Promoting healthy lifestyles

Community Health Workers' Intervention Programme for Primary Prevention of Non-Communicable Diseases in Khayelitsha, an Urban Township in Cape Town

School of Public Health
Faculty of Community & Health Sciences
Promoting healthy lifestyles

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Report
October 2007
Acknowledgements

A number of people were central to making this report possible and acknowledged below. The general co-operation of the staff members at the organisations is highly appreciated. They were always willing to give additional information or assist with setting up interviews and visits in the community.

The high level of interest in the issues by staff from the health services made the data collection straightforward, and the willingness of members in the community to answer the survey questions was commendable.

Staff of the Public Health Programme who supported the project:

Prof David Sanders, Prof Mickey Chopra, Prof Debbie Jackson, Ms Jeani Sengwana, Mr Melvin Adams and Mrs Marlene Petersen.


Data Capturers: Khosi Mngomezulu and Wendy Ward.

Participants and collaborators: Site C Community Health Workers; Community Drama Group Members; Community Awareness and Promotions; Buyelwa Dlangamandla; Kangelani Rhwuzu; Kululu Nongoboza; Dr Vlasiu, Trish de Villiers, Maureen McCrea and Esmé Kennel, PAWC; Khayelitsha Hall Hiring Department, City of Cape Town; Jean Fourie, Chronic Diseases of Lifestyle Unit, Medical Research Council and Pauline Brooks, Los Angeles, California U.S.A.

Funding:

The NRF is greatly acknowledged for funding this project.

Roche Diagnostics and Nova-Nordisk are thanked for the generous provision of glucose testing strips for the Diabetes Awareness Day event.
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  Training of CHWs on primary prevention of non-communicable diseases (Summary of presentations)
  Questions for in-depth interviews with community stakeholders
  Situational analysis:
    A copy of a questionnaire used during a situational analysis
    Interview with community members
    Interview of street vendor owners
  Knowledge and attitudes of CHWs about diabetes and Hypertension (Questionnaire)
  Examples of mapping
  Masiphakame ngempilo yehwu Club: member information
  Walk for life briefing
Background to the project

A community-based project to increase community awareness about primary prevention of non-communicable diseases (NCDs) was implemented in Khayelitsha, an urban township of Cape Town.

The aims of project were:
1. To utilise community health workers (CHWs) as change agents in their community.
2. To develop a NCD model, whereby an urban township community can benefit.

Part 1 of this document describes the process undertaken with CHWs to plan and implement community interventions, and Part 2 outlines the evaluation of the interventions.

Method: Participatory action research (PAR) utilising the ‘triple A’ approach of assessment, analysis, and action was used for planning and implementing the interventions. Stage 1 involved assessment of the CHWs’ risk factors by obtaining anthropometric measurements, interviews and focus group discussions on socio-cultural factors associated with body weight and body image, and barriers to physical activity. Stage 2 Baseline community survey to determine the prevalence of hypertension and diabetes; Stage 3 a situational assessment of available resources in the community for promoting healthy lifestyles. The fourth stage included developing and implementing training programme for primary prevention of non-communicable diseases among CHWs. The fifth and the final stage involved the implementation of community interventions by the CHWs.

Formative evaluation of the effectiveness of utilising CHWs to implement interventions was undertaken by the staff and students (as part of their research projects) of the SOPH and by external evaluators. Data were collected through a community survey, interviews with CHWs and stakeholders, and group discussions with club members.

Evaluations revealed the following:
• Mean body mass index (BMI) of CHWs decreased;
• Knowledge of CHWs regarding NCDs improved (risk factors and preventive measures);
• Physical activity levels of participants increased as a result of implementing a buddy/mentoring system and support groups;
• Consumption of fruit and vegetables did not change because of social economic constraints and environmental barriers.

