes the available resources it appears to be relatively effective. Researchers did however feel that the local *inyangas* were a source of health knowledge that had not been as thoroughly incorporated into the programme as it could have been. Finally none of the respondents complained about the quality of the service they received from the CHWs although some complaints were heard about the inadequacy of the service.

3.8.3 Efficiency

As the study was designed as a pilot study, and no attempt was made to do any cost-benefit or cost-effectiveness analysis, the efficiency of the CBHP is impossible to evaluate. What was evident however was the constraint placed on the efficiency of the service by the lack of infrastructure, particularly the lack of transport available to the facilitators. In some of the wards this was compounded by the facilitators' feelings of frustration stemming from what they perceived as the low priority given to their work by the hospital management.

3.8.4 Political/organizational/environmental constraints

The CBHP operates within a specific political context beyond the control of the implementing agent. While the macropolitical context has a direct bearing on the operation of the CBHP, the constraining factors are fully realized by the implementing agent and it would be superfluous to comment further here. Similarly the environmental constraints, particularly the acute incidence of poverty and the isolation always evident to the researchers, is appreciated by the implementing agent.

The general opinion was that community participation in the organizational structure, while built into the health committees, was perhaps not as effective as possible. Here it may be pertinent to consider disbanding (or restricting the scope) of the committees' activities and instituting a quarterly (or other regular) community meeting organized by the CHF. This meeting would obviate the problem that the health committees do not always operate properly, and would provide the general community with a forum where they could air their health-related concerns. It would also enhance the CHFs' sensitivity to local health problems while ensuring that the democratic base of the CBHP remained firmly intact. The CHWs would moreover become directly accountable to the community instead of being accountable only by proxy.

REFERENCE

SPIEGEL, A.D. 1986. The fluidity of household composition in Matatiele, Transkei: A methodological problem. *African Studies*, 45(1):17-35.

CONTENTS

4. PROCESS EVALUATION: PERSONNEL DIRECTLY INVOLVED IN THE CBHP (ICOMM Team)

4.1 Introduction

The aim of this part of the research, which was carried out by researchers from ICOMM, was to study the effectiveness of the programme by interviewing members of those categories of workers who were directly involved in the execution of the programme in the community: supervisors of the community health facilitators (CHFs), CHFs themselves, community health workers (CHWs) and community health committee members (CHC members). The survey took place in the health wards of Charles Johnson, Manguzi, Mosvold and Nkandla.

4.2 Methodology

4.2.1 Literature study

A literature study was undertaken to determine the factors which were known to either enhance or handicap the effectiveness of a CBHP and which could be used as a basis for the research.

4.2.2 Preliminary survey

A preliminary survey was conducted to enable the researchers to familiarize themselves with the programme and to test interview schedules. The preliminary survey involved three health wards which would not be included in the main survey. Interviews were conducted with CHFs, CHWs and CHC members.

4.2.3 The samples

In each of the four health wards the samples were drawn in the following way:

Supervisor: Each health ward had only one registered nurse who supervises the CHFs and who was included in the sample. In one ward the supervisor had been employed in this capacity for only two months. It was therefore decided to interview the previous supervisor as well.

CHFs: The CHFs are enrolled nurses with additional training who supervise the CHWs. Two of the health wards had only one CHF each, and both of these were included in the survey. In one ward where there were two CHFs, one had only just begun this work and it was therefore decided to interview the other one who had been working for a longer period. Random selection was employed in the other ward where there were also two CHFs.

CHWs: In each health ward five CHWs were randomly selected from the lists of CHWs employed.

CHC members: CHCs, whose members are selected by the community from the community, supervise the CHWs. Five CHC members were randomly selected from lists of such members. In two wards only four CHC members were interviewed. The others were prevented from participation owing to bad weather and transport problems.

4.2.4 Data collection

The interviewers conducted individual interviews in English with the supervisors of the CHFs and with the CHFs. Trained interviewers conducted interviews with the CHWs and CHC members in Zulu. In each health ward three CHWs were interviewed as a group and two were interviewed individually so as to benefit from both the small group and individual interview techniques. Two or three of the CHC members were interviewed together.

4.2.5 Interview schedule

Since the data collected were of a qualitative rather than a quantitative nature, a basic interview schedule was developed for use with variations for all the categories and which allowed for probing.

The schedule was based on the strategies for action in the organization of community health programmes as set out in the report of the World Health Organization (1989:5-43) on community health. This document deals mainly with CHWs. However the research team felt that the CHWs were only one part of the CBHP and that the issues addressed in the document were relevant to all of the categories involved. Therefore during the interviews all the respondents were questioned on each of the issues as far as this was relevant to their work.

4.2.6 Presentation of data

The findings of the present study are presented broadly in accordance with the eight strategies for action identified in the WHO document. These strategies had been based on the eight main areas of weakness in CHW programmes as discovered by the WHO Study Group. The findings will be presented therefore under the headings:

Organization and structure
Functions
Selection
Training
Support and supervision
Working conditions
Cost and financing
Monitoring and evaluation

4.3 Findings

4.3.1 Organization and structure

Organizational structure will be discussed under three headings: structure, community involvement and communication.

(a) Structure

As a background to the findings it should be pointed out that the implementation of population development programmes is an essential part of population development policy at national level. These programmes are developed according to local needs and resources. In KwaZulu each CBHP programme is implemented in a well-delineated geographical area which forms part of a health ward. The community is part of a well-defined tribal system, homogeneous in terms of language and culture.

In the following paragraphs the respondents' views are given on the nature of their communities, the structure of the CBHP in their health wards, and the co-operation between the CBHP and other individuals and institutions providing health care in their communities. Since the views of the different categories of workers did not differ greatly, their responses were combined to provide a background to the rest of the findings.

It was learned that the respondents from the different categories basically viewed the community as being a group of people sharing the same geographical area. Although some respondents mentioned that the people shared customs, others said that there were often strong conflicts - sometimes even resulting in faction fights. However the people mainly endorsed the tribal authority. In some matters decisions were made by the *indunas* but in others - both in health and general matters - the community was involved in decision making during the regular community meetings organized by the tribal authorities. Consensus was

reached by vote whereafter the *induna* consulted the chief who confirmed the decisions and might take the matter further, for instance by consulting the Department of Agriculture about development projects.

All the respondents described the CBHP in terms of mainly preventive/promotive health care with a strong emphasis on community involvement. The aim was "to make the community responsible for their own health and enable them to help themselves by taking primary health care (PHC) into their homes".

The CBHP was viewed as an integral part of the health structure and as an extension of the PHC which is based at the hospital. Those people who were mentioned as playing key roles at district level in the CBHP were the following:

- Hospital superintendent, matron and administrator.
- Community doctor: Due to shortages and the rapid turnover of doctors, the latter sometimes lacked knowledge about the CBHP and were not really involved (Wards B and D).
- Supervisors of the CHFs: All the supervisors of the CHFs are registered nurses. They also have other nursing and administrative duties in the hospital/clinic.
- CHFs: The CHFs are responsible for the CHWs as well as for training the CHCs and the tribal authorities in regard to the CBHP. The number of CHFs depends on the size of the CHW component in a health ward. There are usually only one or two.
- CHWs: The CHWs work directly with the community in their homes. Each CHW is responsible for a number of households. Remuneration depends on the number of days worked and the number of families involved.
- CHC members: The CHC members are responsible for the support and supervision of the CHWs. One CHC is usually responsible for a small number of CHWs in its own area. The number of members in a CHC varies between five and nine.
- Tribal authorities: The CBHP functions within the jurisdiction of a tribal authority. The latter is basically responsible for arranging meetings with the community. In these meetings, for instance, the CHWs and CHC members are selected; also needs are assessed and decisions made. Other responsibilities toward the CBHP include administering the employment of the CHWs and raising funds for projects. The CHWs are also accountable to the tribal authority.

The respondents were also asked to what extent the CBHP collaborated with institutions or individuals (other than the formal health structure) in providing health care. The following institutions/individuals were mentioned:

- Department of Agriculture: Co-operation occurs especially in developmental projects, such as making gardens, building toilets and providing a safe water supply. In some areas the home economists of the department sometimes address the mothers of infants on nutrition, sewing and handicrafts.
- Schools provide health education but there is no real co-operation with the CBHP.
- In three of the health wards private doctors provide a service but are not involved in the CBHP.
- The malaria project: There is good co-operation between this project and the CBHP in two wards.

- In Manguzi the CBHP co-operates with the Manguzi Community Programme which is an NGO, supported by World Vision, with the aim of developing the community.

- *Ugogos* ("grandmothers") still take responsibility for the family's health and CHWs include them when they provide health education. In many cases they act as birth attendants. Although home deliveries are discouraged, this seems to be an established practice and therefore members of the CBHP provide information to make these practices safer.

- The respondents were not aware of *improfethus* in their areas. The *inyangas* (herbalists) and *isangomas* play a significant role in health care. People tend to consult both the traditional healers and the medical personnel. In isolated areas the traditional healer is often the only person who can provide health care. Some of the CHWs and CHC members indicated that the traditional healers could treat some conditions, such as infertility and "bewitchment", but could not cure all conditions, for example TB. In some cases there are *inyangas* and *isangomas* who co-operate with the primary health-care system. In one health ward the respondents indicated that they had contact with traditional healers. In another there had been one meeting with the traditional healers some time ago while another meeting was being planned - so far there had been no co-operation.

Some of the respondents mentioned that they had heard over the radio that there were places where co-operation existed between medical personnel and the traditional healers and that they felt this should be encouraged in their own health wards.

(b) Community involvement

To examine the respondents' insight into the co-ordination of the CBHP and the community, certain aspects thereof were examined, *inter alia* the respondents' views on the needs of the community; perceptions of the community's views of their own needs; views on the responsibility for health as well as perceptions of the community's views on the subject; and understanding of health care as well as perceptions of the community's understanding thereof.

The respondents' perceptions of the community's acceptance of CBHP personnel as well as the relationship between the community and members of the CBHP were also examined.

In order to provide a clear picture of the way that members of the different categories perceived the functioning of the CBHP, the subsequent findings are discussed for each category (supervisors of the CHFs, CHFs, CHWs and CHC members separately).

Community involvement: Supervisors: The supervisors regarded the following matters as important community needs: the development of a more effective infrastructure, for example better roads, a better telephone system and public transport; a safe water supply, sanitation for both dry and wet refuse (toilets and rubbish pits); better nutrition, education and the creation of jobs; a funeral service that could transfer corpses from the hospital to the community without delay; crèches; better precautions against malaria and TB and more residential clinics to counteract the problems of distance, full rivers, etc.

However the supervisors explained the basis on which residential clinics were provided and indicated that the community's wishes were not always justified. In one ward it was mentioned that the members of the community sometimes wanted non-essentials while they could not identify the more pressing needs.

The community initially expected the CBHP to be responsible for their health and provide them with money, food and medicine. Some people still expected this kind of help but in general they expected the CBHP, and by implication the supervisors, to decrease the incidence of illness. The supervisors felt that the CBHP suited the needs of the community although it needed to be expanded to other areas.

They also felt that although communities should be responsible for their own health, the CBHP should guide and motivate them to become involved in preventive and promotive health care. The supervisors thought that the communities considered the CBHP and the government to be responsible for community health. The view that the "government" should build clinics, schools, etc. was still prevalent in some areas. However, increasing contact with the CBHP has made the people more aware of their own role in health care although most of them still needed constant guidance and motivation. On the whole the supervisors felt that the communities could apply the skills and advice taught by the CBHP since the communities were only given advice that they could use. One of the supervisors mentioned that sometimes the people could not initiate self-help projects such as handicrafts or gardening because they had inadequate funds.

The supervisors felt that the communities were concerned about the health of their members and had always shown some initiative (right or wrong) in solving their health problems, such as visiting the traditional healers. However the communities had other more pressing concerns - mainly with the production of food, for instance attending to their cattle and crops - which took precedence over preventive/promotive health care.

According to the supervisors the communities generally accepted and trusted the members of the CBHP although they had initially been wary of the CHFs and the CHWs. For instance the CHWs were expected to set an example (which they did try to do) before attempting to teach others. In all the health wards the communities showed some resistance to the CHWs since they could not provide a curative service, such as medication. In Ward B the community apparently had not fully accepted the CHC members although they had selected them, because the CHC members seemed to be unsure of their duties.

The problems experienced in working with the community mainly include the poor attendance of commmunity meetings and the inability of the community to understand the selection criteria for CHC members, often resulting in inactive CHCs. The factors promoting the effectiveness of the health team are the co-operation of the community and of other institutions, such as the Department of Agriculture. Most of the supervisors felt that wearing a uniform facilitated the identification of the supervisor and the CHFs but could create a social distance between the members of the CBHP and the community. Therefore they felt that CHWs should not wear a uniform.

Community involvement: CHFs: The CHFs' perceptions of the community's needs coincided largely with those of the supervisors. Some other needs were also mentioned: sewing and handicraft clubs; health education especially on nutrition and hygiene; and residential clinics (a need that was also expressed repeatedly by the other categories because the people lived far away from the hospital and the mobile clinic visited the areas only once a month, or, the people lived far away from residential clinics and when the rivers were in flood during the rainy season they could not reach the existing residential clinics nor could the mobile clinics reach them).

The CHFs' perceptions of the community's view of their needs coincided mainly with their (CHFs') own perceptions, but certain needs were added. For example, the community would like the CHWs to provide basic medicines because when people were ill and the CHW told them to buy medicine at the shop they became frustrated, since they felt that their needs were not being met. In another ward people wanted a pipeline system (but did not wish to contribute to its installation), and elsewhere better housing was required.

In general the CHFs thought that the community's expectations of the CBHP and the CHF were unrealistic - it expected the programme and the CHF to provide for all its members' needs. The CHFs thought that the CBHP accommodated some of the health needs of the community but that it did not fulfil the curative needs (for medicine, clinics, etc.).

The CHFs indicated that the communities should be responsible for their own health but should be assisted by the CBHP. They felt that the community considered the programme or the

hospital to be responsible for this. The community was oriented more to cure than to prevention but with the assistance of the CHWs, was becoming more aware of preventive/promotive action. It was mentioned that some people in Ward C considered visits to the traditional healers as preventive health action. The CHFs also said that although some members of the community were concerned about their health, more pressing problems such as a lack of food, money and education took precedence.

The CHFs said that decisions about health matters in the community were taken by mothers or CHWs. The *induna* and members of the CHC were also mentioned as playing a role in decision making.

The CHFs felt that it was easy for the community to obtain information and advice on health-related matters since there were CHWs living among them. In general people could easily apply what they had learnt but there were some problems, for example, the lack of money for developmental projects; problems when building toilets, such as rocky soil, and the influence of traditional healers.

The CHFs stated that the members of the CBHP were accepted, trusted and viewed as part of the community although in Ward A the CHWs were sometimes criticized because they did not always appear to practise what they preached.

Although relationships between the CHFs and the communities were generally good, weaknesses in the community affected some of the CHFs: the community members did not attend meetings as they should; the community could not find concrete solutions to their problems (Ward B); and there were inactive CHC members and disinterested *indunas*.

The CHFs considered that active CHCs were a community strength which was invaluable to the execution of the programme. Another strong point was the community's appreciation of the CBHP and its willingness to implement advice.

Three of the CHFs felt that they had a better rapport with the community when they were in uniform - otherwise they were seen as being superior and the community was afraid of them. They also felt that the CHWs should not wear uniforms because they should be seen as part of the community. The other CHF felt that wearing a uniform facilitated identification, respect and even protection. In her ward some of the CHWs had bought uniforms to appear professional and to protect their clothes. She suggested that the community should vote on the issue of the CHW's uniform.

Community involvement: CHWs: The CHWs confirmed the needs perceived by the supervisors and the CHFs. Some other needs were mentioned, namely a youth centre to educate teenagers about sexual matters, tractors to plough, adult education, forests for fuel and technical schools.

Apart from the infrastructural and developmental needs already mentioned, CHWs indicated that communities expressed a need for electricity, a market where they could sell their products, and ambulances based at the clinics since ambulances took too long to reach the people.

The CHWs mentioned that the community expected the CBHP to lead to a better standard of living and improved health. The community also expected the CBHP and CHWs to provide medicines. Its members' expectations of the CHW included: solving their personal problems; accompanying patients to the hospital/clinic because they thought this would ensure attention sooner; accompanying them to the pension office because they believed that their chances of receiving a pension were better when they were accompanied by the CHW, and fetching their medicines from the hospital.

In general the CHWs felt that the CBHP suited the needs of the community. However the fact that they were unable to provide basic medicines was seen as a shortcoming in the programme. It was mentioned that the communities were very proud to have a CBHP and CHWs whom they

could even call on at night. The CHWs were sometimes consulted by people living in areas where there were no CHWs.

The CHWs considered themselves responsible for the community's health in co-operation with the tribal authority (one ward) and the community. CHWs stated that the community held the doctors (Ward D), the community and the CHWs (Wards C and D) and the CHWs (Ward B) responsible for their health.

The CHWs felt that the community was still mainly oriented to the cure of disease but due to the influence of the CBHP was becoming more aware of and interested in preventing illness and promoting health. Some of the CHWs said that preventive and promotive actions had increased significantly over the years. They indicated that although the community expressed concern about health matters, other concerns such as money (for nutritious food, medicine, children's education and fuel), proper housing and employment had greater priority. The community was also concerned about the extent of the abuse of alcohol and drugs.

The general opinion was that the CHWs made the decisions about health matters since they were responsible for health education; for example, when they diagnosed diarrhoea they advised on the correct treatment.

The CHWs said that it was easy for the community's members to obtain information and advice from them. The members could usually implement what they were taught because they needed only the materials and substances available in every home. Sometimes problems occurred because the shops did not stock the basic medicines recommended by the CHWs (Ward B). The practical implementation of developmental projects occasionally caused difficulties, for example digging toilet pits in rocky ground or where there were large colonies of ants. Another constraint was the lack of money.

The CHWs said that the community often used its own initiative in solving health problems - such as by using herbs when the members of the community were ill, and attending the clinic when necessary - but they required constant motivation and assistance. Many people also did not follow the CHWs' advice.

The only problems that the community members experienced in their communication with the health team was the lack of infrastructure, for example transport. One CHW (Ward A) mentioned that the members of the community were afraid to communicate with the hospital staff.

The CHWs indicated that the members of the CBHP were accepted and trusted by the community. Initially the CHWs had encountered some resistance but as the community got to know them they were accepted. The relationship between the CHWs and the community was sometimes hampered by the CHWs' inability to provide medicines.

The CHWs indicated that the main weaknesses of the community were mainly that: people did not always follow advice; poverty prevented people from going to hospital when necessary; people were not at home in the mornings because they were attending to their crops, and people were not at home but out visiting shebeens.

The strength of the community members was basically that they were learning much that they had not previously known and were now prepared to improve their situation. They also trusted the CHWs. The CHWs knew of no communication problems between the community and themselves.

The CHWs' opinions on wearing uniform differed within the health wards. Those who were against wearing uniform argued that the community would see them as outsiders - moreover people would start cleaning their environment when they saw them approaching and the true conditions of the household would not be revealed.

The CHWs in favour of wearing uniform indicated that they would be easily recognized and really seen to be working, and they would like to protect their clothing - they often had to sit on the floor during home visits and had to change their clothes frequently. Some of the CHWs wanted to wear uniform only for their monthly meeting at the hospital.

Community involvement: CHC members: The CHC members indicated the infrastructural and developmental needs already mentioned. They said that in Ward A they needed more CHWs (in the areas where there were none) and more doctors. As far as the community's views of their needs were concerned, the CHC members felt that they were similar to their own. In one ward they added that the community would like to receive bandages.

The CHC members felt that the community expected the CBHP to solve all its problems and to improve the community's health status. The community expected the CHWs to teach its members sewing and handicrafts (Ward B) and to be a link between them and the formal health system. The CHC members felt that the CBHP did address the needs of the community but that it was not entirely adequate since it did not provide medicines.

The CHC members held the opininon that the CHWs and the community should be responsible for the health of the community. They stated that the community viewed the CHCs (mentioned in Ward B), the CHWs (Ward C) and the hospital (Wards A and D) as being responsible for their health.

The CHC members indicated that some people were still mainly oriented toward cure but in general with the aid of the CHWs the community was taking more preventive action, for example in the immunization of children, personal hygiene and proper nutrition. Although the people were concerned about their health they had more pressing concerns, such as finding employment and providing food for their families. In the view of the CHC members, decisions about health matters were made by the CHWs (Wards B, C and D), the CHCs or the *indunas*.

The CHC members felt that it was easy for the community to obtain information from the CHWs. In some cases it was simple to apply this advice, for instance in building toilets and purifying water. In other cases it was more difficult, for instance toilets were too expensive to build in Manguzi. Some people also needed constant encouragement before they would act.

In general the CHC members indicated that the community only used their initiative to go to the *inyanga*/CHWs/hospital when they fell ill.

The CHC members believed that all the CBHP members were accepted and trusted by the community. They seemed to have no real problems with the community other than that the people did not always attend meetings regularly. There were no communication problems since the people lived close together.

Most of the CHC members felt that it was essential for the CHWs to wear uniform for identification purposes. In three of the health wards the CHC members said that they would like to have uniforms for their meetings.

(c) Communication

The communication aspects were examined in order to establish whether open channels existed for feedback and for the referral of any issues to the appropriate persons who could best attend to these matters.

Communication: Supervisor: Their positions in the CBHP give the supervisors the opportunity to communicate with a wide range of people in both the formal and informal health systems.

The supervisors stated that the Amatikulu staff visited the health wards fairly regularly. In two wards the supervisors held meetings with an Amatikulu representative about once a month although a new supervisor had not yet attended a meeting. In the other two wards the visits occurred about once every two months. The telephone and circulars were used to maintain further contact.