Outcome of the interventions

• Development of a training manual for health promoters
• Establishment of a health club (support group for prevention of NCDs) Involvement of other stakeholders (i.e. Virgin Active) in the initiative for the prevention of NCDs
• Establishment of the first gym in this community
• Recognition of this work by the Western Cape Department of Health that requested assistance with training of support group facilitators
• Development of other support for groups, i.e. those run by churches that focus on the prevention of NCDs in the community.

Challenges

Various challenges were experienced during the implementation process such as high unemployment rates in Khayelitsha, availability of inexpensive unhealthy foods, crime and violence interfering with physical activity, and financial constraints. All these made lifestyle modification difficult.

Conclusions

This CHWs’ Intervention successfully managed to increase awareness of NCDs among people living in Khayelitsha. Some of the interventions are still ongoing, i.e. the health club. This intervention shows that given knowledge and skills, CHWs can act as agents of change in their community, and are therefore instrumental in primary prevention of NCDs. It is recommended that this programme be replicated to a larger population.
Non-communicable diseases (NCDs) are a major cause of global morbidity and mortality. The World Health Organization (WHO) has estimated that by 2020, one third of the global burden of disease will be attributable to NCDs (WHO, 1997).

Mortality data indicate that South Africa is faced with a quadruple burden of disease, including infectious diseases, nutritional deficiencies, and NCDs such as hypertension, as well as injuries and lately HIV/AIDS. The poor suffer the most from all four patterns of mortality. Based on the 1996 South African death registration, infectious diseases along with maternal mortality and conditions related to malnutrition, account for 30.6% of deaths, while chronic diseases account for 31.9% (Bradshaw, 2002). The estimated mortality profile for South Africa for 2000 inform us that NCDs and the associated modifiable risk factors should be a priority in the current health agenda of the region. Moreover, the WHO developed a global strategy for diet, physical activity, and health to be implemented within the integrated prevention and control of NCDs (WHO, 2002). The strategy aims at promoting healthy lifestyles (healthy food choices and an increase in physical activity) in a healthier environment, where nutritious food is available locally, in particular fruits and vegetables, at reasonable prices.

Background

Since 2002, the SOPH, University of the Western Cape has been working with CHWs* in Site C, Khayelitsha, an urban black township in the Western Cape, in a participatory action research project for primary prevention of NCDs. The aim was to design a NCD model, which can be used to benefit an urban township community.

The intervention was initiated in response to the request of community members of Khayelitsha who had noticed an increasing number of their people suffering from diabetes and hypertension in Khayelitsha; and to implement the WHO global strategy for prevention and control of NCDs.

The community members approached the CHWs working in the community, who then approached Zanempilo, previously known as SACLA (South African Christian Leadership Alliance) a large non-governmental organisation (NGO) that was active in the New Crossroads, Nyanga and Khayelitsha districts of Cape Town for over 20 years. The aim of this organisation was to improve the health in the communities where they worked. The main activities of this organisation were achieved with the assistance of approximately 80 CHWs. The CHWs, who resided in Site B and Site C, Khayelitsha, comprised 26 and 22 (n=48), respectively. Services rendered included family planning, TB support and other minor ailments. The care of patients with chronic diseases was not part of the programme because of a lack of capacity in this area.

The representatives of the NGO then approached the research institutions to seek assistance in developing skills for CHWs in the prevention of NCDs, and a meeting was set up. A researcher (TP) attending the meeting was suddenly aware of the extent of this task! Many CHWs were overweight of whom most were extremely obese. It was obvious there was no way the CHWs could assist the community when they too were at risk. The researcher advised Zanempilo to work with the CHWs before moving into the community. They needed to identify their knowledge, beliefs and attitudes about risk factors for NCDs, and then jointly present possible strategies to address these problems. Understanding the association between obesity and NCDs could help members in their community.

The question asked was: How can we ensure that CHWs are attuned to their own unhealthy lifestyles and health risks so that they can be better exemplars and educators of others? Interventions following five development stages were implemented to answer this question.