They did not have much contact with supervisors from the other health wards. In two areas (Wards B and C) the supervisors had been in contact with other trainees during their training. There was daily contact between the supervisor and CHFs and when the need arose communication was initiated by either participant. Formal meetings, such as the PHC meeting, were held regularly. A formal meeting with the CHFs and a doctor also occurred weekly in one of the wards.

Contact with the CHWs usually occurred through the CHF. The supervisors in all the health wards indicated that they met the CHWs once a month, although in one ward the new supervisor said that she had not had such contact and felt that the CHWs should really liaise only with the CHF. The supervisors also used chance meetings in the community to support the CHWs.

The supervisors stated that other personnel in the formal health-care system who played a role in the CBHP included the medical superintendent, the hospital matron and some of the doctors. In one ward there was also contact with the malaria team and the school nurses while in another social workers, physiotherapists and occupational therapists were mentioned.

Contact between the supervisor and the CHC members can be initiated by either party. For example, if a CHC wishes to begin a new project, it contacts the supervisor. One supervisor however said she only had contact with the Clinic Advisory Committees, not with the CHCs as such.

Communication with the local authority is initiated by either party depending on the particular needs, for example implementation of the CBHP in a new area, or the funding and implementation of projects. Meetings are not held regularly but usually take place about once a month. In general the supervisors indicated that there were no communication problems although in one of the wards communication was hampered by the lack of co-operation of an *induna*. The supervisor believed that the latter felt he should be on a CHC and would have liked his children to be selected as CHWs. This did not really have a negative effect since the chief and the CHC members were co-operative.

Community meetings are held in all the health wards once a month when CBHP matters are also discussed. If necessary additional meetings can be arranged through the tribal authorities. Although there are channels through which the community can communicate with the supervisor via the CHWs, CHCs and CHFs, the communication channels also allow them to contact her directly. This does not occur often. Meetings with individual members usually happen by chance since no home visits take place.

Communication: CHFs: The CHFs have fairly regular meetings with the Amatikulu representatives in two of the health wards - about once a month. In the other two wards meetings are held approximately once every two or three months. The CHFs were satisfied with this, but it was mentioned in one case that these meetings did not take place as regularly as they should. Other contact is established by telephone or by mail.

The CHFs confirmed that they were in daily contact with the supervisors and also held meetings: in some health wards once a week, in the others once a month. In one ward PHC meetings were held once a week but owing to the supervisor's administrative tasks and the shortage of doctors these meetings occurred infrequently at the time of the survey. The CHF was most anxious that they should be resumed.

Where there were two CHFs in a health ward, there was daily contact. However in all the health wards the CHFs mentioned that they felt isolated and would prefer to have more contact with the other CHFs even if this occurred only about four times a year and was limited to the region itself. In two of the wards the CHFs had some contact with one another but they would prefer more frequent and more official contact.

Meetings between the CHF and the CHWs are held monthly, usually on payday. In one of the wards the CHF also has weekly group meetings with approximately four or five CHWs in

different areas. Communication is initiated by either party when necessary. The CHF in one case said that she saw every CHW in the community once a fortnight (communication problems due to transport will be discussed later).

The CHFs regularly communicate with other people in the formal health-care system, for example the doctors, school nurses and clinic nurses. In one case it was mentioned that monthly meetings were held with the PHC team. CHFs also had contact with health-care personnel who were responsible for tracing TB defaulters and for treating kwashiorkor, marasmus and other conditions where it was necessary to arrange follow-up treatment in the community. Clinic sisters also provided feedback on the CHWs' referrals to the CHF.

The CHFs in Ward C had monthly contact with the different CHCs in the community. There was less contact in the other areas mainly because of transport problems. These problems caused the CHF in one ward to concentrate on meeting new and inactive CHCs. Communication is also initiated by both parties when necessary. The CHFs receive copies of the minutes of the CHC meetings.

Before a CBHP is implemented the tribal authority is approached by the CHF and the supervisor. Subsequent contact can be initiated easily by either party. Contact between the CHF and the tribal authority is also initiated by the CHCs when matters concerning the community need to be discussed.

Contact with the community is usually arranged by the CHCs and the local authority. Normally the meetings, in which everybody is free to give an opinion, are well attended. In areas where there are no CHCs or where they are inactive, problems arise in the organization of these meetings. When the community has a problem, contact is usually arranged through the CHWs and the CHCs. There is no regular contact between the CHFs and individual members of the community but there is no obstacle to the people meeting the CHF. Only in one ward did the CHF indicate that she avoided giving health education and referred any questions directed at her to the CHWs. The lack of transport limits the CHFs' communication with the community.

Communication: CHWs: The CHWs have little contact with the Amatikulu Centre. Some said that they had met a representative during their training or at the time of their examinations. All of them knew that the centre played an important role in the CBHP.

Generally contact with the supervisor takes place through the CHF. Sometimes the supervisor attends the monthly meeting if she has anything to discuss with the CHWs. It was mentioned in Ward C that if the supervisor had transport she sometimes visited them in the community for training and discussion purposes. On the whole the CHWs were satisfied with their communication with the supervisors.

Communication with the CHF can be initiated by either party. A formal meeting is held monthly. The CHWs and CHF also meet at the community meetings. The CHWs are free to visit the CHF at the hospital and in some cases also at home. Communication channels are open and the CHWs are satisfied with these channels. The CHWs in one ward mentioned that they would prefer to see the CHF more often but that transport problems prevented this. The CHWs in this ward also mentioned that transport to the hospital was very erratic so that they were not always able to visit the CHF when necessary.

Formal contact with other CHWs takes place at the monthly meetings held at the hospital. The CHWs of one ward also hold meetings, without the CHF, in a community centre if they have problems to discuss. The CHWs who live near one another sometimes have informal discussions.

Contact with other people in the formal health system mainly centres on the referral of patients and clients. The CHWs approach these professionals for advice and at times the latter are involved in their training. In all the health wards the CHWs have contact with the hospital and the clinic nurses - who treat TB, psychiatric patients, leprosy and malnutrition - and with the

social workers who help them with social problems. The CHWs mentioned that they often accompanied patients to the clinic or wrote a note for a patient to take to the clinic to facilitate communication between the community and the clinic staff. The CHWs in general valued this contact since they felt that they learned a great deal and managed to help the people in their community. Also, they felt that the health professionals considered their work of value. However some CHWs mentioned that people whom they had referred to the hospital were occasionally treated rudely by the staff. These people then blamed the CHWs for referring them.

The CHWs in Ward C stressed that they had formal contact with the community doctor at their monthly meetings - this interest in their work was greatly valued. In the two health wards where malaria was a problem the malaria team from Jozini co-operated with them.

Where communication with the CHCs was concerned, the CHWs mentioned that either party could initiate a meeting. Regular meetings were held in the community about once a month as arranged by the chairman of the CHC. In general the CHWs were satisfied with the communication but some felt that not all the CHC members were as active as they should be.

The CHWs do not usually have communication with the local authority but they have the opportunity to contact them directly during community meetings. CHWs who live near an *induna* sometimes informally discuss small problems with him. Some of the CHWs in one ward mentioned that there was a lack of real communication and co-operation between the tribal authority and themselves; the tribal authority viewed the CBHP as being an extension of the hospital. Some *indunas* considered that they were responsible for the community's social welfare and resented the CHWs' referring people with social problems to the social worker.

Communication with members of the community occurs daily during home visits. Further communication takes place during community meetings. Communication channels are open between the CHW and the community, although at times they experience difficulties in finding people at home during their home visits and also with some people's refusal to heed their advice.

Communication: CHCs: Some of the CHC members in the different health wards mentioned that they had met a representative from the Amatikulu Centre but otherwise had not had any contact. However they were aware that the CHFs received their training at Amatikulu.

Contact with the supervisor in the four wards was described as respectively: - no contact; don't know her; seen her at about three meetings, and see her when we need her.

The CHC members in general said that the committee invited the CHF to attend both the CHC and the community meetings. On the other hand the CHF sometimes requested meetings with them either in the community or at the hospital. Communication was satisfactory - problems were usually discussed in general terms without singling out a particular person for criticism or praise. In one ward the CHC members said that the CHF had only spoken to them before they had begun the programme but they had not seen her since then. Although they had tried to arrange meetings she could never attend because of bad weather and transport problems. Transport problems were also mentioned as being an obstacle to regular communication in two other wards.

Communication with the CHWs is initiated by either party when the need arises. The supervisor sees the CHWs every day and some of the CHC members said that they saw the CHWs at the monthly meetings. In one ward some of the CHC members said that there had been no meetings as yet. Communication was satisfactory and contributed to the effectiveness of the CBHP.

Communication between CHC members mainly occurs during committee meetings which are arranged by the chairman or the supervisor. In general the CHC members viewed the members of their own committees as being active although in Ward B a chairman mentioned that he was not very active.

The CHC members indicated that the CHF normally initiated communication between the local authority and themselves. The chief or *induna* could also convene meetings if they wished to speak to the CHC members. Although most of the CHC members said that they were satisfied with their contact with the *induna*/chief it seemed that some of the *indunas* did not take an active interest in the community.

It was mentioned that CHC members were in daily contact with the community members and that the latter could complain to the CHCs if they were dissatisfied with the CHWs. The CHC members did not normally visit homes but did visit those households which did not heed the advice of the CHWs. The CHFs and the CHWs in all the health wards said that they were dependent on the telephone/radio to get in touch with the rest of the health team but that these services were completely inadequate and hampered their performance. However all possible communication channels - schools, clinics, hospital visitors - were used by the members of the CBHP if they needed to contact one another. For instance, messages to CHC members could be sent via the school principal and the children to their parents.

4.3.2 Functions

Functions: Supervisors: All the supervisors said that their most important function was to supervise and support the CHFs. They were also involved in the training and support of the CHWs and the CHC members regarding the PHC.

The supervisors and the CHF visit the tribal authorities to familiarize them with the CBHP and also visit whenever else the need arises. They attend community meetings to assist the CHFs in the orientation of the community regarding the programme as well as to show the community their support for the CHFs, CHWs and CHCs and to help solve problems. They visit people in the community with the CHF if necessary.

They are responsible for keeping the matron, the medical staff concerned, and the Amatikulu staff informed on any problems encountered as well as the extent to which the aims of the CBHP are being met.

The supervisors are not only involved in service functions (for example preventive actions) but also in developmental functions such as mobilizing the community to implement projects and monitoring the progress of these projects.

Community projects encouraged by the supervisor include the provision of a safe water supply (for example spring protection, reservoirs and piping systems), the building of toilets, gardening (individual and communal), digging rubbish pits, and building both residential clinics and huts for use by mobile clinics. An under-five clinic was established after a survey on immunization in which the CHWs assisted.

The supervisor in one ward mentioned that she was trying to establish a referral system between the CHWs and nurses in specialized fields such as psychiatry, leprosy care and TB, to facilitate the follow-up of these patients.

Another of the supervisor's functions is to assist the CHFs in their monthly planning of their work. It was mentioned that it was not always possible to follow the schedule due to transport problems. In one ward the supervisor indicated that she was not involved in the planning of the daily activities.

The interviews with personnel in the other categories indicated that the CHFs apparently expected the supervisors to know exactly what the CHFs' role and functions were and to give feedback on their performance. They also expected the supervisor to attend meetings with them and to support them during meetings with the community or with other health team members. In general the CHFs were satisfied with the supervisors' performance although it was

mentioned in one ward that the supervisor did not really know what the CHF was doing. The lack of time seemed to hamper the supervisors' involvement in some health wards (A, B and D). In two of these the supervisors were also involved in nursing administration duties which took up most of their time.

The CHWs mainly expected support in the form of appreciation of work well done, encouragement in general and feedback when their work was below standard but they indicated that their contact with the supervisor was limited. Some of the CHWs (mentioned in Ward B) also expected the supervisor to mediate between them and the local authority about the funding of projects.

The CHC members basically held the same expectations as the CHWs did. However in one ward none of them knew about the supervisor while in another they were uncertain about her functions.

Functions: CHFs: The CHFs viewed the support and supervision of the CBHP as their overall function. The most important functions which were identified in all four health wards included:

- The orientation of all the people in the community, including the tribal authority, regarding the CBHP. (A problem here was that the community meetings were not always well attended.)

- The training of:

  - The tribal authorities, mainly in respect of their administrative duties. They are informed *inter alia* of the conditions of service of the CHWs and the appropriate employment procedures. They are also instructed about applying for funds both for the CHWs' salaries and for the implementation of community development projects.

  - CHC members.

  - CHWs.

- Involving the community in the assessment of their needs. The programme and the training of the CHWs are adapted according to the identified needs; for instance in one ward diarrhoea was identified as a serious problem and the CHWs were therefore primarily trained to treat diarrhoea with oral rehydration. The CHFs also provide health education while they are in the community with the CHWs. The CHFs play a prominent role in assisting to identify the developmental needs of the community, implement new projects and maintain existing ones. The CHFs stated that they were involved with these projects in a practical way, for instance, in teaching the CHWs and the community members how to make doorsize gardens.

The CHFs said that apart from these service and developmental functions they performed various administrative tasks, for instance they helped the CHWs with their employment applications and were responsible for delivering these to the departments involved in the employment process (the hospital administration, the tribal authorities and the Amatikulu Centre). Routine administration involves checking the CHWs' timesheets and attending to their pay arrangements. When the clerk section is short-staffed, the CHF in one ward sometimes prepares the paysheets, which is really the hospital clerks' duty.

The CHFs are dependent on the availability of transport for the execution of their functions and therefore plan their activities (community visits and the training of CHWs) monthly in collaboration with the supervisor and the transport officer (in three of the wards). The CHF in the fourth ward mentioned that planning was not really possible and that the CHWs, CHC members and the community were visited when the need arose provided that transport was available.

The other categories were also asked about their expectations of the CHFs. The supervisors appeared to agree with the CHFs' interpretation of their functions. They emphasized that the CHFs should teach the CHWs, both during educational sessions and by example, to be patient and understanding toward the community. They felt that in general the CHFs fulfilled their expectations.

The CHWs expected the CHFS to encourage and praise them when they did well, help them when they made mistakes and help them establish new projects. The CHFs should also report everything which the CHWs considered to be worth reporting to the supervisor. In general the CHWs were satisfied although in Ward A it was mentioned that they would prefer the CHF to spend more time with them.

Similarly to the CHWs, the CHC members expected the CHFs to be actively interested in the community and its problems and to interact with other authorities, such as the Department of Agriculture and the tribal authorities, that were involved in developmental projects. On the whole they were satisfied with the CHFs' efforts although these were not always successful. The CHC agreed in Ward D that the CHF's performance was excellent.

The CHC members also expected the CHFs to arrange for them to receive wages but this had not yet transpired.

Evaluation of health education sessions: CHFs: In order to evaluate qualitatively the use of the adult education method employed by the CHFs and CHWs in health education, the researchers observed sessions in each health ward which were led by members of these categories. Approximately 20 questions served as criteria for the evaluation. A combined overview of the four health sessions conducted by the CHFs will be given here and the major differences will be indicated.

Owing to the necessity of arranging for the CHWs to attend the sessions, the CHFs had to be told about the observation beforehand. They (CHFs) therefore could prepare for the lecture.

Three of the CHFs chose their topic for discussion before the meeting with the CHWs, and these topics were nutrition, diarrhoea and TB respectively. The CHF in the fourth health ward chose the topic after discussions about the problems encountered by the CHWs. Of a number of problems such as hypertension, malnutrition and tuberculosis, TB was chosen since it was the subject most frequently encountered.

The CHFs introduced the CHWs or allowed them to introduce themselves to the researchers and explained the presence of the latter. The CHWs were then asked to seat themselves in a circle with the CHF sitting as part of the group, which provided a setting for informal discussions. The atmosphere was relaxed and informal and the CHFs asked the CHWs to participate freely and to listen attentively to the opinions of the others.

In one area where the health education session followed the problem-solving session, the atmosphere was slightly less relaxed. Initially the CHF asked each CHW in turn about her problems, writing all comments down. She followed these up by asking each CHW in turn to expand on the problem and during a third round asked each CHW for solutions to her own problems. Interaction was not encouraged and the CHWs did not offer any comments on each other's problems. The CHWs seemed to be at ease although the structure of the health education session was rather formal, unlike that of the other three health wards.

In each of the four sessions the CHFs used a preliminary item to introduce their subject - the TB flip chart, the diarrhoea flip chart, pictures in a nutrition manual and a problem posed by a CHW. There was active participation throughout and everyone in the groups was eager to give answers to or opinions about the many questions asked by the CHFs. The CHFs allowed individual thinking by letting everyone express an opinion and showed respect for the CHWs by treating all their opinions and even incorrect answers seriously. The group was sensitive to the

opinions of their colleagues and listened attentively to them. The CHWs did not ask many questions, mainly because these subjects were being revised and they were already knowledgeable about them. Another reason was that the CHFs posed questions continuously.

With the exception of the CHFs' choosing their topics for discussion, the group made decisions by considering all the opinions and reaching consensus. For instance during the nutrition sessions the different food groups were discussed and suggestions were evaluated for methods of food preparation to ensure proper nutrition. The group also decided jointly when to move on to another topic after ensuring that the previous topic was clear to everyone.

During these sessions the CHFs managed to ensure the full attention of the whole group, summarizing the solutions and opinions, adding information when necessary (information was gained from the group mainly by asking questions) and reinforcing the correct responses in different ways and without making the session boring. Occasionally it was felt that more information could be given, but it was also observed that the most pertinent action-oriented information was given, while interesting, but less salient information was sometimes omitted.

The emphasis was mainly on generating knowledge which could lead to action, for example the prevention of diarrhoea by means of food protection, the early diagnosis of TB and proper food preparation. The subjects discussed were not really oriented to skills, although in one health ward persuasion skills, such as persuading people to take action aimed at the early diagnosis of TB, were discussed. In another ward where the CHWs' problems were discussed, the opportunity to demonstrate or discuss persuasion skills was lost when there were complaints about people refusing to visit the clinic.

The learning that occurred during the sessions was relevant to the life and working conditions of the CHWs and the actions discussed were feasible. In a discussion afterwards with the CHWs it appeared that they viewed the CHFs as being highly credible, knowledgeable and skillful in conducting health education sessions.

In general the sessions were regarded as most successful and as complying with the requirements for adult education.

Functions: CHWs: The CHWs view home visiting as their most important function whereby they obtain an overall picture of health-related matters in the home and attend to these matters. Information on occupancy, the ages of the occupants, their health status, their personal and environmental hygiene, etc., which is gained during the first visit to a home, is recorded on a home-visit card. The subjects discussed and the improvement in conditions are recorded during subsequent visits.

They try to visit each home every four to six weeks and more often if a particular problem arises. They discuss matters individually or in small groups, with everybody participating and asking questions. They attempt to involve all the people even those who are not talkative. The children's immunization cards are also checked during home visits.

It seems that the CHWs' curative function is relatively limited. They do not supply medicines but encourage people to keep a small supply of basic medicines to treat minor illnesses. They do provide first aid and treat mild illnesses such as diarrhoea as well as small wounds ("smaller than the hand") and minor burns.

Only those materials and substances available in the home are used, for instance, diarrhoea is treated with oral rehydration fluid and wounds are cleaned with a solution of water and chlorine bleach and dressed with clean cotton cloths. When the CHWs treat these conditions they also teach the people how to do this themselves. During subsequent visits they check that it is done correctly.

Other health education is mainly directed at the prevention of illness and the promotion of health, for instance: motivation for the immunization of children; female education such as

prenatal and postnatal care and advice on nutrition, personal hygiene and non-restrictive clothing, etc.; breastfeeding, the weaning of infants and nutrition (for example the importance of the five nutrition groups); personal hygiene (for example cleanliness of body and clothing) and environmental hygiene (for example sweeping homes and yards, building toilets and digging rubbish pits); and the prevention of common illnesses such as diarrhoea, TB and malaria.

This example of visits recorded on a typical home-visit card indicates the wide variety of subjects covered by the CHWs during a little more than eight months: cleanliness, epilepsy, malaria, kwashiorkor, pregnancy, immunization, breastfeeding and toilets.

Since AIDS is currently regarded as one of the most serious threats to health it is an important health education topic. Although AIDS was not specifically mentioned as a health education topic, the CHWs were questioned on the spread and prevention thereof. In general the basic concepts of the spread and prevention were well understood as was the fact that AIDS is incurable. The personnel of the other categories interviewed were also questioned on this topic. The supervisors and the CHFs indicated that AIDS was discussed with the aid of pamphlets in their monthly health education sessions. The CHF in one ward said that AIDS was a confusing subject, she did not feel comfortable about discussing it and relied heavily on her previous supervisor to help her with health education. The CHF in another ward said that the people did not really believe that AIDS existed. Some of the CHC members in this ward said that AIDS could be cured but that it was difficult to do so, while elsewhere it was said that AIDS could be cured by injections.

Attention is also paid to health-related community development with the aim *inter alia* of preventing endemic diseases. For example the CHWs encourage the community to build toilets, make gardens, ensure safe water supplies, build huts to serve as mobile clinic points, and take environmental precautions against malaria. The CHWs in co-operation with the community identify and monitor the progress of these developments. They encourage community members to attend meetings where ways of improving the standard of living are discussed. In cases where a number of households are affected by the same condition, a community meeting may be called to discuss the problem. When only a few households are affected a meeting is held with the members of only these households.

The CHWs emphasized that they regarded themselves as the link between the community and the formal health structure. They did follow-up visits of discharged patients for the health personnel and they were involved in the early detection of conditions such as malnutrition in children and TB, etc. The CHWs saw the referral of these and other people in need of professional assistance as a vital service which they performed for the community. At times they took patients to the hospital/clinic and acted as mediators. Some of the CHWs mentioned that they also assisted with the weighing of children at the clinic.

They plan their activities in advance, ensuring sufficient flexibility to visit people in need of extra attention more frequently and yet being able to visit the other households regularly enough. They prepare health education topics for the home visits but adapt their topics as the need arose.

During interviews with members of the other categories, the supervisors indicated that they expected the CHWs to be aware of the needs of the community, to liaise between the community and the formal health service and to perform these functions with understanding and frankness. On the whole they were satisfied with the CHWs' performance but at times there was a need for additional training and motivation.

The CHFs expected the CHWs to perform their functions conscientiously and in general they were satisfied. The CHF in Ward D was of the opinion that in areas where the CHCs were less active the CHWs automatically did not work well. The CHF in another ward felt that the CHWs did not always perform as well as they should, owing to the lack of transport which prevented her from supervising them regularly.

The CHC members in general expected the CHWs to provide health education to the community and to set a good example. They expected the CHWs to report to their supervisor daily and also when problems arose. They wanted the CHW to liaise with the CHF when the CHC members needed her help. On the whole the CHC members were satisfied with the CHWs' performance. In Ward D the CHC members were most enthusiastic, mentioning that the CHWs had done a great deal for the community and that there were fewer cases of miscarriages and certain preventable diseases than had been the case previously.

Evaluation of health education sessions: CHWs: In each of the health wards a researcher accompanied a CHW on her visits to the community, in order to observe health education sessions in the homes.

The researchers noticed on arrival at the homes that the CHWs were cordially received by the members of the households. The CHWs introduced the researchers and the group (small groups of up to five people), who settled themselves spontaneously in a circle with the CHW forming part of it. The sessions took place either indoors or on mats under the trees.

All the CHWs began their sessions by enquiring about the health and wellbeing of the family and deciding in consultation with the group what should be done about health problems. The researchers observed that in homes where there were small children the CHWs examined the pre-school cards. One of the CHWs decided jointly with the group on the topic for a health education session while the others discussed subjects according to their planned programme: advantages of antenatal care and scabies; nutrition; diarrhoea and TB; and immunization and diarrhoea respectively.

Various ways of starting the session were used, for instance by discussing the relevance of the topic, using a flip chart or using a problem identified during the earlier discussion.

Each group was invited to participate freely by asking questions and giving opinions. There was active participation throughout, stimulated by the CHWs' frequent questions. The latter seemed to be sensitive to the opinions of the individuals in the group and included everybody in the decision making, for example one CHW (Ward A) acknowledged the *ugogo's* experience of life and her role in making decisions on health matters and thereby ensured that the *ugogo* would reinforce the CHWs' health messages.

During the health education sessions the CHWs tried to elicit solutions from the group and provided information where necessary. The CHWs considered the households' educational background, and provided the elementary information sufficient for action. The sessions were also of short duration which ensured full attention. The CHWs facilitated the discussion by watching for and following up signals that people wanted to give their opinions.

Although new information was provided, it was observed that there could have been more repetition/summarizing to facilitate learning.

The sessions were generally aimed at ensuring knowledge about and positive attitudes toward the prevention of illness. All the discussions were directed at feasible actions, although the actions could not be observed.

From discussions with the household members after the sessions it was established that they valued the CHWs' advice and interest and tried to follow the advice. The researchers also questioned the household members on the subjects discussed during the previous sessions and found that they had a sound knowledge about applying the advice, for instance in preparing oral rehydration fluids, preventing diarrhoea and in treating scabies.

An overall view of these learning situations is that they accorded with the principles of adult education since they were learner centred and posed problems. There were also elements of self-realization since the participants were encouraged to think about their own solutions to their problems. In as far as was possible in these particular sessions, action was emphasized.

Functions: CHCs: The CHC members in general viewed their main function as being to support the CHWs. They encouraged the community to follow the CHW's advice on personal and environmental hygiene (for example personal cleanliness, the tidiness of surroundings, building toilets, digging rubbish pits, making gardens), and on visiting the hospital/clinic (for example TB patients).

They act as the mediators between the community and the local authorities, for instance when the community members refuse to follow the CHW's advice or when funds are needed for community health projects. The CHC members also supervise the CHWs. For example one member of the CHC, who acts as supervisor, checks the timesheets. In general the CHC members hold monthly meetings with the CHWs and if the need arises, they arrange a community meeting with the co-operation of the *indunas*. One chairman of a CHC felt that the community health projects were not the CHCs' responsibility but rather that of the CHWs.

Some of the CHC members commented that they had either received no job descriptions or were given verbal ones only when they would have liked written ones (e.g. Ward B).

Where the other categories were concerned, the supervisors indicated that they expected the CHC members to support the CHWs. The supervisor in one ward mentioned that she was satisfied that the CHC members were all active and supported the CHWs, but the supervisors of the other three areas were not fully satisfied. They said that some CHCs were inactive (in one ward the term "dying committee" was used frequently) and sometimes projects failed due to their lack of participation. They often failed to attend meetings and needed constant encouragement. Some reasons suggested for their inactivity were that they were not being paid and that there was not sufficient supervision because of the lack of transport. Another reason, implied by the supervisor in Ward B, was that the CHC members were unsure of their duties. It was mentioned elsewhere that although some members might be inactive, an active chairman would ensure an active community.

The CHFs held views similar to those of the supervisors, with one exception. The CHF in that case felt that some of the CHCs were inactive and difficult to motivate - sometimes only about five members were active. The reasons were similar to those given by the supervisors. The CHF in Ward D suggested another reason, namely lack of transport.

The CHWs mainly expected the CHC members to support and encourage them, give them full co-operation in projects, share ideas with them, reinforce their work in the community and give them feedback (praise and complaints). On the whole the CHWs were satisfied with the work of the CHC members although in Ward B they mentioned that it was difficult to obtain the full co-operation of the CHCs.

4.3.3 Selection

Questions were not asked specifically about the selection of supervisors. However it appeared from the interviews that they were chosen on the basis of their qualifications and experience. All the supervisors were registered nurses and midwives and with the exception of one were also registered community health nurses. Some of the supervisors felt that without training in community health nursing they would not be able to do this work properly, since general nursing did not equip them adequately for community work and the training that they received for their role as supervisor was very elementary.

Selection CHFs: The selection procedure for CHFs was discussed with both the CHFs and their supervisors. It was established that the matron of the hospital, in conjunction with others in the formal health structure, usually approached persons deemed suitable for the vacant position. If these persons were interested in the post they applied for it in writing.

The supervisors felt that for CHFs to be effective they should be reliable, responsible and be good workers able to work in the community without constant supervision. They should be community oriented, for instance willing to find out precisely what the community needed and

should have good interpersonal skills, for instance be approachable. They should preferably have lived in the community for a long time, have leadership qualities and be able to set an example, for instance by dressing neatly.

In general the supervisors felt that the selection procedure was fair and adequate. However some felt that vacant posts should be more widely advertised among potential applicants. The comment was also made that people who were unsuitable for community work could impress favourably during interviews but could find out later that community work was not really their line. It was suggested that a prospective CHF should work in the community for a trial period.

The CHFs generally did not know which selection criteria, other than qualifications, the matron used but mentioned a number of criteria which they considered essential for a good CHF: dedication and perseverance; responsibility and reliability; good interpersonal communication, insight and patience; the ability to work hard; identification with the community; love for the community; a positive attitude; maturity; experience in community work, and residence in the community for a relatively long time.

The CHFs felt that the selection by the matron was fair, but the researchers gained the impression that the feeling was derived more from acceptance of a traditional hierarchical way of doing things than from a feeling that a democratic process of selection was taking place. The CHFs seemed to have complete faith in the matrons' decisions.

As was true of the supervisors, one CHF (Ward D) felt that previous experience of community work should be a criterion in the selection of CHFs. The CHF in another ward would have liked discussions with the Amatikulu staff and other CHFs on the programme before applying to do the course.

Selection: CHWs: The following selection procedure was described by respondents in all four of the study areas. Representatives of the formal health service discussed with the chief of the community the aims of the programme, the possibility of implementing the programme locally and the roles of the formal health service and of the community in the implementation and management of the programme. The characteristics and roles of the CHWs and CHC members and the expectations of the community were also discussed.

A public meeting to which the whole community was invited was then convened by the *induna*. During the meeting the community was fully informed of the aims of the programme and was given guidance on the selection criteria for CHWs. Although a few of the CHWs did not know any of the criteria, most of them mentioned a number of criteria viewed as important by the community:

- Have good interpersonal skills - "should be able to listen to all kinds of problems", "speak nicely to people", "should not be rough and cruel", "should not be shy", "should not be short-tempered", "should be able to motivate the community to become involved in the programme"
- Maintain confidentiality and be trustworthy - "should be fair", "people should be open and feel free to discuss their problems with a CHW"
- Identify with the people - "should have lived in the community for a long time", "should be kind and loving", "should like to work with the community", "should be humble and not above the people"
- Be an example for the community
- Have high moral standards
- Be well known in the community, for example, attend community meetings regularly
- Have dedication and perseverance

- Preferably be female
- Preferably be literate.

The respondents stated that when a new programme was initiated, CHWs were chosen - using the above criteria - from among those people who were interested in becoming CHWs. The same procedure was followed when a post became vacant. In the older programmes workers had begun as volunteer workers (in the early 1980s). When the formal programme was implemented and CHWs began receiving payment, the CHWs were chosen by the community from the volunteer workers. The CHWs generally felt that the selection procedure was fair and they emphasized the fact that they were chosen by the community and were therefore accepted by the community. In one of the more recently established branches of the CBHP it was found that two of the chief's daughters had been chosen as CHWs. Both their mothers wanted them to be CHWs and this possibly influenced the community's choice. Initially the CHF was worried that they might not be good CHWs but now felt that they were among the best.

All of the CHWs interviewed were female and had lived in their communities for between seven and 40 years. Their educational level ranged from Std 2 to Std 8. It appears from the data that the respondents in the older branches of the CBHP generally had a lower standard of education.

Selection: CHCs: The same selection procedure as that for CHWs was followed. The selection criteria that the CHC members considered important included

> setting an example, for instance being clean, maintaining a garden; having good communication skills; identifying with the people; having good supervisory ("to look after the CHWs") and problem-solving skills; being a neutral link between the community and the CHWs; being active and attending meetings; maintaining high moral standards; being able to maintain confidentiality; having perseverance, and preferably being literate (especially office bearers).

The CHC members felt that the selection process was generally fair. However in one ward a CHC chairman reported that he had been selected *in absentia* - both as a member and as the chairman. He was upset about the added responsibility since he was already deeply involved in community affairs. He was extremely negative as well as uninformed about his role.

4.3.4 Training and continuing education

Training: Supervisors: The supervisors were all registered general nurses and midwives. Most were also registered community health nurses and therefore had a good background in primary health care. Their responses about their training as supervisors varied although they all felt that they were not adequately trained for this role.

In two of the health wards the supervisors mentioned that they had not received any formal training at Amatikulu but that they had been oriented by predecessors who had very little time to give them information. They felt that they had not been adequately prepared for their role. A previous supervisor (until two months before the survey) said she had simply been told to be a supervisor. Circumstances (pregnancy and transport problems) had prevented her from going to Amatikulu and she had therefore been informed of her role by the CHF only.

In the other two health wards the supervisors indicated that they had attended a three-day workshop at Amatikulu but felt that the experience had not equipped them adequately for their role. They had to rely largely on the CHFs for practical information about the programme, such as writing reports, administrative work and supervision. They all felt that they would like to receive more training so as to cope with their duties adequately.

Training: CHFs: The earlier courses had taken two years to complete but currently training took place at the Amatikulu Centre over a period of 18 months - approximately four weeks at a time were spent at the centre with periods of five months in the community in between.

The trainers were health care staff from the Amatikulu Centre and professionals from related fields. The trainers from the Amatikulu Centre (most of whom were Zulu) had an intimate knowledge of the culture and socio-economic conditions of the communities involved in the CBHP. It appeared from the interviews that the trainers had an excellent understanding of the dynamic structure of the communities and used it to the best advantage of the CBHP by involving both the tribal authorities and the community members in decision making.

Although each CHF had an immediate supervisor in the health service, one member of the staff of the Amatikulu Centre was also involved in each CHF's supervision and would enter the community with the CHF when problems arose. Their immediate supervisors were not involved in the CHFs' training. One supervisor expected to be involved in the future training of CHFs.

The elements of primary health care as set out by the WHO was the point of departure for the CHFs' curriculum. The basis of their training comprised the particular health problems of rural KwaZulu, for example tuberculosis, malaria and malnutrition; also long-term development goals, and the expressed needs of the community (for example sanitation and education).

The CHFs mentioned that their training also gave them a good grounding in the nature and interactions of a community. They pointed out that training in communication and organizational skills was emphasized, such as how to approach and motivate the community, and how to train the CHWs, the tribal authority and the CHC members.

They had been taught by adult education methods (and used it in their own teaching). The methods used were mainly group discussions, practicals, role-playing, peer appraisal of presentations and occasional lectures. The basic procedure was that a group decided on a topic for discussion and that everyone participated in the discussion which was aimed at generating solutions to problems and at acting on these solutions.

The CHFs felt that their active participation in the learning process led to feelings of greater self-worth. Some of them mentioned that they experienced their initial introduction to the adult education method as very difficult since they had previously been taught mainly by the lecture method. Typical responses included: "I felt that I was a better person because I have learned more", "I was too shy to talk in front of people, even to look at them, but after the training it was no longer a problem". In general they felt that they previously could not teach but after the training they felt more confident and were better able to listen to, observe and understand people.

The CHFs in general said that their initial training was sufficient to equip them for their role and for teaching others. However the CHFs who were part of the first group felt that the course had improved and that the subsequent training was better.

The CHFs were satisfied with their examination which took the form of a written paper and a practical session (OSCI). The OSCI was considered a better method of examination than the ordinary practical that they had experienced in nursing. However a comment was heard that it was a frightening and difficult experience since they had not previously encountered this method of examination.

All of the CHFs expressed a need for continuing training. It was mentioned that an annual workshop was held at the Amatikulu Centre. All of them had attended a symposium for CHFs (which took place once a year) and had benefited from it. The CHF in one ward mentioned that occasional meetings were held with the CHFs of a neighbouring health ward. The CHFs expressed a definite need for more regular contact with other CHFs, even if only on a regional

basis, and with staff from the Amatikulu Centre. The reasons mentioned included their feelings of isolation - since often there was only one CHF in a community - and their desire to share problems and solutions with other CHFs. Specific training needs included more information about methods of motivating the community and the CHWs to participate actively in projects. One CHF expressed a need for knowledge about midwifery because of the frequent enquiries about this subject.

Training: CHWs: The CHWs are trained in their specific communities. In each health ward the training takes place in health centres and practical experience is gained by means of home visiting. The health centres include the hospital, other community facilities or huts built by the community which are also used as visiting points for the mobile units.

The CHWs indicated that they were trained (through the medium of Zulu) for periods which varied from one ward to another: one to three months, eight to nine months, or 11 to 12 months.

The reasons had to do firstly with a lack of transport which might either cause the timespan of a course to be extended because of the infrequent visits the CHF was able to make to the CHWs, or to be contracted when trainees congregated close to a hospital - staying with relatives while undergoing an intensified course. In other cases the educational level of the trainees was relatively low, requiring a longer period of training.

The training of the CHWs in all the health wards is mainly conducted by the CHFs with the assistance of the CHFs' supervisor. Occasionally other health professionals such as social workers and physiotherapists give talks to the trainees. It was clear that the CHFs were well grounded in respect of the cultural background, the socio-economic situation and the dynamic structure of the community owing to both their training and their period of residence in the area. They were therefore well able to prepare the CHWs for their work in the community.

Apart from the above-mentioned community-related factors the CHWs received training in:

- the elements of PHC as identified by the WHO (the CHWs mentioned *inter alia* the prevention of illness, the treatment of common diseases, the weaning of infants, nutrition, hygiene, first aid and, GOBIFFF - the acronym for Growth chart, Oral rehydration, Breastfeeding, Immunization, Female education, Family planning and Food/Feeding),
- communication skills (for example, how to introduce themselves, how to talk to the community, how to ask questions and how to provide health education),
- practical skills (for example, dressing of wounds, preparation of oral rehydration fluids),
- administrative skills (for example, the writing of reports and filling in home-visit cards).

An adult education method was used in their training. Training sessions consisted of discussions aimed at problem solving, and of the demonstration and practising of skills.

The CHWs felt that the knowledge and skills gained from their training enabled them to improve their own health and to teach the community about the prevention of illness and the promotion of health. For the first time they realized that illness and handicaps need not merely be accepted but that they could themselves take control; for instance, a handicapped person need not be limited to staying at home but could be helped to fulfil a useful role in the community. They also learned that it was beneficial for a pregnant woman to visit the clinic from the third month of pregnancy onwards. "At first we were blind but now we are enlightened, the mist has been removed."

The CHWs were satisfied with their training and thought they could even train other CHWs. Some indicated that they would have liked to learn more about contraceptives (because they

encountered problems with teenage pregnancies), the various side effects of medicines, the delivery of babies and AIDS.

The CHWs were satisfied with the form (and the results) of their examination which consisted of a written and a practical (OSCI) part. In all the health wards the CHWs indicated that they received formal in-service training - usually once a month on payday. These sessions focused on the problems they had encountered during their home visits, as well as on revision. Some of the CHWs said they would like to learn more about medication dosages and why treatment differed for people with the same illness, for example hypertension. They also mentioned that they would like to learn to drive and use a two-way radio.

Training: CHCs: In general the CHC members indicated that they received some training from the CHF. They were trained in the functions of a committee, such as supporting the CHWs. They were taught administrative tasks, such as conducting meetings, writing minutes and supervision (keeping timesheets).

They received elementary training in health and hygiene so as to understand and promote the programme. However in two of the health wards (A and B) some of the CHC members said that they had received no training. Those respondents who had been trained mentioned that they were satisfied with the basic training and that it gave them confidence: "Now we know that we are capable of supporting the community."

The need was expressed for a manual on the functions of the CHCs because they found it difficult to remember everything. Others wanted the training to continue but had no subject preferences. Some mentioned that they would like to learn more about certain subjects, such as first aid - for example for snake bite - and the treatment of diseases such as TB. Others said that they would like to learn how to sew and build toilets in order to teach others.

One of the CHFs mentioned that the training of the CHC members was extremely difficult and was often delayed since often only two or three members were literate. Discussion was time-consuming and participation poor so that one often had to resort to lecturing. Because some of the CHC members were illiterate they tended to forget the dates of their meetings.

On rainy days they had no shelter for their meetings as they normally met under the trees.

4.3.5 Support and supervision

Support and supervision: Supervisors: The supervisors viewed supervision as being mainly of a supportive nature and not as a means of control and inspection. Their local support, both morally and practically, came mainly from the hospital staff. The matron played a major supportive role and was their immediate supervisor (all four health wards). The superintendent, the doctors, the transport officers, the CHF and the CHWs were also mentioned as being supportive. Nevertheless clinical demands usually took precedence over CBHP needs. In all four health wards the staff members of the Amatikulu Centre were mentioned as being very supportive.

The supervisors said that they were mainly responsible for supervising the CHFs' work. They would prefer to spend more time in the community - at least meet all their appointments - but clinical and administrative demands on their time took precedence. Moreover, they felt that they were not sufficiently trained to supervise, and could therefore not give sufficient support to the CHFs.

Support and supervision: CHFs: The CHFs said that supervision meant having a full understanding of the role and functions of the persons supervised, sharing ideas with them, helping them solve problems and giving them moral support. Supervision was thus defined in terms of support rather than in terms of control and inspection.

Their primary supervision/support came from their supervisor and in general the CHFs were fairly satisfied with their supervision. Other hospital staff who were mentioned as being supportive were the matron, the medical superintendent, the doctors and other CHFs. However the CHF in one ward felt that the hospital staff and the supervisor did not really understand her role - she sometimes had difficulty in explaining her needs and problems to the supervisor and the matron. Elsewhere the CHF felt that there was inadequate support from the rest of the health team since PHC meetings were not satisfactorily attended because of clinical demands which were given priority. The Amatikulu staff were also mentioned as being supportive and in one ward the CHF felt that most of the moral and practical support came from Amatikulu. In the wards where there were two CHFs, they indicated that they assisted each other in the training of their respective CHWs and that they supported each other.

The CHFs explained that they supervised the CHWs, the CHC members and to a certain extent the community. The problems that the CHFs experienced with their own support also affected the support/supervision that they were able to provide. The lack of transport was again mentioned as a serious obstacle. The CHFs also experienced problems with the provision of stationery; for instance the forms that the Amatikulu Centre supplied took a long time to arrive and often there was either no paper in the hospital to photocopy these forms or the photocopying machine was out of order. This situation hampered the CHWs in the performance of their record-keeping tasks.

Opportunities to provide both moral and practical support were used when for example the CHWs visited the hospital on payday. Group sessions were held to provide both continuing education and a forum for case discussions and problem solving.

Indications of social distance between the CHFs and the community (CHC members and community members) were observed by the researchers in two health wards. For instance the CHFs were reluctant to enter homes and talk to the people when the opportunity presented itself. Possibly the CHFs were reluctant to seek contact with the people and thus bypass the CHWs. However in the other two areas the CHFs were observed to be on very friendly and easy terms with the people.

Support and supervision: CHWs: The CHWs considered supervision to mean that support was given by providing feedback on performance and by encouraging problem-solving discussions. The CHWs indicated that they were being directly supervised/supported by the CHFs and the CHC members, especially the supervisor, and that they were satisfied with this support. Support was also derived from the tribal authorities, the community and the hospital/clinic staff.

The CHWs felt that they did not always receive adequate material support (which could also be perceived as a lack of moral support), for instance timesheets and other forms often did not reach them on time; they had to buy their own exercise books (to use when the forms were not available) and ballpoint pens, and they had to pay for their own transport to and from the hospital.