The project benefited an estimated target population of 1000 households residing in Khayelitsha, a Cape Town township, with a population estimated at between 350 000 and 900 000. Because of the legacy of apartheid, people had moved from rural areas to Khayelitsha seeking employment, although opportunities have been scarce. Each of the CHWs had to take care of about 100 to 150 households. The interventions focused around areas where CHWs worked.

* Community health workers are lay people and elected by the communities, which they serve. Their role in Health Promotion and Prevention is being increasingly recognised in the health sector and the level of policy makers. Their role is that of a generalist, responding to the health needs of the community.

CHWs usually undergo training in basic health care, health promotion, disease-specific techniques and home-based care. We evaluated the impact of adding an additional role to their activities by using them as agents of change in NCDs.
A triple-A approach of assessment of causes of unhealthy behaviours, analysis of the findings and action taken to implement the interventions was utilized. The process followed to implement the interventions is outlined below along with some of the results.

Three assessments were done. 1) CHWs’ risk factors; 2) a household survey to determine community risk factors for NCDs; and 3) a situational analysis to assess environmental influences of unhealthy lifestyles.

**Stage 1: Assessment of CHWs’ risk factors (2001)**

The knowledge, beliefs and attitudes of CHWs from Sites B and C about body size and body image (a risk factor for NCDs) including perceptions about food, exercise, rest and health were examined through interviews and focus group discussions (FGD, see appendix for questionnaire). Anthropometric measurements (weight, height, mid-upper arm circumference, waist circumference and blood pressure readings) were taken from all CHWs. Photos were taken to provide visual messages of portion sizes for training purposes.

CHWs were given disposable cameras to verify their observations in the areas they visited. These included places such as street vendors selling unhealthy foods and those that encourage alcohol intake and smoking. Photos were taken of the area.

Of the 44 women that were measured, only two had normal weight (BMI 18-24.5 kg/m²), two were overweight (BMI = 25-29.9 kg/m²) and 40 were obese (BMI > 30 kg/m²), of whom 15 were extremely obese (BMI > 40 kg/m²). A large percentage of women perceived a moderately overweight woman as attractive, and this was associated with dignity, respect, confidence and feeling good about oneself (Puoane et al., 2005).

Factors perceived as leading to overweight were eating the wrong food, skipping breakfast, worries about debts, cash loans, husbands/partners and teenage children frequent violence, and alcohol abuse. Aspects of obesity that were perceived negatively were, continuous body aches and tiredness.

CHWs also had misconceptions about the causes and treatment of hypertension (Sengwana & Puoane, 2004) and diabetes (Hughes, Puoane & Bradley, 2006). Eating patterns revealed consumption of soft maize porridge 3-4 times a week to which sugar, peanut butter or butter was added. A large percentage of participants added oil and sugar to their vegetables.

Respondents who consumed fat cakes twice a week (sometimes stuffed with ground beef) were 40%. Most respondents used full cream milk (64.7%), fewer used low fat milk (26.5%) and sour milk (21.6%), while only 8.8% used non-fat milk. Those who consumed tripe twice a week and red meat 3-4 times were 19%, while 30% consumed sausages 3-4 times a week.

The reasons given for choices of certain food types were that they were locally available, reasonably priced and tasty. Eighty percent of the street vendors sold meat with high fat contents at very reasonable prices. Almost all local stores only sold full cream milk.

The CHWs also lacked knowledge about nutrition and the risk of fat intake, which was indicated by the statement that, “People who boil food are not civilised. Fried food is attractive, tasty - like “chicken lick’n”. “Chicken skin is very tasty because it has fat. It makes you satisfied. We can’t throw the skin away. We even buy skin and fat.” (Chopra & Puoane, 2003).

Observations of cooking methods revealed unhealthy practices that included cooking chicken with the skin in 300 ml cooking oil. The portions served were extremely large, and almost triple those of the suggested servings.

Photographs of local shops confirmed the information presented by CHWs that the environment in the township promotes unhealthy food choices. Crime, lack of safety, cultural beliefs, and lack of green areas and recreation facilities in the township interfered with participating in physical activities.

A number of factors were specifically identified as contributing to unhealthy living:

- **Environment:** There is a shortage of healthy, low-fat food and little fresh fruit and vegetables are available in the townships. Most local shops sell cheap fatty foods. Street vendors’ stalls sell fatty meat and sausages.
- **Socio-economic factors:** Unhealthy food that is readily available is relatively cheap.
- **Lack of knowledge:** Although CHWs are among the more knowledgeable members of their community regarding health issues, they did not link diabetes and high blood pressure to obesity and certainly never considered themselves at risk, since their knowledge about nutrition is very little.
Beliefs and attitudes: A belief that women are admired when round and plump interfered with maintaining normal body weight in this population. The next stage assessed risk factors for NCDs in the community.

Stage 2: Baseline Community Survey (2001)
A survey of 800 households in Khayelitsha was done to determine the prevalence of hypertension and self-reported cases of diabetes. Data were collected through interviews done by convenience sampling of one adult per selected household, who was available at the time of the visit. Respondents were interviewed to assess their knowledge about risk factors and prevention of chronic diseases, including the prevalence of hypertension and self-reported prevalence of diabetes. Data were also collected on risk factors for chronic diseases, such as smoking, physical inactivity, excessive alcohol intake, obesity, and eating patterns.

Twenty-two CHWs were trained to conduct the survey, complete a questionnaire and take anthropometric measurements along with experienced fieldworkers. Information similar to that gathered in Stage 1 was collected from the communities in Sites B, C and Zibonele Town 2, which were chosen because they were similar in population size, socio-economic status and cultural lifestyle, and therefore, suitable for a long-term intervention study. Established CHW programmes operated in all three of these areas.

The data revealed obesity prevalence of 46%, hypertension (88.6%) and self-reported diabetes of 12.5%.

Environmental influences of unhealthy lifestyles are discussed in the next stage.

Stage 3: Situational analysis (2002)
In preparation for community interventions, the CHWs conducted a situational analysis in the community to obtain information from places in the area that they thought were promoting unhealthy lifestyles. The CHWs drew a map (see appendix) of the area and asked the neighbours to contribute towards identifying resources that influenced or discouraged healthy living.

CHWs interviewed community members to determine their perceptions about risk factors for NCDs in the community. Street-vendors were also interviewed to assess their perceptions about the type of food items that they sold in terms of health.

Problems identified during the situational analysis included smoking, alcohol intake, and increased prevalence of obesity, hypertension and diabetes. Lack of knowledge on healthy eating, poverty and environmental factors were determinants of unhealthy lifestyles. Street vendors had no or little knowledge about the health risks associated with the food items that they sold (cheap fatty meat). A large percentage had started this type of business to earn a living, especially because of the increased number of people who were unemployed.

Discussions during community situational assessment meetings revealed that socio-economic issues also contributed to unhealthy food choices, as indicated by the following comments:

“I have been poor for most of my childhood, now I have a husband who works and can afford to feed...”
me, why should I punish myself?"

"You want me to starve myself the next thing, car accident, I am dead. Let me eat what I like and be happy"

"I have been deprived since I was a child. This is the time to enjoy myself by eating what I like. I like my food"

Participants were concerned about shebeens near schools which encourage drinking behaviours among the youth.

Feedback of the findings (analysis)

On completion of the assessment of risk factors among CHWs, feedback on the results of anthropometric measurements (Stage 1) using WHO cut-off points were given to explain the risk associated with different levels of BMI (WHO, 2000; Rose et al., 1982). In addition, the consequences of a diet rich in fats, the benefits of reducing fat intake, and increasing fruits and vegetables were explained.

At the end of the presentations, CHWs were given time to think about their results. Small group discussions were held to discuss the way forward. At the end of their discussion, one of the CHWs made the following statement:

"We have been discussing our results. I am going to speak for the group. We do not know what to eat to be healthy. We have realised that we have been poisoning ourselves with unhealthy food. We need to be educated, we do not want to die and leave our young children behind. We need help".