The CHWs said that they supervised/supported the community. They felt that they could not give all the support that the community expected since they could not provide basic medicines and dressings/bandages. They would like particularly to help the poorer people in this regard. The CHWs had very few aids to their work, such as armbands and flip charts. Some of them indicated that the set of flip charts was an important aid to their health education task but that they needed more and a larger variety of flip charts to educate the community.

Support and supervision: CHCs: The CHC members saw supervision as looking after the people with whom they worked. They implied an element of control: "Looking to see if people do their work and then telling them to do the right thing."

The CHC members said that they were supervised by the CHF (who encouraged them and gave them feedback about their work), by the chairperson of the committee and by the local authority. The CHC members had different opinions about who provided them with the most

moral and practical support, mentioning any of the following: the CHFs, the CHWs, the tribal authorities and the chairperson of the committee.

The CHC members supervised both the community and the CHWs. The fact that they were supervising the CHWs who were paid for their work while they themselves were not paid, caused some of the CHC members to feel that support was lacking. Others felt that they wanted to do this work as a community service. Another factor which caused unhappiness was the fact that they had to buy their own notebooks.

4.3.6 Working conditions

Working conditions: Supervisors: Since the supervisors of the CHFs are a part of the formal health structure in which there are many career opportunities open to them and since they are not only involved in the CBHP but also have other nursing duties, their working conditions were not investigated. However, certain factors in their involvement in the CBHP with which they were not satisfied, for instance the lack of transport and time, have been discussed throughout the report.

However, supervisors were questioned about the working conditions of the members of the other categories in order to establish whether they were aware of factors that could affect the motivation and future prospects of these workers.

Working conditions: CHFs: During the interviews with the supervisors it transpired that some of the CHFs wanted to be paid more since they did much driving which was seen as an extra job. Others felt that the CHFs worked hard and had an extra qualification, therefore they should be paid more. In one case the CHF was said to be unhappy after she had received a circular promising a salary increase which never materialized.

There were no clear views about the CHFs' future but it was mentioned that a new bridging course of approximately the same duration as the training course for the CHFs would attract more staff nurses since they would become registered nurses with higher salaries, more status and better career prospects. A second opinion was that there was room for advancement for the CHFs. They could for example have their own preventive/promotive service which could even be separate from the hospital.

All the CHFs indicated that they enjoyed working with the community and did not wish to do anything else. However some aspects of their working conditions caused discontent:

- In three of the wards the CHFs stated that they were not earning enough since
  - they viewed driving as an extra job for which they should receive extra remuneration,
  - working in the community was more difficult than working in the hospital but the pay for both was the same,
  - they had an extra qualification and had two jobs (health educator and CHF) but did not receive extra pay,
  - other people, for instance the clerks in the hospital and teachers, earned more and had promotion prospects which the CHFs did not have.
- In the fourth ward the CHF did not complain about the salary but felt unhappy about having to use her own money for transport and about being refunded much later, which meant that she was short of money during the month. She also felt dissatisfied because she had to pay for her lunch when she visited the community (she normally took lunch to work).

- Sharing an office with the mobile clinic staff was a problem in one case since the CHF felt among other things that there was not enough space for his records (the researchers noticed that the office was indeed crowded at times). In other wards the CHFs also shared offices but did not complain.

Some of the CHFs' problems concerning their working conditions - such as transport problems and the difficult nature of their work - have already been discussed. These problems also have a negative effect on their job satisfaction and motivation. For example boredom sets in when the CHF spends too much time at the office when transport facilities are in short supply.

The CHFs had various views about their future. Two were happy to remain CHFs, one felt that future satisfaction depended largely on the improvement in working conditions while another had no expectations but was "looking for pension".

Working conditions: CHWs: The supervisors generally thought that the CHWs were satisfied with their working conditions although they sometimes found their work (mobilizing the community for change) difficult. They were not aware of complaints about salaries and mentioned that there were not many jobs available. In only one health ward did the supervisor feel strongly about the working conditions: "The CHWs work hard, they have long distances to travel, sometimes they are not accepted and there are problems. They are not paid enough, one cannot live on R200 a month."

Most of the supervisors had no expectations about the future of the CHWs although one felt that the CHWs could specialize (for example in leprosy, TB or nutrition) which would give them greater job satisfaction and would make them more enthusiastic and productive.

All the CHWs said that they enjoyed their work. They enjoyed having the knowledge and being able, for example, to help people to improve their health or to arrange pensions for disabled people. However there were certain factors which marred their job satisfaction. For example salaries were generally too low. Moreover their salaries compared unfavourably with those of other workers (e.g. hospital kitchen staff). Experience was not taken into account - new CHWs earned the same amount as did those who had been with the programme for longer periods. In at least one ward it was mentioned that CHWs were not always paid on time and sometimes had to wait for up to two weeks for their pay.

The CHWs said that transport was usually not a great problem since they worked close to their homes. However some of them had to walk long distances because the homes they visited were far apart, while others had to cover difficult terrain. Moreover transport was usually needed to visit the hospital and often there was no transport available. Some of the CHWs said that they would have liked having bicycles.

A matter which was frequently mentioned and was considered to be a problem by some of the CHWs was that they often had to work in rainy conditions and had no protection for themselves or their equipment (e.g. home-visit cards, timesheets and flip charts). In one area the CHWs mentioned that they were using their own briefcases which were becoming damaged. Their clothes were being worn out and it was difficult to appear neat at all times.

The CHWs did not perceive their future in terms of their individual career development but rather in terms of their community's development. They were very positive about the future with regard to health and developmental progress which would ensure a better future for their children.

Working conditions: CHCs: The supervisors generally felt that the CHC members were unhappy because they did not receive a salary. In one area only the supervisor said that the present CHC members accepted that the CBHP was a self-help programme - others who had expected payment were no longer on the committees. The supervisor in one ward said that she had told the CHC members that they might receive payment in the future because the CHWs had progressed from being unpaid volunteers to being paid workers.

On the whole the CHC members were satisfied with their working conditions and enjoyed their work because they considered themselves to be health educators. Where payment was concerned CHC members in two health wards (Wards A and B) said that they would prefer to be paid, even "if it is just a little", since the CHWs whom they supervised were paid. Although the CHC members in a third ward did not complain about not being paid, their CHF indicated that they (CHCs) wanted to be paid since they had to spend time in being trained and in efforts to plan projects.

As in the case of the CHWs, the CHC members saw their future in terms of the community's development. They were very positive and felt that all the people would be healthier than before.

4.3.7 Cost and financing

A study of the cost and financing of the CBHP was not within the scope of this research. However it appears from both the interviews and the Department of Health KwaZulu: Information Document on Community-Based Health Programmes, that the Department of Health supports the CBHP by providing grants to the local authorities to employ CHWs. The Department also directly provides training for the different categories in the CBHP.

When possible the community also contributes to the funding of developmental projects; for instance in one health ward it was mentioned that every household in one area had contributed R50 towards a water pipeline system.

Planning and costing of support services including the time spent and the transport required, should receive adequate attention especially before the expansion of the programme.

4.3.8 Monitoring and evaluation

The present formal study which is both qualitative and quantitative is only one way of evaluating the inputs, the activities and their management and the results of the CBHP. A less formal method of monitoring and evaluating these aspects is to do so on a continuous basis. The members of the various categories interviewed gave their views of the ways that this takes place within the CBHP.

Monitoring and evaluation: Supervisors: The supervisors mainly indicated that a needs assessment was performed in the community; the projects implemented on the basis of these needs were monitored against set goals within time limits, and the factors impeding or promoting progress were analyzed and evaluated. This was done by means of observation in the community and discussions with the CHFs. The supervisors' assessment of the CBHP was that it was a worthwhile programme since some of the goals had been attained, although much remained to be achieved.

The monitoring and evaluation of their own work as managers of the CBHP was done relative to goals set annually or bi-annually. This was done through self-assessment as well as through group discussions with the matron, a representative of the Amatikulu Centre and the CHFs, during which the annual/bi-annual reports were discussed. These reports focused on the problems posed by the community and on observation of the actions taken by the community. It was mentioned in Ward D that statistics such as disease incidence and hospital admissions were also taken into consideration.

The supervisors had no new ideas for evaluating the programme, but suggested that the programme could be improved by

- training more CHFs and CHWs,
- allocating transport to the CBHP,

- employing more community health nurses,
- more interaction (for instance visits) with a better established programme such as the Valley Trust,
- increasing the salaries of the CHFs and the CHWs, and
- more residential clinics which would also provide more contact for the CHWs with the formal health service.

Monitoring and evaluation: CHFs: Like the supervisors, the CHFs mentioned that the CBHP was based on a continuous needs assessment, that projects were monitored against set goals and that procedures were evaluated throughout. This was done by means of discussions with tribal authorities, CHWs, CHCs and the community whose decisions were guided by the CHF, as well as through discussions with personnel in the formal health structure.

As a rule the CHFs felt that the CBHP was worthwhile. However they sometimes found it difficult to work with the community because the people did not want to improve themselves, or with the CHCs because the latter required constant supervision. It was mentioned (Ward A) that much still needed to be done before the CHFs could feel satisfied. They were uncertain about whether or not they fulfilled the expectations of the programme. They did their best but felt there were certain constraints on their efficiency.

The following people were respectively considered to play the most important role in their (CHFs') own evaluation:

The supervisor, matron, superintendent and the Amatikulu staff
The supervisor
The supervisor and the Amatikulu staff
The Amatikulu representative, mostly.

Monitoring as described in three of the health wards is done by measuring the achievements against the goals. The CHFs' weekly/monthly reports on the progress of the CBHP, such as the number of patients referred to the clinics by the CHWs, the measures of illness prevention and the projects that have been implemented are discussed so as to monitor progress. During these discussions the CHFs are also actively involved in the examination of factors impeding or promoting the CBHP.

The Amatikulu representative in the other ward accompanies the CHF on visits to the community and attends the health education sessions held for the CHWs. Feedback on these sessions is given during discussions. In this ward the CHF uses the number of active CHCs and the examination results of the CHWs (which were indeed excellent compared to most of the other health wards) as the most important guidelines for measuring the effectiveness of the CBHP. This CHF has little use for monthly/quarterly written reports since there is daily contact with the supervisor.

Although there appeared to be no formal guidelines for monitoring, all the CHFs used goal achievement as a measure of their effectiveness. Monitoring and evaluation took place both by means of group discussions and self-appraisal.

It was suggested that the programme be evaluated by people outside the formal health structure who could visit people in areas with and without CHWs and compare these areas according to their respective health statuses and their developmental projects, such as sanitation and toilet building. Discussions with all the CHWs about their work in the community were also considered potentially valuable. A further suggestion was that the formal health staff (hospital/clinics) and all members of the categories in the CBHP should be involved in these discussions.

In the CHFs' opinion the CBHP could be improved by

- employing more CHFs,
- employing CHWs in the areas where there were none,
- holding more discussions between the community and the CHFs,
- holding combined meetings of the community and the hospital staff since the latter were well informed about the community's problems,
- adapting the CHFs' and CHWs' training courses to include malaria prevention - at the time of the study preventing malaria seemed to be the sole responsibility of the malaria team,
- conducting research into the effectiveness of the CBHP,
- co-operating with teachers in respect of health education, and
- making more transport available for the CBHP.

Monitoring and evaluation: CHWs: Although the CHWs were uncertain about formal guidelines for the monitoring and evaluation of the CBHP, they said that they assessed the health and developmental needs of the households and the environment, monitored the progress and evaluated the process. They felt that on the whole most of their efforts in the CBHP were worthwhile.

They indicated that their work was monitored and evaluated by the CHFs and, in one ward, by a doctor. This occurred during monthly group discussions attended by the CHF and the CHWs (and the doctor referred to) where everybody was free to voice an opinion. Their weekly reports, focusing on the number of visits, the number of households visited, the topics discussed during the visits as well as the number and progress of developmental programmes, formed the basis of these discussions. The CHF gave them feedback on the performance of their duties by way of general comment. At times when the CHFs visited the community they inspected the home-visit cards.

In general the CHWs were satisfied with the progress made but at times they felt that they did not fulfil the expectations of the programme, for example when people were stubborn and refused to follow advice. The CHWs suggested that the clinic staff should have access to their home-visit cards in order to understand the problems in the community better.

The CHWs also contribute to the formal statistical information by completing birth and death forms which are sent to the Amatikulu Centre.

Record keeping is a time-consuming activity. Depending on the educational level of the CHWs, writing the weekly report (based on the information on the home-visit cards) normally takes between 30 minutes and two hours. Some of the CHWs who cannot write very well take even longer ("it takes almost a day") and they need assistance from others, for example their children. These reports are however considered helpful since they portray what is happening in the community.

The CHWs indicated that the CBHP could be improved if there were greater co-operation with the schools and if more CHWs were employed.

Monitoring and evaluation: CHCs: The CHC members said that they monitored the CBHP by following up health and developmental projects in the community and by checking the CHWs' timesheets. They evaluated the process by following up any problems that occurred. This was

done by means of discussions with the community and the CHWs. In this way the community was also involved. The CHC members were satisfied that the CBHP was a worthwhile programme.

The monitoring and evaluation of their own work occurred primarily within the committee. The chairperson and the supervisor played particularly active roles in this regard. The minutes of their meetings, in which progress was reported, served as the basis for monitoring and evaluation. In three of the wards these minutes were also inspected by the CHF who gave them feedback. In the fourth ward some of the CHC members said that they had never had any meetings while others said that they had kept no records of their discussions.

It was also mentioned that the local authority and the community were involved in the monitoring and evaluation of the CHCs' work. They felt that they tried to fulfil the expectations of the programme but did not know whether they succeeded.

The CHC members indicated that the CBHP could be improved by

- more contact between the community and the community health nurses, employing more CHWs, larger government subsidies, more involvement of the CHC members in the community's health care, the CHWs' providing health education in the schools, more transport for the CHFs, and more clinics and better roads.

4.4 Discussion and recommendations

In order to make recommendations for the different levels of the CBHP the findings will be summarized and discussed with reference to the different role players in the functioning of the CBHP.

4.4.1 The CBHP and the community

The respondents described the CBHP as a mainly preventive and promotive service with a strong emphasis on community involvement. The continuity of the service is largely ensured by the fact that there is a low turnover of CHWs and no turnover of CHFs as yet. The CBHP also co-operates with various other individuals and institutions concerned with population development and health.

There is still a great need for the community to take responsibility for health-related matters. Preventive and promotive actions are increasing owing to the presence of the CHWs and the willingness of the community to co-operate, but the community still considers the authorities, for example the hospital, the CBHP, the individual members of the CBHP and the government to be largely responsible for their health. The community expects the CHWs to play an extensive supportive role, for instance by accompanying them to the hospital/clinic/pension offices and by solving their personal problems.

The members of the community in general tend to be poor attenders of meetings and are not always well informed about the CBHP and can therefore not contribute sufficiently to its effective functioning. The community also needs constant motivation for and reinforcement of new health practices. New ideas on preventive and promotive health action have to be repeated often and appropriate action should be continuously reinforced so that it becomes internalized.

The general community needs - as perceived by the members of the CBHP - and the expressed needs of the community - as reported by the respondents - included:

- The development of a more effective infrastructure, for example, better roads, telephone system and public transport.

- A safe water supply and sanitation. The co-operation of institutions which could assist the community should be sought and alternative forms of sanitation, for example for

rocky or sandy areas, should be explored.

- The improvement of living standards by means of better education and adult education, job creation and better nutrition. The CBHP could obtain the assistance of individuals or institutions to provide adult education (for example, in literacy and handicrafts). Where nutrition is concerned, it appears that people often have food but are ignorant of the proper constituents of a balanced diet. Nutritional education could be combined with the efforts of people in communal and individual gardening projects.

- Forests for fuel. People are becoming aware of the danger of severely depleting the fuel supply and the need to provide for this in good time. The CBHP could play a significant role in obtaining the assistance of the Departments of Agriculture and Forestry to provide education in forestry conservation.

Health-related needs included:

- An improved curative service, as expressed *inter alia* by the need for more residential and mobile clinics, and for medication to be provided by the CHWs. The co-operation of general dealers in the CBHP areas should also be sought in connection with stocking the basic recommended medicines.

- A youth centre for recreation and education, for instance to educate teenagers on sexual matters as well as to prevent drug and alcohol abuse.

It seems that although the community is trying to improve its health conditions it has more pressing survival needs which take precedence, such as the provision of food for the family (caring for cattle and crops) and money for daily provisions and for educating the children. **Consequently, motivating people to take preventive/promotive action in the face of more pressing survival problems requires perseverance.**

However the communities are said to be proud of having a CBHP and health workers on whom they can call even at night - in some health wards the CHWs are also consulted by members of communities where there is no CBHP. Furthermore the CBHP is adapted to local standards. People can use the materials and substances available in the home. Although a uniform may constitute a barrier between CBHP members and the community, supplying the CHWs with some kind of protective clothing for visits to homes should be considered.

The supervisors and the CHFs have contact with the community during community meetings. However the contact between the CBHP members and the community mainly takes place during the daily visits to homes by the CHWs.

Because they reside in the community the CHC members are also in daily contact with the community. They can therefore lend their support to the CHWs in their work and can follow up the communities' problems with the CBHP.

Communication channels are generally open between the community, the formal health structure and the Amatikulu Centre. Although the poor infrastructure (lack of transport, poor road system, few telephones or two-way radio systems) in the communities hampers communication to some extent, the members of the CBHP show initiative in using the existing channels, for instance by sending messages via the schools, clinics and hospital visitors.

However the following matters mentioned by the respondents should receive attention:

- Although schools provide health education there is no real co-operation with the CBHP. It is recommended that closer co-operation between the Departments of Health and Education should be obtained with a view to allowing CBHP members to assist with health education in the schools.

- Private doctors providing a health service in the community are not sufficiently involved in the CBHP.

- Although in some cases the traditional healers seem to co-operate with the CBHP the co-operation is not well established. Better co-operation should be established between the traditional healers and the CBHP and they should be made more aware of their potential role in health education. They should be given some training in preventive care including the early diagnosis of diseases such as TB, and in curative care, such as first aid and rehydration treatment for diarrhoea.

4.4.2 The CBHP and the tribal authority

Contact between the CBHP personnel and the tribal authority occurs mainly through the supervisor and the CHF. Although communication and co-operation are mostly satisfactory, it was mentioned in some health wards that *indunas* who wanted to be selected as members of a committee and who wanted their children to be health workers, did not co-operate. The direct involvement of the *indunas*' children, provided that they are selected by the community, should not necessarily be either encouraged or discouraged, but their status in the community can contribute to the improvement of their community.

Care should be taken to provide the *indunas* with adequate information on the programme and to emphasize the important role that they play in their capacity as a tribal authority in community development. They should be kept well informed of the progress of and problems in the CBHP and be constantly assured of the value of their participation.

4.4.3 Role of the supervisors of the CHFs

The CHFs' supervisors were selected on the basis of their qualifications and experience. All were registered nurses and midwives and three were registered community health nurses.

All of them felt that they were not adequately trained for their role as supervisors. They relied largely on the CHFs for practical information about the programme. It is suggested that group discussions should be held with the supervisors in order to establish what specific problems they encounter and to find solutions. The participation of CHFs in these discussions could also provide useful insights.

The supervisors' functions include the supervision and support of the CHFs, negotiations with the tribal authority concerning the implementation of the CBHP and developmental projects, and keeping the hospital authorities informed of developments in the programme. There is daily contact between the supervisor and the CHFs in each health ward. Meetings take place once a week/month.

Although the CHFs in general were satisfied with the performance of the supervisors there were apparently some obstacles to supervision. These involved knowledge of roles, time limits, too few meetings, etc. The CHFs' supervisors have other nursing and administrative duties in the hospital/clinic, but care should be taken to allow them enough time that they can spend regularly with members of the CBHP to show support and provide motivation.

Contact between the supervisor and the CHWs usually occurs through the CHFs and during monthly meetings, but it is recommended that the supervisor should have closer and more direct contact with the CHWs.

Contact between the supervisors and the CHC members seems to be limited to occasional discussions but closer contact might motivate the CHC members to become more active.

4.4.4 Role of the CHFs

A good CHF should *inter alia* be reliable, be community oriented, have good interpersonal skills, have leadership qualities, be a long-term resident and have experience in community work. Some suggestions for the improvement of the selection process included the following: vacant posts should be more widely advertised; prospective CHFs should work a trial period in the community; and more information should be made available to prospective applicants.

The training of the CHFs takes place over approximately 18 months. Short periods of theoretical training at the Amatikulu Centre alternated with longer periods of practical work in the community. The curriculum included the elements of PHC as set out by the WHO, the particular health problems of rural KwaZulu, a good grounding in the nature and interactions of the community, and communication and organization skills. It is suggested that the CHFs' immediate supervisor in the community should be more involved in their training to gain a better insight into their role and to enable the supervisor to fulfil her supervisory and supportive role more effectively.

The CHFs were taught using adult education methods and they felt that their active participation in the learning process led to feelings of greater self-worth. They were satisfied with the method of examination which included the OSCI which they had never previously encountered. It is recommended that they be given the opportunity during their training to familiarize themselves with this method. All of the CHFs felt that there was a need for continuing training, *inter alia* in methods of motivating the CHWs and the community.

The CHFs' most important functions appear to be

> the orientation of the tribal authorities and the communities toward the CBHP; the training of the tribal authorities, the CHWs and the CHC members in respect of their roles in the CBHP; the supervision of the CHWs; needs assessment and implementation of developmental projects with the assistance of the community; and the execution of administrative tasks pertaining to the employment of the CHWs.

Monthly meetings which include an education session ensure regular contact between the CHFs and the CHWs and more contact is arranged as needed. As a rule the health education sessions were seen as successful and as answering the requirements of adult education, such as being learner-centred, problem-posing, self-realizing and action-oriented.

Although the organization of the CBHP cannot be expected to run smoothly before the transport problems are solved, ways should be found to meet regularly.

The CHFs are primarily supported and supervised by the supervisor although other hospital staff and CBHP staff also support them.