This statement led to the development of a training programme for primary prevention of NCDs.


An interactive training programme was developed for CHWs. The aim of the training programme was to empower CHWs with knowledge and skills to make healthy choices about food and to increase their physical activity. By the end of training they were expected to influence their community to adopt healthy lifestyles by being positive role models, and secondly to use key messages to increase awareness and promote healthy lifestyles.

Weekly interactive training sessions were held at a central venue over a 6-month period. Lectures used to teach the CHWs from Site-C, were combined into a training manual. The manual was piloted in Site-B’s CHWs before it was finalised, and is available electronically and as a hard copy.

Actions to influence lifestyle modification among CHWs

During the training sessions, after the completion of each topic, CHWs were asked to identify behaviours that they wanted to modify, as well as to set goals related to identified modifiable risk practices and barriers to achieving such goals, and how to overcome these. The aim of this exercise was to help them realise that behaviour modification is a step-wise process, which incorporates targeted goals. Achievement and failures related to set goals were presented during the next training session. New goals were also set. Some of the targeted risk behaviours included a reduction in salt, sugar and fat intakes; and food portion sizes. Weight loss and increased physical activity were also targeted.

Example: Nomsa wanted to reduce the amount of salt she added to food. She recognised this as a problem that affected her family, as she is the main cook and the food that she cooks is always salty. Now she was made aware of the consequences of excess salt intake and she wanted to take actions that would reduce the risk of NCDs.

Goal: Reduction in amount of salt intake

Current status: I add salt in everything that I eat including bread, vegetables, salads, rice and pasta. I don’t measure the amount of salt that I add. I even add salt in my cooked food before tasting the food.

Objective:

By the end of seven days, I would like to reduce the amount of salt that I add to food. First, I would like to omit adding salt in vegetables including salads.

Planned Activities

- Get rid of saltshaker.
- Put household salt used for cooking in a container. Use a small teaspoon to measure salt that I add when cooking.

Barriers that may prevent me from achieving my goal

- If I put salt on the table, I will automatically add it to food.
- How will I overcome this barrier?
- I will not put salt on the table during meal times.
- I will also request my family to support me.

Stage 5: Community interventions by CHWs (2004-2005)

The aim of the interventions was to develop practical, feasible, sustainable and culturally relevant environmental programmes to improve the quality of life of community members in Khayelitsha, according to their identified needs.

The CHWs with the help of researchers and health professionals used the information they collected during mapping exercises to plan interventions in the community. Once the CHWs were empowered with additional knowledge and skills in the prevention of NCDs, awareness-raising events were held annually from 2001 to 2003 and in 2005. The CHWs took the
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responsibility for advertising and promoting these events. They also assisted with taking the anthropometric measurements. These events focused on increasing physical activity and making healthy choices about food. A play on diabetes was dramatised in the 2003 event.

**CHWs' Programme Activities**

Some of the activities for increasing community awareness about preventing NCDs included discussions on eating healthy, group walks, developing and staging dramatised plays to disseminate messages about prevention and control of NCDs, and starting a health club.

**Group walks**

Community walks, such as the Walk for Life and the Health Walk in Khayelitsha (see appendix) were organised to increase community awareness of physical activity in preventing NCDs and to support the heart awareness month. These fun walks ensured that community members could see the benefit of engaging in healthy exercise.

**Using community drama to spread messages about diabetes**

CHWs, professional actors and community members developed and staged a drama during Diabetes Awareness Week in November 2003. The purpose of the drama was:

- To raise awareness to risk factors to diabetes
- To promote adherence to diabetes treatment, including medicine usage.

Key messages included: eating healthy and regular meals, being physically active, not drinking excessive amounts of alcohol and adherence to recommended medication and treatment regimes. The drama was performed during Diabetes Awareness Week to over 1100 people at a total of 13 sites including a community hall, the local clinic and in the streets.

At the end of each performance, the audience was interviewed to assess their understanding and to evaluate the clarity of the drama in imparting important messages about diabetes. Messages recalled about medication usage included: the importance of taking medicines regularly, not sharing medicines with others and not running out of medicines. There were requests for more performances in the area and neighbouring communities.

**Development of a Health Club (support group focusing on NCDs)**

During January 2005, CHWs took part in planning and developing a health club called "Masiphakane Ngempilo yethu" (Let's stand up for our Health). After they were trained in leading exercise groups by an expert Sports Scientist, they recruited 35 community members from their area to join the club (see appendix for member details).

Baseline measurements were collected from 31 of these members, with most of them being women living in Site C, Khayelitsha. These included weight, height and blood pressure.

Their BMIs when calculated showed that none was underweight and 7% had normal weights.
However, 33% were overweight (BMI > 25-30 kg/m²), while 47% were obese (BMI > 30-40 kg/m²) and 13% were very obese (BMI 40+ kg/m²).

Blood pressure (BP) measurements revealed that 6% had a low BP (systolic pressure < 90 mmHg), 49% had normal BPs (120/80 mmHg) and 45% had high BPs (140/90 mmHg). (see figure 2)

There were 71% of the members who had one or more types of NCDs, viz. diabetes, hypertension and/or arthritis. The rest (29%) did not have any form of NCDs. (see figure 3)

At present members meet every Wednesday morning. At each session, they are led through a series of exercises by trained CHWs and then have demonstrations, talks, and discussions on healthy nutrition, cooking techniques, the importance of physical activity, and other areas.

The CHWs act as role models and agents of information dissemination in the community. They maintain an attendance list; take measurements every month including blood pressure, weight, height and BMI. They participate in supporting groups/health club members to increase their levels of physical activity. Members are referred to the local primary care facility if necessary. Once a month a cooking demonstration is done, where everyone tastes the food and recipes are shared among the group. The number of members who first joined (n=35) the Club has increased to 152 in 2006.
Five years after the initiation of the project (2006), it was necessary to evaluate the impact of CHW’s interventions in the community. The staff and students at the SOPH and external evaluators carried out the evaluation of this project. Evaluation was aimed at answering the following question: Can a CHW’s intervention be effective in increasing the community’s awareness about primary prevention of non-communicable diseases?

In the evaluation, the following topics are discussed:
1. Assessment of knowledge retention on NCDs among CHWs who were trained in the primary prevention of NCDs in Khayelitsha, Cape Town.
2. Assessing the awareness of community members about activities of CHWs regarding NCDs (community survey results).
3. Assessing perceptions of club attendees about their participation in the club (FGD).
4. Comparison of physical activity and dietary habits of health club attendees and community controls in Khayelitsha, Cape Town.
5. Evaluation of the impact of intervention by a stakeholder.

1. Evaluation of knowledge retention on NCDs among CHWs who were trained in the primary prevention of NCDs in Khayelitsha, Cape Town

At baseline, 44 CHWs had their anthropometric measurements (weight, height, blood pressure) taken. Knowledge about risk factors and prevention of NCDs was assessed through interviews and focus group discussions. All CHWs who had received training on primary prevention of NCDs were interviewed to assess retention of knowledge gained during the training. Anthropometric measurements (weight and height) were also collected. During the evaluation study, only 30 CHWs were available to participate in the study. Findings of the pre and post interventions are compared.


<table>
<thead>
<tr>
<th>Condition</th>
<th>Pre training</th>
<th>Post training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>Caused by fatty foods and witchcraft</td>
<td>Lifestyle factors and genetics are responsible for hypertension</td>
</tr>
<tr>
<td></td>
<td>Treatment: Home brewed beer and Cape aloe</td>
<td>Treatment: Lifestyle modification and diet</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Caused by too much sweet foods and starch in the diet</td>
<td>Diabetes is caused by unhealthy lifestyle and mal-functioning pancreas</td>
</tr>
<tr>
<td></td>
<td>Traditional healers can cure diabetes</td>
<td>No cure, treatment includes diet, exercise and medication</td>
</tr>
</tbody>
</table>