The CHFs enjoyed their work but some points of dissatisfaction were that their work-load and qualifications justified higher salaries and the lack of transport confined them to the office, which led to frustration and boredom. Attention should be given to ways of making employment as a CHF more attractive, for instance by the registration of an extra qualification, increased salaries and a shorter training course.

4.4.5 Role of the CHWs

When the CBHP is implemented the CHWs are chosen by the community according to certain criteria deemed essential - for instance having good interpersonal skills, maintaining confidentiality, identifying with the people, having high moral standards, being well known to the community, having dedication and perseverance, preferably being female and literate.

The training of the CHWs takes place in their communities over variable periods to overcome obstacles such as transport for the CHFs. This training is conducted mainly by the CHFs and

the CHFs' supervisors. Subjects include the elements of PHC as identified by the WHO, and also communication, practical and administrative skills. However they would like to learn more about, *inter alia,* contraceptives, the side effects of medicine, the delivering of babies and AIDS.

The CHWs' main functions concern preventive and promotive health care and appear to be to assess community needs on an ongoing basis during home visits; provide health education; encourage and monitor developmental projects, and liaise between the community and the formal health structure.

The CHWs maintain flexibility in the performance of their tasks, adapting health education to the needs of the households and visiting those in need of care more often. They usually meet one another at the monthly discussion sessions.

Although the CHWs were satisfied with the supervision and support which they received they indicated that they were not receiving adequate material support.

They also cannot provide basic medicines and dressings or bandages. **Every effort should be made to enable them to fulfil their functions properly, for example by providing health education aids such as sufficient flip charts.**

The CHWs were enthusiastic about their work which enabled them to contribute to the improvement of their communities. However some factors causing discontent were the difficult working conditions such as walking long distances over rough terrain in all weather conditions; salaries were too low and their experience was not taken into consideration; and clothing (uniforms) were not supplied. Within the economic limitations a reward system which takes experience into account could be considered and would lead to greater job satisfaction.

4.4.6 Role of the CHCs

Basically the same procedure is used to select the CHC members as is used for the CHWs. Criteria that the CHC members considered to be important included: having good communication and supervisory skills, being active, setting an example, identifying with the community, being a neutral link between the community and the CHWs, being trustworthy and preferably literate.

The CHCs' functions are to supervise and support the CHWs, to encourage the community to follow the advice of the CHWs, to act as mediators between the community and the local authorities and to arrange community meetings.

Contact between the members of the CHCs and the CHWs takes place about once a month. The supervisor of the CHWs, who is a member of the CHC, has daily contact with the CHWs.

The large turnover of the CHC members as well as the inactivity of some members was a problem. The reasons mentioned included that they were not being paid for their work, that they were unsure of their duties and that they were not sufficiently supervised and motivated due to the lack of transport.

Training of the CHC members is adversely affected by the high incidence of illiteracy and the lack of proper venues. Inadequate training could lead to a lack of motivation and ultimately to inactivity. Regardless of constraints such as a lack of transport, every effort should be made to ensure well-trained, well-motivated and effective CHC members.

Although they were reasonably satisfied with their working conditions the CHC members in general were dissatisfied because they were not being paid. It is recommended that the community be made aware, even before selecting members, that CHC membership is an important community-oriented function which is performed voluntarily. Expectations of future payment should not be created.

4.4.7 Role of the formal health care personnel

Most of the contact made by the CBHP with other personnel in the formal health care system is with the superintendent, matron, school and clinic nurses and some of the doctors. In general there seems to be a well-developed referral system between the community and the health personnel.

An effort should be made to involve all doctors in the CBHP on their arrival in the health ward and to inform them fully about their role in the effective functioning of the CBHP. It is vital for the credibility and the success of the CBHP that a specific doctor should be allocated for this function and that he should be actively involved.

4.4.8 Role of the Amatikulu Centre

The supervisors and the CHFs have personal contact with the Amatikulu personnel about once a month or once in every two to three months.

Both the supervisors and the CHFs indicated that the staff of the Amatikulu Centre were very supportive. **To prevent the CBHP from being seen as a vertical programme bypassing the formal health structure, consideration could be given to involving hospital staff, such as the community doctor, in the training of CHFs and in the meetings between Amatikulu personnel and CBHP personnel.**

The supervisors and the CHFs would also like more contact with their colleagues in other health wards since contact was mainly limited to initial training courses and, among the CHFs, to the occasional symposium.

4.4.9 Monitoring and evaluation of the CBHP

The programme is monitored on the basis of the implementation and progress of developmental projects and the health status of the community as well as general impressions of environmental improvements.

The CHWs keep records of their daily activities and members of all the categories submit reports which are fundamental to the monitoring of progress against set goals. However the respondents seemed to be uncertain of the formal criteria for monitoring and evaluation. It is recommended that a set of guidelines be clearly defined for each level of the hierarchy.

Monitoring and evaluation of the respondents' own work is mainly performed by using self-assessment and group discussions with their colleagues and supervisors. Although monitoring and evaluation seem to be performed continuously, the respondents were rather uncertain of the extent to which they fulfilled expectations. It is absolutely essential that regular feedback be given to all those whose work is being monitored and evaluated.

Attention should also be given to suggestions offered by the respondents for the improvement of the CBHP, *inter alia* training more CHFs and CHWs; extending the training of CHFs and CHWs to include a greater number of local health problems such as malaria; allocation of transport specifically for the CBHP; more interaction with other branches of the CBHP on all levels; increasing the salaries of the CHFs and the CHWs; greater co-operation with schools; more contact between the community, the CBHP and the hospital staff, and conducting research into the effectiveness of the CBHP.

4.5 Conclusion

In general the respondents were enthusiastic about both the CBHP and their work. Within the constraints in which they function they show flexibility and the CHWs in particular adapt their work to the needs of the community. However it is vital for effective functioning that everybody in the CBHP and the formal health system be well informed of the participants' roles and the services they can offer, and that communication between all levels is supportive. Interest in the participants' work should be evident and more opportunities should be created for the continuous reinforcement of information and motivation. These people function in relative isolation, they work under difficult circumstances and they are expected to effect change in traditional communities which are characterized by resistance to change. This requires a great deal of perseverance and constant motivation from their colleagues.

REFERENCE

WORLD HEALTH ORGANIZATION. 1989. *Study group on community health.* Geneva: WHO.

CONTENTS

5. PROCESS EVALUATION: HEALTH WARD MANAGEMENT TEAMS

5.1 Introduction

In this part of the research the members of the health ward management teams in the four areas were examined to find out what their perceptions were of the CBHP operating in their health wards.

5.2 Methodology

5.2.1 The questionnaire

The survey was conducted by means of a questionnaire that was mailed to key personnel of the hospital management and also to members of the broader primary health-care team in the four survey areas and included questions on their

- awareness of the CBHP;
- knowledge of the aims, objectives and organization of the CBHP;
- involvement in and support of the CBHP;
- views on ways to improve the programme.

As far as was practical the questions were open ended so that the respondents could supply as much information as possible.

5.2.2 The samples

Questionnaires were mailed to 42 members of the medical, nursing and administrative personnel as well as to social workers in the areas. Four weeks were allowed for the questionnaires to be returned after which a second questionnaire was mailed to those persons who had not yet responded. A further period of two months was allowed for responses. The numbers of questionnaires mailed and returned were as follows:

	Mailed	Returned
A	9	7
B	11	7
C	11	7
D	11	6
TOTAL	42	27

There was a response rate of 64,3 %. For a postal survey this can be considered adequate. Descriptions of the samples in terms of the positions of the respondents in the health ward management team are shown in Table 5.1 and those in terms of the duration of employment in the health ward, in Table 5.2. It should be noted that all the medical superintendents, community medical officers and matrons returned their questionnaires while only some of the administrators, tutors and other nursing personnel did so. None of the social workers responded. This could indicate that the non-respondents were not aware of or really involved in the CBHP. Where the duration of employment is concerned it seemed that most of the respondents (40,7 %) had been employed for less than three years in their respective areas although 33,3 % of them had been employed for 13 years and longer.

TABLE 5.1: POSITION IN THE HEALTH WARD MANAGEMENT TEAM

Position in team	(D)		(C)		(B)		(A)		TOTAL	
	N	%	N	%	N	%	N	%	N	%
Matron	1	16,7	1	14,3	1	14,3	1	14,3	4	14,8
Hospital administrator	.	.	1	14,3	.	.	1	14,3	2	7,4
Medical superintendent	1	16,7	1	14,3	1	14,3	1	14,3	4	14,8
Community medical officer	1	16,7	1	14,3	1	14,3	.	.	3	11,1
Community health nurse	.	.	2	28,6	1	14,3	.	.	3	11,1
Primary healthcare nurse	1	16,7	.	.	1	14,3	1	14,3	3	11,1
Clinic nurse	1	16,7	1	14,3	1	14,3	2	28,6	5	18,5
Tutor	.	.	.	.	1	14,3	1	14,3	2	7,4
Psychiatric nurse	1	16,7	.	.	.	.	.	.	1	3,7
TOTAL	6	100,0	7	100,0	7	100,0	7	100,0	27	100,0

TABLE 5.2: DURATION OF EMPLOYMENT

Years employed	(D)		(C)		(B)		(A)		TOTAL	
	N	%	N	%	N	%	N	%	N	%
3 years and less	3	50,0	4	57,1	2	28,6	2	28,6	11	40,7
4 to 6 years	1	16,7	.	.	.	.	.	.	1	3,7
7 to 9 years	1	16,7	2	28,6	.	.	1	14,3	4	14,8
10 to 12 years	.	.	.	.	1	14,3	1	14,3	2	7,4
13 years and more	1	16,7	1	14,3	4	57,1	3	42,9	9	33,3
TOTAL	6	100,0	7	100,0	7	100,0	7	100,0	27	100,0

5.2.3 Analysis and presentation of the data

Since this survey is of a qualitative nature and a relatively small number of respondents were involved, a description of the data will be given, but no inferential statistical analyses will be performed. Frequencies and percentages will be shown in tables where appropriate.

5.3 Findings

5.3.1 Awareness of the CBHP

The respondents were asked whether they were aware of the CBHP in their health wards and how long they had known about it. Responses to the first question revealed that all the respondents were aware of the existence of the CBHP in their areas, some for a shorter period of time because they had been appointed not long before the survey took place (Table 5.3).

TABLE 5.3: DURATION OF AWARENESS OF THE CBHP

Duration in years	(D)		(C)		(B)		(A)		TOTAL	
	N	%	N	%	N	%	N	%	N	%
Less than three years	2	33	1	14	2	29	3	43	8	30
Three years	1	17	3	43	.	.	2	29	6	22
Four years	.	.	.	.	1	14	.	.	1	4
Five years	1	17	2	29	3	43	.	.	6	22
Six years	1	17	.	.	.	.	1	14	2	7
Seven years or more	1	17	1	14	1	14	1	14	4	15
TOTAL	6	100,0	7	100,0	7	100,0	7	100,0	27	100,0

5.3.2 Objectives of the CBHP

The respondents were asked what they thought the objectives of the CBHP in their health ward were and whether they believed that the aims were being achieved.

The majority of the respondents in all four health wards (Table 5.4) viewed the objectives comprehensively, namely the improvement of primary health care, the involvement of the community in its own health care, and the provision of health education.

Some defined the objectives more narrowly, concentrating on specific points such as the provision of curative, preventive/promotive or rehabilitative services. Others referred to even more specific points such as discouraging home deliveries, rendering first aid, malnutrition follow-up, and co-ordinating health workers and traditional healers.

TABLE 5.4: OBJECTIVES OF THE CBHP IN THE HEALTH WARD

Objective	(D)		(C)		(B)		(A)		TOTAL*	
	N	%	N	%	N	%	N	%	N	%
Improve primary health care	2	33	4	57	5	71	3	43	14	52
Involve community in own health care	3	50	3	43	5	71	2	29	13	48
Provide health education	3	50	3	43	4	57	3	43	13	48
Provide curative service only	1	17	2	29	1	14	.	.	4	15
Provide preventive/ promotive service only	1	17	3	43	.	.	.	.	4	15
Provide rehabilitative service only	1	17	1	14	.	.	.	.	2	7
Mentioned specific aspects**	5	83	2	29	4	57	2	29	13	48

* Some respondents gave more than one response therefore the percentages do not total 100.

** Discouraging home deliveries; first aid; malnutrition follow-up; medication follow-up; co-ordinating health workers and traditional healers.

A small proportion (15 % of the total sample) perceived that the CHWs provided curative services only.

The objectives of the CBHP were felt to be met in varying degrees in the four health wards. Fifty-seven per cent of the respondents in Wards A and C felt that the objectives of the CBHP were being met although a further 29 % in Ward C and 14 % in Ward A had some reservations. The situation differed in Ward D, where only 33 % (and a further 17 % with reservations) and Ward B, where only 14 % (and 43 % with reservations) felt that the objectives were being reached (Table 5.5).

TABLE 5.5: ARE THE OBJECTIVES OF THE CBHP IN THE HEALTH WARD BEING MET?

Response	(D)		(C)		(B)		(A)		TOTAL	
	N	%	N	%	N	%	N	%	N	%
Yes	2	33	4	57	1	14	4	57	11	41
Yes, with reservations	1	17	2	29	3	43	1	14	7	26
No	3	50	1	14	2	29	1	14	7	26
Unsure	.	.	.	.	1	14	1	14	2	7
TOTAL	6	100	7	100	7	100	7	100	100	100

The reasons the respondents gave for thinking that the objectives of the CBHP were being reached, can be summarized as follows:

- The CBHP rendered health services to the community. Examples of these services included oral rehydration, immunization, supervision of TB patients, referral of patients and treatment of mild illnesses.
- The CBHP was responsible for the implementation of worthwhile projects such as community gardening, the building of toilets and water protection.
- The community was more aware of and used the health services in its area more effectively and was better able to take care of its members than previously.

The reasons respondents gave for feeling that the objectives were not being achieved, included:

- There were not enough CHFs and CHWs to serve the large communities - in some communities there were no CHWs.
- There was a shortage of health personnel in general.
- Unsatisfactory practices continued; for instance, home deliveries still occurred, compliance with immunization schedules was poor, toilets were not being built, the water supply was still poor and there were still defaulters in the TB treatment programmes.
- CHWs worked in isolation from other professional people and the community leaders. Some CHWs still had an "oppressive" attitude.
- Health centres were still a great distance from the people.
- The programme was not evaluated annually.

Finally, those respondents who felt that the objectives were being met, but who had certain reservations, stated that illiteracy in the community and the consequent poor communication also obstructed the CBHP; the lack of such resources as transport prevented progress in the programme and made supervision difficult; more CHWs and CHFs were needed and the CHWs had not been sufficiently incorporated into the health-care plans of patients.

5.3.3 Involvement in the CBHP

Respondents were asked whether they had been involved with the CHFs, CHWs or any of the other components of the CBHP, what their involvement in the CBHP had been and in what way they thought they could support the programme in future.

Most of the respondents (Table 5.6), ranging from 71 % in Wards B and C to 100 % in Ward A, were involved in some or other aspect of the CBHP.

TABLE 5.6: INVOLVEMENT IN THE CBHP ("YES" OR "NO")

Response	(D)		(C)		(B)		(A)		TOTAL	
	N	%	N	%	N	%	N	%	N	%
Yes	5	83	5	71	5	71	7	100	22	82
No	1	17	2	29	2	29	.	.	5	19
TOTAL	6	100	7	100	7	100	7	100	27	100

This involvement (Table 5.7) focused on activities such as teaching, examining and supporting the CHWs and supervising and supporting the CHFs. A few respondents mentioned that they involved the CHWs in patient follow-up, for example in conditions such as tuberculosis or malnutrition. Some mentioned being involved in obtaining transport for the CBHP (26 %) and in motivating an application for a CBHP (19 %) as ways in which they had been involved in the programme. Joint organization with the CBHP for special community health efforts, such as health days, AIDS day and breastfeeding week, was also mentioned by 19 % of the respondents. A few mentioned being involved in community development (such as organizing spring protection and community gardening, encouraging toilet building and protecting the water supply).

TABLE 5.7: TYPE OF INVOLVEMENT IN THE CBHP

Type of involvement	(D)		(C)		(B)		(A)		TOTAL*	
	N	%	N	%	N	%	N	%	N	%
Support CHWs and CHFs	1	17	3	43	2	29	3	43	9	33
Manage/provide transport	1	17	2	29	1	14	3	43	7	26
Teach CHWs	1	17	2	29	2	29	.	.	5	19
Educate community on health	1	17	1	14	2	29	1	14	5	19
Motivate for programme	1	17	2	29	1	14	1	14	5	19
Examine CHWs	1	17	.	.	2	29	1	14	4	15
Supervise CHFs	1	17	1	14	1	14	1	14	4	15
Involve CHWs in follow-up care	1	17	.	.	1	14	1	14	3	11
Other **	1	17	1	14	1	14	2	29	5	19

* Some respondents gave more than one response therefore the percentages do not total 100.

** Other involvement mentioned: community development, membership of the community development committee, and evaluation of the programme.

An encouraging response was the willing support offered for the CBHP for the future by all but two respondents who were soon to leave the area (Table 5.8). This included training the CHWs in general subjects (for example midwifery, teenage pregnancies and psychiatry) as well as their continuing education. Supporting, supervising and encouraging both CHWs and CHFs were also mentioned by a number of respondents in each area.

Involvement with the community was another area in which respondents in all four health wards felt that they could play a role, for instance by providing health education, motivating and advising the community (assist during meetings, make suggestions, support the community and help with problem solving) and generally assisting with the programme (e.g. home visiting and immunization).

In three of the areas (Wards A, B and C) respondents mentioned that they could be involved in fund-raising for assistance with transport.

Although the evaluation of the programme was mentioned in only one area (Ward D, 50 %) this would seem to be another important aspect of the programme in which members of the health team could be involved.

TABLE 5.8: POSSIBLE WAYS OF SUPPORTING THE PROGRAMME (IN FUTURE)

Types of support possible	(D)		(C)		(B)		(A)		TOTAL	
	N	%	N	%	N	%	N	%	N	%
Support CHWs and CHFs	3	50	4	57	2	29	2	29	11	41
Advise community	1	17[a]	1	14	4	57	3	43	9	33
Seek private funding	.	.	3	43	1	14	2	29	6	22
Health education community	3	50	1	14	1	14	.	.	5	19
Generally assist PHC programme	2	33	1	14	.	.	2	29	5	19
Training CHWs: general	1	17	2	29	.	.	.	.	3	11
Training CHWs: specific	2	33	.	.	1	14	.	.	3	11
Continuing education: CHWs	1	17	1	14	1	14	.	.	3	11
Evaluation of programme	3	50	.	.	.	.	.	.	3	11
Other *	.	.	1	14	1	14	2	29	4	14

* Other includes motivating the community, and leaving soon (N.A.).

5.3.4 The place of the CBHP in the health system

To determine perceptions of the role the CBHP plays in the health system, two statements were offered to the respondents with the request that they indicate with supporting arguments which of the two statements they thought were the most applicable to the CBHP in their health ward:

(i) Some people say that the CBHP in KwaZulu is essentially a vertical programme under the control of the head office that bypasses the existing structures in the health ward.

(ii) Others say that it is part of a well-integrated health system in the true spirit of health care.

TABLE 5.9: PLACE OF THE CBHP IN HEALTH SYSTEM

Type of system: vertical or integrated	(D)		(C)		(B)		(A)		TOTAL	
	N	%	N	%	N	%	N	%	N	%
(i) Vertical programme	2	33	.	.	.	.	.	.	2	7
(ii) Well-integrated system	4	67	7	100	7	100	7	100	25	93
TOTAL	6	100	7	100	7	100	7	100	27	100

Table 5.9 indicates that the majority of the respondents in all four areas held the opinion that the CBHP was part of a well-integrated health-care system. However the fact that there were two respondents who did not share this view cannot be ignored.

The respondents who felt that the CBHP was not part of an integrated health service gave the following explanations:

- There seems to be more allegiance in the CBHP to the Amatikulu Centre than to the hospital.
- The CBHP exists as an autonomous unit within the health ward and does not have any accountability to the other structures within the hospital and community. This is possibly expedient because medical staff within the hospital often change.

The explanations given by those respondents who felt that the CBHP forms part of a well-integrated health system can be summarized as follows:

- The CBHP is part of a system involving the community, the local authorities, the agricultural services, the schools, social workers and the hospital. All of these institutions and individuals are well informed about the programme and work hand in hand with the programme.
- The CBHP has strong links with the hospital and clinics - the CHWs are being taught by and are under the guidance of the CHFs who in turn are under the supervision of and are receiving the support of the nursing and medical staff of the hospital.
- The CBHP is part of a comprehensive health-care scheme, involving different professional categories, aiming at the improvement of health-related status, encouraging everybody's active participation and incorporating an adequate referral system.
- The CBHP changes the traditional pyramidal structure of health care in which all authority resides in the apex to a more constructive system with improved attitudes and communication.
- Since there are not and never will be enough health personnel, particularly nurses, to perform the all-important task of assisting the people of the rural areas in their own homes (which should really be done by community health nurses) the CHWs are doing this. They are the people who have the best understanding of their people and therefore are best able to help them. "They are acting as our feet to walk in the community."

5.3.5 Knowledge of the CHWs and CHFs

Some questions were included about the number of CHFs and CHWs in the health wards, the remuneration of the CHWs and the supervision of the CHFs and CHWs.

All the respondents in Mosvold* and Nkandla knew the number of CHFs working in their area; in the other health wards several respondents did not know the number (Table 5.10).