Pre test Post test

Table 1. CHWs’ knowledge on causes of diabetes

<table>
<thead>
<tr>
<th>Condition</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inheritance</td>
<td>13.8%</td>
<td>63.3%</td>
</tr>
<tr>
<td>Defective pancreas</td>
<td>13.8%</td>
<td>63.3%</td>
</tr>
</tbody>
</table>

Table 2. CHWs’ Knowledge on risk factors for hypertension

<table>
<thead>
<tr>
<th>Factor</th>
<th>Pre test</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of exercise</td>
<td>17.2%</td>
<td>83.3%</td>
</tr>
<tr>
<td>Overweight</td>
<td>3.4%</td>
<td>90%</td>
</tr>
<tr>
<td>Inheritance</td>
<td>13.8%</td>
<td>63.3%</td>
</tr>
</tbody>
</table>

Table 3. Summary of group discussions on CHWs’ knowledge about NCDs

Changes in BMI among the CHWs showed a decrease in the number of obese CHWs and an increase in those who were of normal and overweight from 2001 to 2006.
Sources of health information

Sources of health information varied in this population as shown in Figure 6. Community health workers were identified as an important source of health information.

Table 4. Comparison of advice given by CHWs on what one should do to keep healthy if suffering from hypertension

<table>
<thead>
<tr>
<th>Advice</th>
<th>Pre test %</th>
<th>Post test %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control weight</td>
<td>6.9</td>
<td>93.3</td>
</tr>
<tr>
<td>Low fat diet</td>
<td>37.9</td>
<td>93.3</td>
</tr>
<tr>
<td>Reduced salt intake</td>
<td>20.7</td>
<td>90</td>
</tr>
<tr>
<td>Reduced my alcohol intake</td>
<td>6.9</td>
<td>80</td>
</tr>
<tr>
<td>Traditional medicines</td>
<td>3.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Mixtures e.g. vinegar, dagga, aloe</td>
<td>3.4</td>
<td>6.7</td>
</tr>
<tr>
<td>Homemade alcohol</td>
<td>3.4</td>
<td>16.7</td>
</tr>
<tr>
<td>Stop smoking</td>
<td>3.4</td>
<td>16.7</td>
</tr>
</tbody>
</table>

Table 4 shows some changes in CHWs' knowledge about giving advice to hypertensive patients about healthy living. Of concern is the use of traditional medicines, which remains unchanged. This is probably because CHWs find it difficult to discourage people from using traditional medicines as they also believe in these.

2. Assessing the awareness of the community about activities of CHWs regarding NCDs (community survey results)

Data was collected during August 2006. Two hundred households were randomly selected for the study in the areas where the CHWs reside and work. Data was collected through interviews with one of the adults from the selected household. Direct measurements (weight and height) were taken and the BMI calculated.

Preliminary findings

Disease prevalence

There has been an increase in the prevalence (self-reported) of NCDs from 2001 to 2006. Diabetes, high blood pressure and arthritis are more prevalent in this population (Figure 5). The prevalence of heart attacks and strokes has doubled in the past 5 years.

Table 4 shows some changes in CHWs' knowledge about giving advice to hypertensive patients about healthy living. Of concern is the use of traditional medicines, which remains unchanged. This is probably because CHWs find it difficult to discourage people from using traditional medicines as they also believe in these.

Figure 5: Comparison of baseline and follow-up survey

Figure 6: Sources of health information from the 2006 community survey

Comparison of BMI from 2001-2006

In general, there has been an increase in the number of people who are obese (BMI > 30 kg/m²). On the other hand, there has been a decrease in the number of people who fall within the categories of underweight, normal weight and overweight.