TABLE 5.10: NUMBER OF CHFs IN EACH HEALTH WARD

Response	Manguzi*		Charles Johnson*		Mosvold*		Nkandla*	
	N	%	N	%	N	%	N	%
One	1	17	3	43**	.	.	7	100**
Two	4	67**	3	43	7	100**	.	.
Four	.	.	1	14	.	.	.	.
Six	1	17	.	.	.	.	.	.
TOTAL	6	100	7	100	7	100	7	100

* Names are used in Table 5.10 and Table 5.11 in order to limit the possibility of tracing.

** The underlined figures indicate the correct responses.

In none of the wards did all the respondents record the correct number of CHWs, and as can be seen from Table 5.11, in one ward no respondent knew even the correct range or interval. Understandably there was greater knowledge about the number of CHWs in those wards (e.g. Nkandla) where there were few CHWs.

TABLE 5.11: NUMBER OF CHWs IN THE HEALTH WARD

Respondents' perception of number of CHWs	Manguzi (57)*		Charles Johnson (23)*		Mosvold (56)*		Nkandla (14)*	
	N	%	N	%	N	%	N	%
1 to 9	2	33	2	29	.	.	1	14
10 to 19	1	17	2	29	1	14	6	86
20 to 29	.	.	3	42	.	.	.	.
30 to 39	.	.	.	.	.	.	.	.
40 to 49	3	50	.	.	.	.	.	.
50 to 59	.	.	.	.	3	43	.	.
60 to 69	.	.	.	.	1	14	.	.
70 to 79	.	.	.	.	.	.	.	.
80 to 89	.	.	.	.	2	29	.	.
TOTAL	6	100	7	100	7	100	7	100

* Correct number of CHWs in particular ward.

Almost half of the respondents indicated that they did not know what the CHWs earned an hour (Table 5.12). Some thought that the CHWs did voluntary work or earned less than R1 an hour. The percentages of respondents who knew the approximate amount of their earnings varied between 14 % and 43 %.

TABLE 5.12: CHWs' REMUNERATION AN HOUR

Respondents' perception of CHWs' remuneration	(D)		(C)		(B)		(A)		TOTAL	
	N	%	N	%	N	%	N	%	N	%
Nothing	.	.	.	.	1	14	.	.	1	4
Less than one rand	1	17	2	29	.	.	2	29	5	19
One to two rands*	2	33	3	43	2	29	1	14	8	30
Do not know	3	50	2	29	4	57	4	57	13	48
TOTAL	6	100	7	100	7	100	7	100	27	100

* The actual remuneration was between R1 and R2 an hour.

Twenty-nine per cent of the respondents in Wards A, B and C and 50 % in Ward D thought that the CHFs were responsible to and were supervised by personnel from the Amatikulu Centre (Table 5.13). Some respondents in Ward D thought that the CHFs were only supervised by the Amatikulu staff (respondents could give more than one response and others mentioned Amatikulu staff as well as hospital staff).

In two areas, reference was also made to a CHF's supervisor. Most of the respondents from Ward C (86 %) and Ward D (50 %) mentioned that the CHFs were responsible to senior nursing staff, such as a matron or a community health nurse.

TABLE 5.13: CHFs' SUPERVISOR*

Respondents' perception of CHFs' supervisor	(D)		(C)		(B)		(A)		TOTAL**	
	N	%	N	%	N	%	N	%	N	%
Senior nurses	3	50	6	86	4	57	4	57	17	63
Amatikulu staff	3	50	2	29	2	29	2	29	9	33
Supervisor	.	.	.	.	2	29	2	29	4	15
Med. superintendent	.	.	2	29	1	14	1	14	4	15
Administrator	.	.	1	14	.	.	.	.	1	4
Community leaders	.	.	.	.	1	14	.	.	1	4
Do not know	1	17	.	.	.	.	.	.	1	4

* See Section 4.3.5 for the actual position regarding supervision.

** Some of the respondents gave more than one response, consequently percentages do not total 100.

More than 85 % of the respondents in each area mentioned that the CHWs were responsible to and supervised by the CHFs. It is interesting to note that reference was also made in three of the health wards (A, B and C) to their supervision by the community, the community authorities, the CHC and the supervisor (who is a member of the CHC).

TABLE 5.14: CHWs' SUPERVISOR*

Respondents' perception of CHWs' supervisor	(D)		(C)		(B)		(A)		TOTAL**	
	N	%	N	%	N	%	N	%	N	%
CHFs	6	100	6	86	6	86	6	86	24	89
Community authorities	.	.	1	14	1	14	1	14	3	11
Matron	.	.	.	.	.	.	2	29	2	7
Supervisor	.	.	.	.	1	14	1	14	2	7
CHC	.	.	1	14	1	14	.	.	2	7
Clinic sisters	1	17	.	.	.	.	.	.	1	4
Community	.	.	.	.	.	.	1	14	1	4

* See Section 4.3.5 for the actual position regarding supervision.

** Some of the respondents gave more than one response with the result that percentages do not total 100.

5.3.6 Suggestions for the improvement of the CBHP

Finally respondents were asked to suggest ways to improve the CBHP. A number of ways were suggested and are summarized in Table 5.15.

The shortage of vehicles for use in the CBHP causes concern in most of the health wards (A, B, and C) and it was suggested that vehicles should be allocated specifically to the CBHP.

Suggestions concerning the CHWs focus *inter alia* on the need to employ more CHWs, and on better training for them.

TABLE 5.15: SUGGESTIONS FOR IMPROVEMENT OF THE CBHP

Types of improvement	(D)		(C)		(B)		(A)		TOTAL*	
	N	%	N	%	N	%	N	%	N	%
More vehicles	.	.	7	100	2	29	2	29	11	40
Motivate community	.	.	1	14	4	57	.	.	5	19
More CHWs	1	17	1	14	2	29	1	14	5	19
More CHFs	.	.	3	43	.	.	1	14	4	15
Train CHWs better	1	17	2	29	1	14	.	.	4	15
Represent CHWs better in team	3	50	.	.	.	.	.	.	3	11
Involve medical personnel more	.	.	1	14	.	.	2	29	3	11
Involve nursing staff more	1	17	.	.	1	14	1	14	3	11
Improve health education facilities	1	17	.	.	2	29	.	.	3	11
Other **	2	34	1	14	2	28	3	42	8	30

* Some of the respondents gave more than one response therefore percentages do not total 100.

** Other suggestions included: Team better informed re CHWs' functions; research on CHWs' work; clinic sisters to work more closely with CHWs; fundraising for CHWs' salaries; better roads and better budgeting.

5.4 Conclusion

The above findings indicate that all the respondents in all four health wards were aware of the existence of the CBHP in their areas. It is suspected that the non-respondents were unaware of the programme and therefore did not respond.

The objectives of the programme were understood by most of the respondents as being of a comprehensive nature, with responses focusing on the improvement of primary health care, community involvement in health care and the provision of health education.

In two of the wards there was a tendency to agree that the objectives of the CBHP had been achieved, while in the other two wards, fairly large proportions of the respondents thought otherwise. It could be speculated that respondents in the latter health wards, where the programmes had been established for a longer period, were more aware of some of the obstacles in the way of success than were the respondents in the other areas.

The respondents who felt that the objectives were being reached, mentioned that the CBHP rendered health services to the community was responsible for the implementation of worthwhile projects, and had increased the community's awareness and use of the health services. The respondents who felt that the objectives were not being adequately achieved indicated as their reasons that there were not enough CHWs and CHFs, there was a shortage of health personnel in general, unsatisfactory health practices persisted, CHWs did not work in co-operation with professional workers, the health centres were located far from the people, illiteracy was rife in the community with consequent poor communication, and there were transport problems.

Most of the respondents mentioned that they had been involved with the CBHP in some way, mostly in respect of the training of CHWs and the support of the CHFs and CHWs, and to a lesser extent in various aspects of community work, such as health education. Motivation for the programme and transport management were also mentioned.

All the respondents were willing to support the programme in the future. The areas in which they envisaged their involvement included the training of the CHWs and support of the CHWS and CHFs, involvement in the community (for instance by helping with problem solving), and evaluation of the CBHP. The fact that respondents in three wards mentioned that they could support the programme by seeking funding for transport seems to accentuate the transport problems that were repeatedly mentioned during this survey.

Most of the respondents viewed the CBHP as part of a well-integrated health system in the true spirit of health care. The opinions in this regard can be summarized as follows: The CBHP is part of a comprehensive health-care scheme, involving different professional categories, encouraging everybody's participation and incorporating an adequate referral system. It has strong links with the hospitals and clinics which support and supervise the CHWs and CHFs.

Those respondents that expressed the view that the CBHP was a vertical programme under the control of the head office which bypassed the existing structures in the health ward gave the following reasons: There seemed to be more allegiance in the CBHP to the Amatikulu Centre than to the hospital, and the CBHP was an autonomous unit without accountability to the other structures within the hospital and community. The latter reason however was regarded as possibly being expedient since medical staff in the hospital often change.

In two of the wards the respondents seemed to be reasonably well informed about the number of CHFs and CHWs employed in their health wards. In the other two wards there seemed to be some confusion on this point.

The respondents in all the areas mentioned that the CHFs were supervised by senior nursing staff - the supervisor was only mentioned specifically in two areas. A number of other people were also mentioned, such as administrators, medical superintendents and community leaders.

Several respondents mentioned only Amatikulu (Centre) staff, indicating that they were not aware of any local supervision of the CHFs. This may also account for the view held by a few of the respondents in one of the wards that the CBHP was a vertical structure controlled by the head office and which bypassed the existing structures in the health wards.

The majority of the respondents in all four health wards mentioned that the CHWs were supervised by the CHFs. A number of respondents also referred to their supervision by the community, for instance by tribal authorities and members of the CHCs. Where remuneration is concerned, it seemed that although some respondents had an idea of what the CHWs earned an hour, this was not generally known.

A number of suggestions for the improvement of the CBHP were offered by the respondents in all four health wards which further illustrates the needs of the health-care system.

- Lack of transport was a recurring problem throughout the study and transport should be more freely available to improve efficiency in the CBHP.
- More CHWs should be employed and the need for more substantial training, including a greater number of practical procedures such as first aid, should be investigated.
- More CHFs should be employed. Although the number of CHFs may need to be increased this will not increase efficiency in the CBHP unless the transport problem is resolved.
- The community should be better informed of the role of the CHWs and more effectively motivated to participate.
- The hospital management and the PHC team should be better informed of the role of the CHWs and should be more involved in the CBHP. Although these suggestions were rather vague, they should not be ignored. They seem to point to a general awareness that members of the health team might not be as actively involved as they could be.
- CHWs should be better represented in the health team, on health boards and on committees.
- Health education facilities should be improved.

CONTENTS

6. RECOMMENDATIONS

6.1 Introduction

This chapter serves as a summation of the recommendations that are implicit in the section on the evaluation of community knowledge (Section 3), the section on the process evaluation of the personnel directly involved in the CBHP (Section 4) and the section on the health ward management team (Section 5). Because of the nature of the research described in Section 7 (subject matter as well as methodology), the latter is not referred to in these recommendations.

6.2 Community needs

Implicit in the Alma Ata Declaration is the contention that Primary Health Care (PHC) strategies should not be looking for ways to justify the disparity in allocation of resources (and the CBHP does not attempt to do this) but should face the reality that the root cause of many of the problems besetting the people of the less developed regions is in fact the disparity of resource allocation. While the credibility of the CBHP is relatively high, the fact that health is ultimately a political issue, and will probably become more so, means that the CBHP could be perceived as a second-rate substitute for the high-tech infrastructure characteristic of the health care of the more advantaged communities. In order to obviate this, primary health care has to be given a higher priority and more of the health resources should be allocated to PHC. There is no escaping the issue that if we wish to redress this problem we will have to spend more on disadvantaged sectors.

This is particularly true of the problem of transport. CHFs are severely constrained by the non-availability of transport (Sections 3, 4 and 5). The issue of the need to concentrate on improving the curative service via the CHWs is also implicit in much of the data (Sections 3, 4 and 5).

6.3 Democratization of the CBHP and the CHCs

Some thought should be given to further democratization of the CBHP. CHFs could hold community meetings more regularly. From the needs articulated at these meetings some community feedback could be given and a "priority training list" could be drawn up for the CHWs . The evident need for some AIDS counselling (Sections 3 and 4) comes to mind. These meetings would also operate to encourage the CHCs and institute a continuity of policy that is absent as a result of the high turnover rates experienced by some CHCs (Section 4). The meetings would also facilitate the "bottom-up" communication so vital to any successful community-based programme (Section 4).

The selection and functioning of CHC members should be carefully communicated to the communities from the outset. This would enhance the quality of people proposed as CHC members and would better integrate the CHCs into the communities.

6.4 The CBHP and integrated rural development

Thought should be given to the role of CHFs, and by extension the CHWs, within the concept of integrated rural development. The CHFs are at the interface between "community" and regional structures, and this fact in conjunction with the large degree of community credibility the CHFs and the CHWs appear to enjoy, means that they occupy a position which would enable them to become an active catalyst within the gambit of rural development. Some of the specific issues mentioned during the research interviews include

- a greater role in facilitating a clean water supply (e.g. spring protection and sanitation),
- a greater role in promoting relevant aspects of adult education (e.g. literacy classes),

- a greater role in promoting youth education, particularly with regard to sex education, alcoholism and drug abuse (greater co-operation with particularly the Department of Education should be encouraged),

- some involvement in facilitating infrastructural development (e.g. construction of community centres),

- some role in education around the growing natural fuel crisis.

6.5 The strategy of "networking"

Allied to the above recommendation is the suggestion that serious thought should be given to the strategy of "networking" to enhance the functioning of the programme. This should take on two dimensions: (a) internal networking, and (b) external networking. Internal networking could be greatly enhanced through the production of a newsletter that would facilitate communication and the transfer of knowledge among all concerned. Interpersonal communication between the different CBHPs in KwaZulu could also be improved. External networking could be facilitated through greater involvement in bodies such as SANCA, in extension programmes as well as with other CBHPs in Southern Africa.

6.6 Training

While it is recognized that the training given to the CHFs is flexible and continuously reviewed, some attention should be given to the differential demands imposed by regional circumstances and ways should be found to accommodate "special interests" within the CHF training schedule. One sometimes gained the impression that the CHFs had determined the health problems in the area before they did the health survey. Thus "water" was almost universally regarded as the major health issue by the CHFs, but not always by the respondents (Section 3). It would seem that the supervisors did not receive adequate training and this should be redressed as a matter of urgency. It is also recommended that the CHFs' supervisors participate in the training of CHFs. This would give the supervisors a better insight into their new role and into the functioning of the CBHP.

Attention should also be given to further training and motivation of the CHWs (Sections 4 and 5). Many of the CHC members had not been given any training. If they are to fulfil their support role adequately they will also have to receive training (Section 4).

6.7 The role of the *inyanga*

The *inyangas* form a category of potential expertise but the CHFs and CHWs seem to have little co-operation with them. However a considerable number of *inyangas* operate in the area, indicating that these people informally constitute part of the total health provision system. Perhaps greater attention should be given to the formal incorporation of *inyangas* into the programme. From conversations with the CHFs it appeared that only Ward D was making some effort in this regard (Sections 3 and 4).

6.8 Doctors' awareness of the CBHP

The relatively high turnover of doctors within the health wards means that some of the doctors who should be having an input into the programme are not fully informed or aware of it. A concise and clear document that outlines the aims of the programme and gives details of its functioning within the health wards and guidelines for the doctors' role should be drawn up. This should be made compulsory reading for all hospital staff who have a direct input or even an indirect input into the programme (Sections 4 and 5).

6.9 Cross-programme co-operation

The concept of the CBHP as part of a team enterprise needs greater emphasis. This is particularly noticeable in terms of the lack of co-operation between the CBHP and school health education (Section 4).

6.10 Private doctors

Private doctors who operate within the "constituency" of the health wards should be identified and fully informed about the CBHP. This is particularly necessary as the status that these doctors enjoy in the community could, if they were unenthusiastic and resistant, have a negative impact on the credibility of the CBHP (Section 4). By making use of the CBHP, the private doctors can promote the general health status of the community.

6.11 Monitoring and evaluation

The concept of ongoing monitoring and evaluation administered by the CHFs is fraught with difficulty. It involves an initial and continuous needs assessment of health and development projects with the assistance of the community. It is recommended that a set of guidelines be clearly defined for internal use in the CBHP and that evaluation be administered on a regular basis by a member of the health team not directly involved in the CBHP.

The guidelines for evaluation should be drawn up in consultation with the parties who will be involved in it. In addition it is recommended that the clinic staff have direct access to the CHWs' home-visit cards so as to enhance their knowledge of community conditions (Sections 4 and 5). In addition a test case should be selected whereby a baseline survey is done in a single community to assess the health needs and knowledge. Following the implementation of the programme in the community, ongoing monitoring and evaluation of the impact of the programme should be undertaken.

6.12 Concept of the health team

Greater emphasis should be placed on the concept of the "health team". This should find expression through fairly regular meetings in which the CHFs and CHWs as well as hospital medical personnel are involved. Such meetings would provide positive feedback to the CHFs, in particular, and go some way toward alleviating the frustration many feel (Sections 3 and 4). The meetings would also serve to inform the rest of the health team what the CHWs were doing. Referral rates from regions with CHWs could be monitored so as to gauge their (CHWs') influence in particular areas.

Team meetings would help to integrate the CBHP into the health ward and thus obviate the perception held by some respondents (particularly doctors) that the programme operates purely as an extension of the Amatikulu Centre (Section 4).

6.13 Communication channels

This has been extensively dealt with in Section 4. What should be highlighted here however is that the communication channels are hierarchical but not so inflexible that the people at various levels cannot use their own initiative to solve problems. However it was found that the people who were critical of the success of the CBHP had received insufficient feedback, particularly of a positive nature, from the people to whom they were responsible.

6.14 Support

Although the members of the CBHP were reasonably satisfied with the supervision and the support they received, certain problems need to be addressed, for instance the pressure of other duties, the lack of transport, uncertainty about supervisory criteria and lack of material support such as stationery, etc. (Section 4).

6.15 Working conditions

The future availability of the CHFs may be hampered by the newly introduced bridging course for staff nurses. Attention should be given to ways of making employment as a CHF more attractive. The registration of an extra qualification, increased salaries and a shorter training course could be considered.

More attention should also be paid to giving the required moral support and motivation to the CHWs who work under difficult conditions for salaries they consider relatively low. Consideration should also be given to a reward system which would take the CHWs' experience into account. Finally one should guard against creating false expectations, e.g. the future payment of CHC members (Section 4).

6.16 Conclusion

In conclusion, the following are the positive and negative aspects of the CBHP as seen by the researchers.

Negative:

- Lack of infrastructural back up from the authorities at regional level.
- CBHP members are not really addressing the cardinal health needs. There are structural limits to what they can do, e.g. provision of basic drugs.
- CBHP members do not really form part of the health team. Doctors (with some exceptions) show little interest in their work (probably owing to understaffing in the health service in KwaZulu).
- CBHP members' potential are not fully utilized.
- There is insufficient moral and practical support for key personnel.
- CBHP members are rather isolated from one another.
- Health in itself is not seen as a priority by many of the community members. It is linked to a wider range of survival needs.

Positive:

- The CBHP enjoys a high degree of "community" credibility.
- It is uniquely positioned to form a link between the hospital/clinic and the "community"; i.e. act as the eyes and the ears of the community especially as there is a low turnover of CHWs and CHFs.
- It is regarded as a resource by the community.

CONTENTS

7. EVALUATION OF FLIP CHARTS

7.1 Introduction

The Department of Health: KwaZulu has developed a number of flip charts as teaching aids for the CHFs and CHWs in the community. At the time of the study, nine flip charts had been completed covering *inter alia* the following themes: diarrhoea, smoking, tuberculosis (TB), weaning and oral rehydration.

The flip charts were not designed for use in isolation but are viewed as an integral part of the comprehensive CBHP. They are intended for use to start discussions that will stimulate participation and the sharing of ideas. They are also aimed at ensuring that the correct facts are learnt during group discussions.

It was envisaged that more flip charts would be developed and it was decided to evaluate one flip chart (one set of pictures) in the field in order to determine its effectiveness. Ideally one would like to establish whether the use of the flip charts leads to changes in the knowledge and practices of the target group. However this is not feasible - particularly not through evaluating only one chart - since change is a complex process influenced by a wide variety of factors, such as culture, perceptions, attitudes, beliefs, knowledge, etc. Therefore it was decided to focus in this study on the pictures in the flip charts to determine to what extent they were understood by the viewers. The aim was to suggest guidelines for the improvement of the visual aspects of flip charts.

7.2 Nature of the flip chart: The story of Shandu and Mbambo (TB)

7.2.1 Selection

The flip chart "The Story of Shandu and Mbambo" which covered the subject of tuberculosis was selected for *inter alia* the following reasons:

> TB is a relevant subject for the whole target group; the flip chart includes a variety of both traditional and Western localities/elements; and pictorial communication is not only used on a concrete level but also on the abstract, symbolic and metaphorical levels.

7.2.2 Description

The flip chart consisted of a series of 16 photographs in a story format (see Appendix). Part I (five pictures) in which the problem is introduced, initiates the discussion. Part II (11 pictures) provides the answers to the questions posed in Part I. The captions to the various pictures are given below and briefly describe the story.

PART I

1. Shandu had a friend Mbambo. They used to see quite a lot of each other. But Mbambo was sick - he was coughing a lot and had chest pain. Shandu wondered what was wrong with his friend.

2. Then gradually Shandu also started feeling unwell. He had no appetite.

3. He was also losing weight - his trousers were getting too big for him.

4. And he was coughing up sputum all the time! After coughing for more than a month, he started getting worried.

5. He also remembered his uncle who used to live with them. He had also had the same complaints, and had refused to go to hospital for treatment. He just stayed at home and got worse and worse, and died a year later.

PART II

6. So he decided to go to hospital. The doctor examined him there.

7. The doctor asked him to spit some sputum into a bottle. His sputum was examined with a special machine, and they saw in it the germs which cause TB. So they knew he had TB.

8. An X-ray was also taken of his chest. The doctor showed him on the X-ray where his lungs had been damaged by the TB. But there was also good news. Because he had come to hospital straight away, before the TB got very bad, the doctor said he could take his treatment at a clinic near his home.

9. Before he left the hospital that day, a nurse explained his treatment to him. He had to go to the clinic three times a week for six months, then the TB would be cured. But if he stopped before six months, the TB might come back.

10. So now Shandu goes to the clinic for treatment every Monday, Wednesday and Friday. It only takes half an hour and then he can go.

11. The nurse at the clinic also went to see his employer, to explain that he was being treated for TB. So he could continue working, and his employer let him go to the clinic for an hour three times a week.

12. The clinic nurse also advised him to bring his family to the clinic, to see if they had perhaps got the TB germs from him.

13. When his daughter was examined she was found to have TB. So she also started taking treatment, and she never became seriously ill.

14. Meanwhile Shandu heard that Mbambo was still very sick, and that he was now staying with an *inyanga*. So Shandu went to see them, and persuaded them that Mbambo had TB, like he had. They decided together that Mbambo should go to hospital.

15. At the hospital they found that Mbambo did have TB. So he started getting his treatment as well.

16. He's feeling better already and it won't be long before he's completely better!

7.3 Methodology

A qualitative approach was followed in the execution of this study. An interview schedule was designed in which primary questions were posed. Where necessary additional probing questions were asked.

Focus group interviews were conducted with nine groups of approximately eight respondents each. These respondents were drawn from the available adult members of the public in the four areas of study. Group interviews were used rather than individual interviews which would have been unnatural for the group-oriented rural people. A further benefit of focus group interviews is that it generates more information as a result of the interaction.

Apart from the group interviews which were conducted with the assistance of a translator, the researchers occasionally observed more closely the group interaction/presentation of the flip charts given by the CHFs/CHWs.

7.4 Theoretical basis

Where the theoretical framework was concerned, it was decided to base the interview schedule on the various functions of pictorial communication. In this regard Jakobson's model (intended

originally for the analysis of language and adapted by Peters (1977) for pictorial communication) served as a framework for evaluating the visual material. The following functions can be differentiated and will be briefly discussed: referential, phatic, conative, expressive, metalinguistic and poetic function.

The *referential* function refers to the objects in the representation. The primary question is whether the objects can be easily and clearly identified by the viewer.

The *phatic* function is concerned with the ability of the presentation to capture the viewer's attention. It refers therefore to those visual elements that aim at establishing contact with the viewer.

The *conative* function involves aspects of the representation that lead the viewer to interpret the message in a particular way. The main concern is whether the intended message has been conveyed to the receiver.

The *expressive* function refers to the way that the communicator conveyed the intended attitudes and actions. It is necessary to determine in this case whether the message made an impression on the receiver and whether its representation appealed to him/her.

The *metalinguistic* function involves any sign or symbol fulfilling an additional interpretative function. This concerns the question whether the text as well as symbolic or metaphoric use of "codes" (visual or verbal) are (when present) in fact clearly understood and functional.

The *poetic* function refers to the aesthetic features of the representation and concerns the question whether the viewer found the representation aesthetically acceptable. It is however interesting that previous research in this regard showed that black rural people tended to view the idea of aesthetic in terms of the acceptability of the message, rather than in terms of aesthetical elements such as colour, composition, etc.

Since the different functions overlap to a large extent and should not be seen as separate entities, they were treated, and will be discussed, as a unit.

7.5 Theoretical analysis

The presentation takes the form of a narrative, which is generally very popular among blacks. The main figure (Shandu) acts as a spokesman for the message the communicator wishes to convey to the receiver, namely an awareness of tuberculosis and the actions required for its early diagnosis and treatment.

In the story structure, the images generally succeed one another coherently. With the exception of one or two "absent images" the story forms a well-integrated whole. The picture of Shandu and his employer (Picture 11) could for example have been preceded by the nurse's visit to his employer. Alternatively, the nurse could have been included in Picture 11 since she is referred to in the written text.

A community-oriented approach was followed in the presentation of the message. The presentation is largely successful, as it has a locally-oriented approach that should appeal to the target group. Although the rural setting and these people's traditional values are acknowledged, the fact that some acculturation (a degree of westernization) has taken place is not denied. Whether all aspects of the message are credible and will appeal to the target group, will have to be determined by the group itself. The question should for example be raised whether it is possible or advisable for someone like Shandu, who is supposed to be an ordinary member of the community, to interfere with the treatment of the *inyanga* and to suggest that the person who approached the *inyanga* be sent to a doctor. The extent to which Western concepts such as "germs" are known to the target group is also problematical.

When the images are looked at one by one, it is evident that they are generally explicit and that they largely speak for themselves. Various indicators are used to facilitate the interpretation of the message in the image but certain shortcomings could be pointed out. For example in Picture 10 there is no indication that Shandu is actually visiting a clinic since the clinic building looks like any other building.

Although the depiction of the images in the flip chart generally corresponds closely with reality (in the sense that the images are for the most part presented concretely and are true to life), it is in fact an "ideal" reality that is presented to the viewer.

For example, Shandu acts very analytically and is strongly Western-oriented in the way he solves his problem. He does not first discuss the problem with his family or friends, but visits his uncle's grave on his own and then goes directly to the hospital. (A photograph in which Shandu discusses the matter with the members of the family or a friend may have served as a good introduction to his visit to the hospital.) It is also implied that Shandu visits the clinic regularly: three times a week for only half an hour. However, in view of the serious transport problems that are often encountered in rural areas, the relatively long distances that have to be covered on foot, and the situation, often found in hospitals and clinics, of people having to sit and wait for long periods in queues, the question arises how far the image is really true to life. It therefore seems that Shandu is presented as a *model* of *how* one should act; but the target group should see the model as realistic.

The content of the written text generally complements the images and therefore performs a supportive function. However, as far as the *presentation* of the written text is concerned, problems are experienced. There is no unity between the written text and the image because the position, letter type and colour of the written text make it too inconspicuous. Although the written text was probably not meant to form an integral part of the image, it can assume a much stronger functional role if it is presented in conjunction with the text.

It is also important to point out that in a few instances the written text is presented in the passive voice. This may hamper interpretation - particularly if it is borne in mind that many of the people in rural communities are semiliterate. When the active voice is used, the message is more direct, and this facilitates readability. The following will serve as an example: His sputum was examined (passive voice). The doctor/They examined his sputum (active voice).

Nevertheless the approach that is followed (story format) and the fact that the images have been compiled as far as possible from the point of view of the community, makes it easy for the target group to identify with the images. The presence of cultural indicators (such as the grass mat, clothes hanging over a stretched rope) is striking and contributes to the credibility of the message.

7.6 Findings

For the purposes of this study it was decided to focus on the understanding of visual communication (Section 7.1). However it should be borne in mind that flip charts are usually used in conjunction with group discussions and the presentation is therefore a major factor in understanding the subject. This fact was confirmed during observation of a group of community members who were receiving health education (which did not form part of the formal research) with the aid of the TB flip chart. The presenter was highly skilled in using the flip chart, pointing out the shortcomings of the pictures and filling the gaps. The presenter also asked viewers to read the captions in order to clear up misunderstandings and to bring about participation. It was found that the viewers had a clear understanding of the content of the story and it was obvious that the style of presentation and the skill of the presenter were significant contributing factors in transmitting the message.

In one of the nine groups included in the study it was established that many of the respondents had been exposed to the flip chart previously during a health education session. Since this group was familiar with the flip charts, the findings relating to them are not included in further discussions.

In the discussion that follows the findings concerning each picture will first be presented separately after which the findings in respect of the flip chart as a whole will be considered.

7.6.1 Picture 1: Shandu and his coughing friend, Mbambo

During the focus group interviews it was established that most of the respondents realized that illness was portrayed in this picture. The respondents were able to grasp the idea of discomfort, unhappiness, suffering and pain. The condition of the person was recognized by some of the groups as tuberculosis on the basis of indicators such as coughing, chest pain and leanness. However, some of the groups attached connotations to the picture which had not been intended by the communicator. For instance, the man coughing was interpreted as a man smoking a cigarette and sniffing benzine. Some of the respondents were further confused about the nature of the illness, since they focused on the condition of the man's skin, interpreting it as either a rash, spots or sores.

Some of the respondents liked the idea of the man coughing into his hand so that his illness should not spread to his friend. However, some respondents did not like this aspect since they considered that he was coughing into his friend's face. Others suggested that he should not cough into his hand but should rather use a cloth. It was noticeable that all the groups expressed a strong aversion to the idea of illness and frequently referred to the unhappiness of the people portrayed. In this regard, the picture successfully appealed to the viewers.

7.6.2 Picture 2: Shandu's loss of appetite

Although the man's condition was usually described as an illness, the comment was also made that he could be drunk. All the respondents understood the man's gesture indicating that he did not want the food. Some of the respondents mentioned that loss of appetite was a sign of tuberculosis. However there were also references to illness in general, the use of alcohol and stomach-ache.

The presentation seemed to appeal to the respondents. In the first place they appreciated the cleanliness of the house and the environment. It was also possible for them to identify with the situation of a woman serving food ("... it is a nice thing to do") indicating the traditional caring role of women. However one respondent said that the food offered was not typical of the local food they served. More important they were unhappy about the man's refusal of the food. The concern was even expressed that he would lose weight.

7.6.3 Picture 3: Shandu's loss of weight

It was clear from the discussions that the respondents observed that the man had lost weight, although some respondents did not realize that it was Shandu; they thought it was his friend Mbambo.

As far as the representation of the picture is concerned, the man's feelings of worry and unhappiness, as well as his loss of weight seemed to cause concern among the respondents. Some even took their concern a step further by suggesting that the man was contemplating a visit to the hospital.

Certain aspects of the picture, however, seemed to limit its effectiveness; for instance mention was again made of the man's skin condition. It was also interesting that the pair of shoes was sometimes viewed as high heeled and therefore not suitable for a man - it could be that the photographic angle used caused this impression.

7.6.4 Picture 4: Coughing up sputum

In general the groups agreed that the man was coughing into a kind of handkerchief and that he realized that something was wrong. However, some respondents thought he was blowing his nose. A few respondents perceived the spot on the handkerchief as yellow sputum, but mostly

it was perceived as blood. The connection between his illness and his sputum was clear to some, while others did not know what caused the sputum. One should also note the comment heard in one group that the man's illness was caused by bewitchment.

7.6.5 Picture 5: Shandu at the grave

All of the respondents recognized the grave and most of them connected the grave with a death due to tuberculosis. The responses indicated that they were not clear on who the deceased person was, for instance a father, friend, brother or an uncle. There was even confusion among the people who understood this picture to be part of the story. Some thought that the man standing at the grave was Shandu, while others thought it was Mbambo. The people who realized that it was Shandu, generally thought that Mbambo was the deceased. In one group the respondents mentioned that Shandu had visited his uncle's grave which indicated that they had read the caption. The observation was made by the researchers that the captions were generally not read, not only because some of the respondents were illiterate but also because the captions were unobtrusive.

The feelings attributed to the man at the grave were loneliness after the death of his friend, fear that he too might die of tuberculosis, and sadness for the loss of a loved one.

These responses indicated that the emotional appeal implicit in the picture was successful. However one person mentioned that it was not typical for people of their culture to visit graves.

Some of the respondents associated the cross on the grave with Christianity and were of the opinion that the man visiting the grave became a Christian/adopted the Christian religion.

7.6.6 Picture 6: Doctor examining Shandu

The objects such as the screen, bed and the stethoscope were effective in conveying the concept of a hospital. The respondents realized that a doctor was examining the person's chest with a stethoscope. Although some of the respondents recognized this person as Shandu, many thought that it was Mbambo - the man who had been coughing in the first picture.

7.6.7 Picture 7: Shandu's sputum specimen

In one group some of the respondents thought that the man had been drinking alcohol and was holding an empty glass. However the respondents as a rule indicated that the man was coughing/spitting into a bottle. Some respondents said that it was better to cough into a bottle than into one's hand. Only in one group did the respondents refer to the examination of the sputum directly. There were indications that they had read the caption which referred to it specifically.

It is important to note the comment that the man's head was too big which indicates that the particular camera perspective might be a problem for some viewers.

7.6.8 Picture 8: Doctor discussing X-ray with Shandu

It is interesting to note that all the groups recognized the X-ray and realized that the doctor was explaining about the illness. However the message of early diagnosis and treatment in the picture, which was strongly supported by the caption, was not fully understood. Although some of the respondents perceived the man's condition as improving, many of them also said that he was seriously ill and would die.

7.6.9 Picture 9: Nurse explaining Shandu's treatment to him

All the groups agreed that a nurse was explaining to the man how to take his medicine. The non-verbal cue of the nurse holding up three fingers, which forms the focus point of the picture, was very effective in attracting attention. There was some difference of opinion about the

message. Some respondents said that the medicine had to be taken three times a day (indicating their frame of reference according to which medicine is often taken three times a day), while others said that it had to be taken three times a week. Since no reference was made to the nurse's instructions regarding regular visits to the clinic, it can be concluded that the caption had not been read.

The respondents showed understanding of the sequence of the man's visit to the doctor and the nurse's explanation of his treatment. The idea that the man would be treated and feel better, appealed to them. They seemed to identify with the patient, even indicating that they would not like it if the man did not take his medicine and became seriously ill.

7.6.10 Picture 10: Shandu's visit to the clinic

The presentation in this picture seemed to create uncertainty and confusion. Since there were insufficient indicators that the building portrayed was a clinic, it is not suprising that the respondents described the destination of the man as a shop, his place of work or his home. However some of them identified the building as a hospital on the basis of the government car parked in front of the building or of the people sitting on the bench.

7.6.11 Picture 11: Shandu at work

All the groups agreed that the two men were at work in a garage or "machine shop". They realized that the man was back at work, but their perception of the situation varied. Some were adamant that they were working and not talking. Others said that they were talking about the man's recovery, while others were of the opinion that they were talking about the work. One group came to the conclusion that the man was talking to his employer about the machine which they saw as "the internal parts of a person" that the two people were fixing in the same way as a doctor would treat a person. This unintended analogy acted as a reinforcement of the message for this particular group.

Only in one group was the comment made that the employer should give the man permission to fetch his medicine. This was the only indication that the respondents took note of the caption. There was no mention of the nurse visiting the employer.

7.6.12 Picture 12: Shandu's family at the clinic

The responses indicated that there was some confusion as to WHO and WHERE the people were. In general the people were seen as a family (the two women were sometimes described as the man's mother and the *ugogo*). Some of the respondents thought that the people were at home, while others said that they were at the clinic/hospital. It seems that there were no clear cues for the identification of the clinic. On the other hand, the probing of responses revealed that the double doors and the step were not perceived as typical of a house, leading to the conclusion that it had to be a hospital/clinic.

The reasons mentioned for the visit to the hospital included the possibility that the man's family was going for a check-up; they were taking a sick baby to the hospital; or they were going to the hospital for TB treatment because "they already have TB, because if one person in the family has TB everyone gets it".

In regard to the latter reason it is encouraging that the respondents realized that tuberculosis is an infectious disease. However it would seem that the misconception that everybody would get TB if they came into contact with a TB victim, regardless of whether he was being treated, was not totally dispelled. The message of early diagnosis therefore did not have the intended impression in this case.

As in the case of the other pictures, the respondents could identify with their perceptions of the situation. For instance the respondents who perceived the whole family as ill did not like the idea of illness, but were pleased that the people were seeking treatment. Others were unhappy

because they perceived the family's worry about the outcome of their examination. Yet others were happy, because the man had recovered.

7.6.13 Picture 13: The early diagnosis of Shandu's daughter

It was generally agreed that the daughter (some thought it was a boy) of the man who took his family to the clinic, was being examined by the nurse. Most of the respondents thought that the child *was* ill, while some thought that the nurse was examining her *to determine* whether she was ill. It would seem that the caption did not attract their attention, since none of the respondents mentioned what was really portrayed, namely that the child had received treatment and did not become seriously ill.

7.6.14 Picture 14: Shandu's visit to Mbambo and the *inyanga*

All the respondents recognized the traditional healer as either an *inyanga* or a *sangoma*. The respondents also recognized the objects in front of the *inyanga* as representing the place where such a person kept his medicine and where his patients consulted him.

Although many respondents recognized the other two men, there was also some confusion about their identities. It is interesting to note that others who had previously said that Mbambo had died (Picture 5), expressed their surprise at seeing him in this picture ("... so he did not die").

The main reason for the two men's presence at the *inyanga's* place - according to the respondents - was that either one or both of them came to fetch medicine. In one group the respondents thought that the man in the middle (Shandu) was the *inyanga's* assistant.

The message that Shandu had persuaded Mbambo and the *inyanga* that Mbambo had TB and should go to the hospital, was fully understood by only one group. It would seem that the caption which enhances the message in the picture assisted this group in their interpretation, while the rest of the respondents relied largely on their cultural frame of reference for their understanding of the picture.

Some of the groups expressed unhappiness because of the men's visit to the *inyanga*. The comment was made that perhaps the *inyanga* could treat some illnesses, but not TB.

7.6.15 Picture 15: Mbambo's visit to the hospital

Many of the respondents (now) realized that the man who was ill (the coughing man/the man who had "died") was at the hospital. All the respondents understood that he was being examined by the nurse - some even mentioned that his blood pressure was being taken but did not know why.

It seems that there are certain factors in the picture which interfere with the interpretation of the message. Firstly taking the blood pressure is not directly relevant for TB since it is not a technique used specifically in the diagnosis of tuberculosis. Furthermore the intended portrayal of the admission procedure was not typical of this kind of situation. (It is unlikely that the registration and examination of the patient would take place at the same time and place.) It was also noticeable that none of the respondents referred to the admission procedure, and it can be deduced that the background distracted the respondents' attention from the nurse and patient who were the real focal point of this picture.

7.6.16 Picture 16: Mbambo is feeling better

Most of the groups agreed that the man in the picture had been ill, that he was better and indicated with his hands that he was better. These respondents were able to identify fully with the situation.

The respondents' involvement with the story, which was noticeable throughout the discussion, was particularly evident in respect of this picture. They expressed their happiness with Mbambo's recovery by mimicking his thumbs-up sign and generally showing their joy.

However, a few respondents persisted in their original view of the story, i.e. that the man was sniffing benzine. One of these groups associated the benzine sniffing with illness and suffering, while the second group interpreted the man's happiness in the last picture as the effect of the benzine. It is therefore clear that these people did not follow the story.

7.7 Summary and guidelines for visual material

The respondents enjoyed the story very much. The images were generally understood within the societal context of the chart-set, and the potential problem of the images being seen as separate entities therefore did not really arise. Even in cases where the story was not fully understood, or where the exact relation between certain images was not clear, the respondents did understand that a story was being told.

The respondents in the main followed the story of tuberculosis and felt that the suspense was maintained and ended in a climax. However certain aspects of the story were felt to be obscure or confusing, although most of them became clearer as the narrative developed. In a few exceptional cases, the respondents did not understand that TB was the theme of the story, and they found several of the images obscure.

There was general confusion about the two models. At no time could Shandu and Mbambo be clearly distinguished from one another. **It is important that such problems be eliminated, for example by making the models wear contrasting clothing or by selecting persons with clearly differentiated facial features.**

Despite certain problems, it is clear that the narrative format can be used to good effect when conveying a message. **It is recommended that the narrative structure be kept as simple as possible and that leaps in terms of time and space be made carefully. There should be a clear link between the images, although it is also important for every image to function independently and convey its part of the message clearly.**

The visual image was felt to be most attractive, and the respondents said that it was a pleasant and friendly medium. The visual image proved to be a credible and convincing medium of communication particularly because the photographs were true to life.

Various facets of the image will now be discussed in terms of the functions of an image.

Although the respondents were not specifically asked to identify the objects in the image, no serious problems were experienced in this regard. In cases where an object was not described quite correctly or was considered to be unclear, this mostly did not hamper the interpretation of the message. A handkerchief that was for example described as a "tissue", "cloth" or "cotton wool", sputum that was thought to be blood and men's low-heeled shoes that were perceived incorrectly as high-heeled shoes, were some of the perceptual differences to emerge. The only image that can really be identified as a problem is the building in Picture 10. Many of the respondents did not identify it as a hospital, but as a shop, a workplace or a house. In this case the image did not contain any clear sign informing the viewer that the building was a hospital.

The respondents generally recognized the objects easily and most of them were familiar with the context within which the message was presented.

When compiling the visual images it is important that the objects in the image are clearly recognizable and that the target community is familiar with them.

It appears from the reaction of the respondents that the images generally attracted them and held their attention. They were generally considered attractive and served as stimuli for conducting discussions.

With a few exceptions the respondents understood the message about tuberculosis. However, although the concept of disease and treatment was clear to most of the respondents, the idea of early diagnosis was not fully understood. This can on the one hand be ascribed to the fact that the target community mainly focused on treatment, and on the other hand that the written text highlighting the importance of early diagnosis and treatment was not taken into account by the respondents when they interpreted the message. Although the image in the case of the flip chart is the primary carrier of the message, certain matters can be expressed only with difficulty and consequently rely largely on the written text. (See for example Pictures 8 and 13 in this regard.)

The various images are for the most part concrete and direct and do not require a high level of visual literacy. The signals that were used to facilitate the interpretation of a message were generally understood. However there are a few images of a more complex nature requiring a higher level of interpretation, and respondents experienced problems in understanding messages that were not explicitly stated. In the case of Picture 10 many of the respondents could not identify the building as a hospital. On the other hand, although there was no clear indication one would have expected people to gather from the narration that the building should be a hospital. When interpreting the work situation (Picture 11), many respondents did not understand that Shandu's medical treatment was being discussed with his employer.

Therefore, although there is congruence and continuity among the images, it is recommended that every individual image be depicted as clearly and directly as possible.

Although the signals are used in such a way in the image that the receiver will arrive at a particular interpretation, it is also important to bear in mind that people observe selectively and that they tend to interpret things from their own frames of reference. When the respondents' perception of the visual material is noted from an intercultural perspective, it is hardly surprising that they projected their cultural background and own life-world into the image. The following serve as examples:

- The view was expressed that the man who was ill (Picture 4), had been bewitched.
- When interpreting Shandu's visit to his friend and the *inyanga* (Picture 14), most respondents felt that the two persons in the picture had gone to fetch medicine from the *inyanga*.
- The visit to the grave (Picture 5) was linked to Christianity, which most probably can be ascribed to the cross on the grave.

It is therefore recommended that the image message be formulated and depicted simply, clearly and explicitly. Abstract, indirect and hidden messages place excessive demands on the level of interpretation.

The way that the images are depicted appealed to the target group. They were generally felt to be credible, which enabled the respondents to identify with them. The concept that the disease created discomfort, unhappiness, pain, suffering, worry, anxiety, loneliness and heartache deeply affected the respondents. The happy ending to the story also enabled the viewers to share in Shandu's happiness and joy.

The locally-oriented approach which takes the target's life-world into account, is successful and is strongly recommended. In only a few cases did the respondents indicate that they felt that the images did not reflect their culture; for example it was not typical for them to visit somebody's grave (Picture 5). A nationally or even internationally-oriented media product is often too general and in an attempt to reach "everyone", it runs the risk of reaching no one.

Although the approach by which models act as spokesmen to propose "ideal action" appeared to be successful in this investigation, it should be stressed that the desired situation, which is depicted in the image, should be realistic and practicable. If a depicted action is not within the target population's reach - or based on conditions as they have experienced them - this could lead to great frustration and could sabotage a programme's effectiveness.

In order to address the target group, one should therefore take note of their culture and world of experience in depicting the message. It should also be borne in mind that traditions change continually and that the degree of acculturation should be taken into account. It was for example interesting that many of the respondents felt that the supposed visit to the *inyanga* was unacceptable since they did not expect him to be able to treat TB.

It is also interesting that the image was assessed in terms of the acceptability of the message and not in terms of aesthetic matters, such as colour, composition, etc. The concept of disease and matters associated with it was regarded as "ugly" and as something that should be rejected, while the idea of rendering assistance elicited positive reactions and was regarded as "beautiful".

Other matters which elicited approval were, among other things, the clean, neat house and the wife bringing food to her husband, which indicated appreciation for women's traditional caretaking role. Dissatisfaction was expressed on matters which included the skin that seemed unhealthy; as well as the man's perceived "large" forehead, in Picture 4.

Specific guidelines on the poetic function can be laid down only with difficulty. **In terms of the poetic function it is recommended that acceptability to the target population and effectiveness should be borne in mind.** Although the respondents for example found the idea of disease "ugly", the message was effective and struck home.

It was evident that the captions were not strongly functional. Although they have a supportive function and are in certain cases essential to a full understanding of the message, they were seldom read by the respondents. This was possibly because some of the respondents were illiterate and therefore unable to read, or because the captions were not prominently placed and the letter size and letter type were inconspicuous. In certain cases the content of the text was not relevant to the image and consequently did not complement or explain the image, for example in Picture 11.

It is recommended that captions be written with care. The content should support the visual image as the primary carrier of the message. Since a large percentage of persons in rural communities are illiterate or semiliterate, it is crucial that the visual image should as far as possible speak for itself. However where a text is used, the letter type and letter size should be large enough, form an integral part of the whole and attract the viewer's attention.

Symbols or signs can also be used to allow certain aspects of a message to emerge more clearly. For example a red cross at a building can indicate that it is a hospital. An emblem that is unique to a programme such as the CBHP, can also be included in every image.

7.8 Concluding remarks

On the whole the flip charts can be regarded as being effective. People could identify with them and they largely understood the message. The respondents picked up the non-verbal signals and were able to identify strongly with the feelings of concern, loneliness, fear, heartache, unhappiness and happiness that were depicted. **In this regard the importance of pretesting was once again demonstrated: the target community had been involved in the development of the media product, which increased its chances of being effective.**

It is important not to expect one particular communication medium to lead to a change in behaviour. Behavioural change is a multidimensional issue and communication is only one of the key factors in effecting such change.

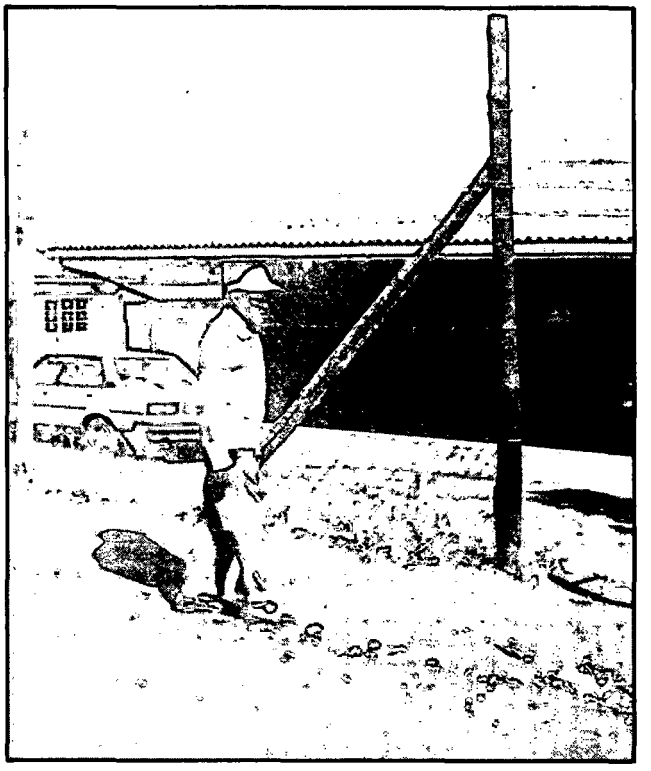
Although the focus in this investigation was on the comprehensibility and effectiveness of the visual image, the evaluation of the flip charts cannot be divorced from the group interaction which in practice forms part of the presentation of the flip charts. In this regard it also appeared from observation that group members participated actively and with great enthusiasm in the discussion, which once again indicated that interpersonal communication, in combination with other media, is successful.

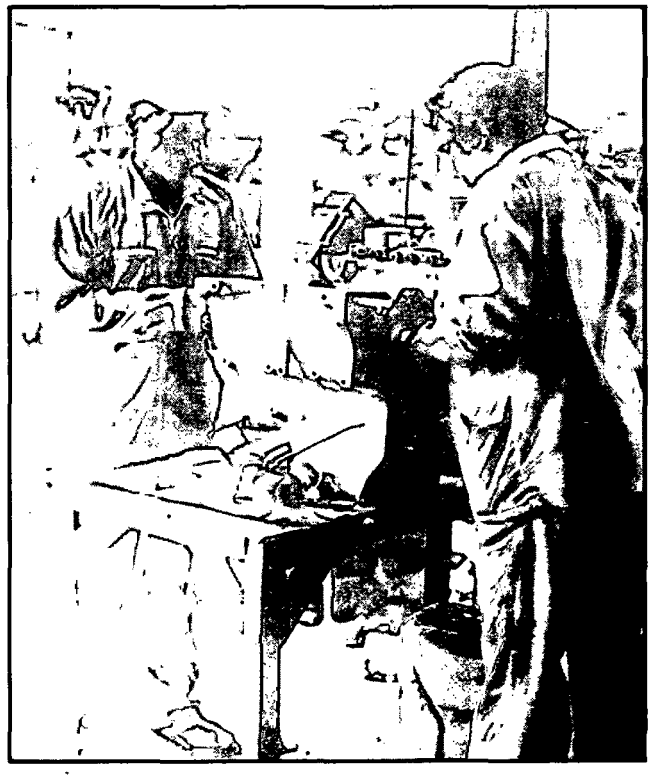
REFERENCE

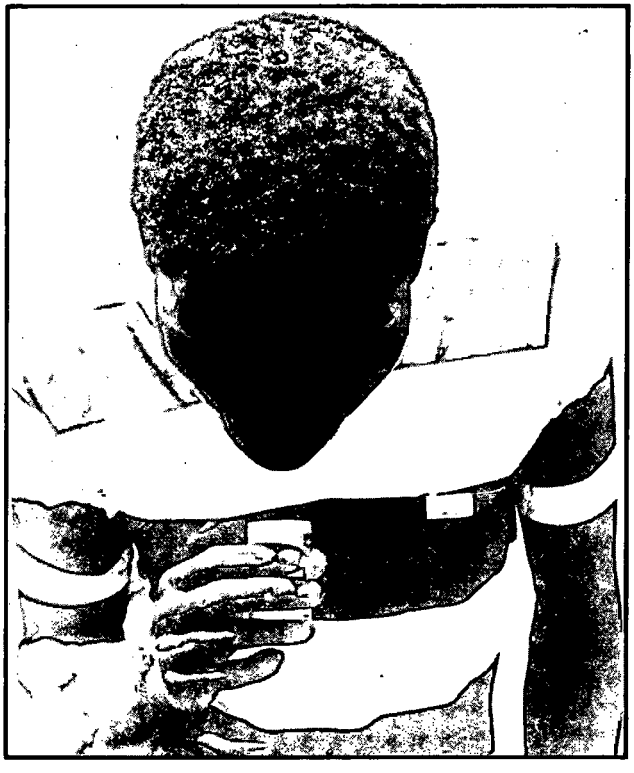
PETERS, J.M. 1977. *Pictorial communication.* Cape Town: David Philip.

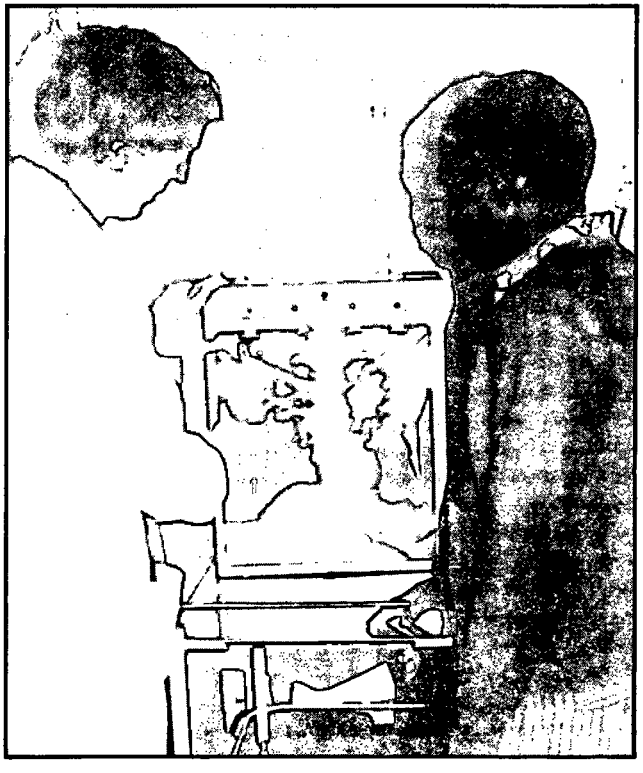
Doc. 288640
Cup: 298700

R21,00.









To facilitate the reproduction of the posters the captions to the pictures have been deleted

SICELA UFUNDISISE KAHLE LELIKHASI NGA-PHAMBI KOKUBA USEBENZISE LEFLIPCHART

IFLIPCHART YESINE

INDABA KASHA NOMBAMB

(Isifo sofuba noma iTB)

1. Leflipchart isifundisa lokhu okulandelayo:

1.1. **Okubangwa ITB**
- — ITB ibangwa amagciwane.
- — Amagciwane eTB alimaza noma adlavuza amaphaphu. Uma umuntu ephethwe iTB ekhwehlela, amagciwane asabalala emoyeni.
- — Amagciwane angatholwa ngomunye umuntu emoyeni, bese engenwa iTB.
- — Ngokusobala imindeni yalabo abaphethwe yiTB isengozini enkulu yokuba ithole iTB.

1.2. **Ngezikhalo zabaphethwe iTB.**
- — Ukukhwehlela okungapheli ngenyanga eyodwa noma ngaphezulu.
- — Ngokuhamba kwesikhathi isikhwehlela singaba negazi.
- — Ukungathandi ukudla.
- — Ukuzaca noma ukwehla kwesisindo.

1.3. **Okwenzeka esigulini esineTB uma sisesibhedlela**
- — Udokotela noma unesi uhlola isifuba.
- — Isikhwehlela siyahlolwa.
- — Kuthathwa isithombe sesifuba seXray.

1.4. **Ngokulashwa kweTB**
- — ITB ingalashwa ngemithi esetshenziswa ngodokotela nonesi. Izinyanga, izangoma kanye nabahlolayo ngeke bayelaphe iTB..
- — Uma ophethwe iTB engatholi ukwelashwa kahle ngemithi kadokotela, uyokufa.
- — Uma isiguli sisheshe sathola ukulashwa kahle, singalashelwa ngaphandle singalalanga esibhedlela.
- — Uma umuntu esheshe wathola ukulashwa angaqhubeka asebenze.
- — Ukulashwa ngokuphelela kudinga ukuthole kathathu ngesonto, izinyanga eziyisithupha.

2. **Izifundo aziyona indlela enhle ekufundiseni abantu abadala.** Abantu abafundi noma bakhumbule kahle uma bezohlala balalele. Ngakho-ke kungcono uma usebenzisa leflipchart ngendlela elandelayo.

3. **Siyakuncoma ukuthi usebenzise leflipchart ngenkathi nibosisana emaqenjini amancane,** lapho abantu bengakwazi ukuhlangana kangcono khona. Sekwabonakala ukuthi uma abantu bebeka nabo ngokwabo uma kufundwa, bafunda kangcono kakhulu.

3.1. Ungafundisa noma yiliphi iqembu elincane ngalendlela: iziguli emtholampilo noma emawadini, imindeni emakhaya, ikomidi lezempilo, iqembu lomphakathi njalonjalo. Kungcono uma iqembu lilincane kakhulu (sithi-nje abantu abalishumi) kodwa kwezinye izikhathi ungathola ukuthi kufanele usebenzise iqembu elininganа.

3.2. Kusemqoka ukuzilungiselela ngaphambi kokusebenzisa leflipchart. Qala ngokuyibuka kahle ngaphambi kokuqala. Uyabona ukuthi inezingxenye ezimbili ezihlukaniswe iphepha elingabhaliwe.

Ingxenye yokuQala iyisiqalo sokubonisana. Lokhu kusho ukuthi indaba ebeka izinkinga eqenjini zokuba kuboniswane. **Ingxenye yesiBili** inikeza izimpendulo emibuzweni ebuziwe eNgxenyeni yokuQala, ngesimo sendaba. Isetshenziselwa ukuqinisekisa lokho iqembu eselikufundile ekubonisaneni kwalo, futhi mhlawumbe nokulungisa imibono engalungile.

3.3. Uma niqala ukubonisana, **isimo kufanele kube ngesijwayelekile futhi ukhululeke.** Hlala phansi neqembu — ungami ngaphambi kwalo. Zazise, bese uchaza ukuthi **lokhu kuwukubonisana hayi ukufundisa.** Wonke umuntu uzohlanganyela ngolwazi analo namanye amalungu aseqenjini.

3.4. Misa iflipchart iqonde endaweni lapho wonke umuntu azoyibona kahle ngokucacile. Amakhasi eNgxenye yokuQala ayaphenyeka ngalinye ngalinye, futhi amalungu eqembu ayacelwa ukuba abambisane ekuxoxeni indaba. Eminye imininingwane ingaqulwa ukuze ihambisane kancono nesimo sendawo.

3.5. Kulesigaba kusemqoka ukukhumbula ukuthi **awuzele ukuzoshumayela kodwa ukwenza iqembu lizitholele izinto ngokwalo.** Khumbula ukuthi amaphuzu ozothanda ukuba amalungu eqembu awafunde asevele ayaziwa abanye babo. Ngakho-ke thula ngokunokwenzeka; buyisela imibuzo abakubuza yona kubona; khuthaza ukubonisana ngokubuza lemibuzo elandelayo:
- — siBoneni lapha?
- — kwEnzekani lapha?
- — ngabe kuyenzeka ezweni lEthu?
- — Kungani kwenzeka?
- — sizokweEnzenjani thina ngalokhu?

Khumbula izinhlamvu "BEEKE"

3.6. Emva kokuba sekuboniswene ngalemibuzo kaBEEKE, iNgxenye yesiBili yeflipchart ingakhonjiswa. Iqembu ekuxoxeni indaba liyoqiniseka ngaloko okufundiwe iqembu noma mhlawumbe lilungise imibono engalungile. Kungumqondo omuhle **ukuhlola manje ukuthi amalungu eqembu asefundile yini.** Lokhu ungakwenza ngokubuza imibuzo, futhi usebenzise amakhasi eflipchart ukucacisa izimpendulo.

3.7. Inhloso yemfundo yezempilo ukuletha abantu ukuba benze ukuze bayenze ncono impilo yabo. Ngakho-ke ekugcineni kokubonisana, cela amalunga eqembu **ashiyelane ngalokho asenquma ukuthi azokwenza** ngalenkinga.

4. Awudingi ukusebenzisa yonke iflipchart uma nibonisana. Ikhasi elilodwa lingenela ukuqala inxoxo. (Khumbula ukuthi isiqalo senxoxo siveza inkinga, ngaphandle kokunika impendulo). Isiqalo senxoxo silandelwa imibuzo ezifanele.

PLEASE READ THIS PAGE CAREFULLY BEFORE YOU USE THIS FLIPCHART

FLIPCHART NO. 4

APPENDIX

ORY OF SHANDU AND MBAMBO

(Tuberculosis or TB)

1. This flipchart teaches the following facts:

1.1. **About the cause of TB**
- — TB is caused by germs.
- — These TB germs damage the lungs, and when a person with TB coughs, the germs get into the air.
- — The germs can therefore be breathed in by another person, who can then also get TB.
- — Clearly, the families of TB sufferers are in great danger of getting TB.

1.2. **About the complaints of TB sufferers**
- — A cough which will not go away, for one month or more.
- — Later on, the sputum may have blood in it.
- — Loss of appetite.
- — Loss of weight.

1.3. **About what happens to a TB patient when he goes to hospital**
- — The doctor or nurse examines his chest.
- — His sputum is examined.
- — An X-ray is taken of his chest.

1.4. **About the treatment of TB**
- — TB can only be treated with the medicines that doctors and nurses use. Inyangas, sangomas and prophets can't cure TB.
- — If a TB sufferer is not treated properly with doctor's medicines, he will die.
- — If a person starts getting the right treatment soon after getting TB, he can be treated as an outpatient and does not need to stay in hospital.
- — If a person with TB starts getting the right treatment soon, he can continue working.
- — To get completely cured, he needs to be treated at least 3 times a week, for 6 months.

2. **You should rather not give a lecture when using this flipchart.** Lectures are not a very good way of teaching adults. People do not learn or remember well if they just have to sit and listen.

3. **We recommend that you use this flipchart during discussions in small groups,** when people can take part more easily. It has been shown that if people are more involved when they learn, they learn better.

3.1. You can teach any small group in this way: patients at clinics or in wards, families at home, health committees, community groups etc. It is better if the group is quite small - any 10 people - but sometimes you may find you have to use larger groups.

3.2. It is very important that you should prepare before using this flipchart; go through it carefully beforehand. You will notice that it consists of two parts, separated by a blank sheet of paper.
Part 1 is a **discussion starter.** This means it is a story which puts problems to the group for discussion.
Part 2 gives some answers to the question posed in Part 1, also in story form. It is used to reinforce what the group has learnt in their discussion, and perhaps to correct some wrong ideas.

3.3. When you start a discussion, **the atmosphere must be informal and relaxed.** Sit down with the group - do not stand in front of it. Introduce yourself, and explain that **this is a discussion and not a lecture.** Everyone is going to share the knowledge they have with the other members of the group.

3.4. Hold the flipchart upright in a place where everyone can see it clearly. The pages of Part 1 are flipped over one by one, and group members are asked to participate in telling the story. Some details may be changed, to fit in better with local circumstances.

3.5. At this stage it is important to remember that **you are not here to preach, but to enable the group to discover things for themselves.** Also remember that the facts you would like the group members to learn are probably already known to some of them. So be as quiet as possible; turn questions that are asked to you back to the group; and stimulate discussion by asking some of the following questions:
- — what have we **S**een here?
- — what is **H**appening here?
- — does it happen in **O**ur community?
- — **W**hy does it happen?
- — what are we going to **D**o about it?

Remember the letters "SHOWD"

3.6. After these SHOWD questions have been discussed, Part 2 of the flipchart is showed. Again the group participates in telling the story. It will reinforce what the group has learnt, and perhaps correct some wrong ideas. It is a good idea also to **check now whether the group members have really learnt.** You can do this by asking questions again, and using pages of the flipchart to illustrate answers.

3.7. The aim of health education is to bring people to act to improve their health. So right at the end of the discussion, ask members of the group to **share what they have decided to do** about the problem.

4. You need not use the whole flipchart with each group discussion - a single page may be anough to start the discussion off. (Remember that a good discussion starter poses a problem, without giving the answer). The starter is then followed by the appropriate questions.

Leflipchart ikhishwa ngokuhlanganyelwa
INgwelezane Health Ward Committee kanye noMnyango wezeMpilo waKwaZulu
Ikhiqizwa e: **Amatikulu Centre**
Private Bag X2113, 3802 Nyoni, South Africa

Photos: Mandlenkosi T. Buthelezi

Zululand Times, Eshowe

This flipchart is a joint production of
the Ngwelezana Health Ward Committee and the Department of Health KwaZulu
It is produced at: **Amatikulu Centre**
Private Bag X2113, 3802 Nyoni, South Africa