Summary of findings

Although NCDs have increased, CHWs form an integral part in disseminating information to this community. Preliminary data reveal that environmental and socio-economic factors seem to play a role in the unhealthy choices people make regarding food and physical activity, as more of them have become obese over the intervention period.
3. Assessing perceptions of club attendees about their participation in the club

Group discussions with club members took place on 02/08/2006 and facilitated by external evaluators (Pauline, Pat and Ruth from the USA).

The aim was to explore the perceptions of club members about being participant in the health club.

The discussions were facilitated in a local language, isiXhosa, which was translated by the project co-ordinator, Jabulisiwe Zulu. Discussions were recorded on tape, independently transcribed verbatim by two research assistants and translated into English. At the end of the discussions, the information gathered was summarised and presented to the participants to verify if the information that was collected reflected what participants meant to discuss.

The transcribed information is presented as follows:

Interviewer: I know that Jabu has talked to you about the main aspect of pictures and we may tape record the conversation but at any time if you say something that you do not want tape recorder we will erase, and we'll erase it in front of you. The same goes for any photographs. If we take a photograph and there is something that you do not want photographed we will not do that.

There may also be subjects that you may not wish to talk about and if that’s the case you have the right to say “we don’t want to tell you, we don’t want to talk about it and we will ask other kinds of questions. You have the right to do that. Anytime that you talk with a researcher or a photographer or a newspaper person or anybody like that, anything that I just said is your right. So it’s not just for us today but for everybody. You have the right to say no.

Interpreter: I forgot to say that these are all club members that started last year in March.

Interviewer: Anything that we will write or if we photograph anything, we will take it up with the University and they will share it with you. They should do so to make sure that it’s accurate and that it’s the truth.

You have to help us be honest and truthful in what we do. Sometimes we may say something that’s not truthful, but it’s by accident because we did not understand. So even in our conversation today if you feel that you said something that we don’t really understand what you meant. We may write down the word, but we did not really understand what you really meant. Please help us understand. We would like to understand. It’s your story and we just trying to understand that story. If we did the story at all, then anytime that we may bring or try to assist won’t be helpful to you, so…

There are many parts to this research project and my part...I have an interest in looking at issues that involve......in particular the issue of racism.

Interpreter: I just explained to them, like when it comes to racism, as they know that even their existence of this health club it was from a research study, that’s why it exists. We got different interest in this research study.

Interviewer: Before I ask specific questions about your club and about your health and what you hoping to get from the club, let me first ask, how do you see the club developing and what are you hoping to have here.

Respondent: I do not know if I’ll be able to express what I want to express, because I’m going to talk about my own experience.

First of all I would like to greet three of you. First of all when I joined this club, it was because I saw the state of my health then. When I got in, I got a chance of being told as to what is it that can help me in living healthy like you Sissi(meaning Jabu) that you were telling us how to prevent and control non communicable disease. Even though I am not yet better, but there’s a great difference since I joined the club, as a result if I don’t come or miss the club day, I feel like I am not healthy because I missed something.

We appreciate you guys, working at School of Public Health. We did not know anything before we met you, but now we are aware of the ill health practices. I will stop there for a minute.

Respondent: I’m greeting you health professionals. I really thank you for this health information that the club brought to us. I was attending NOUNGILE clinic, that’s the nearby clinic I told you about. I was having painful knees and backache, but since this initiation of this club, it’s been a long time since I’ve been back to the clinic. I can feel the difference. I am fresh. I thank you for coming with this bright idea, concerning our health, because really today we can even run. I don’t even have difficulty in breathing as I have before. I run even with other club members now. Thank You.

Respondent: I greet you all. I am 62 years old. Since I joined the club I am very happy. I took all the advice that I was given by this club, for example drinking eight glasses of water in 24 hours. I can really say if I drink that water, I really feel the difference even if I’ve been having pain. I would feel there’s nothing. I was troubled by constant high blood pressure, but if I eat vegetables, like spinach and cabbage etc..... I really thank the health information that was brought by Jabu and our Community Health Workers. Thank You.

Respondent: I am also greeting all of you. I thank God for giving you a chance to come and see us, because he did not give others the chance of seeing people. He also gave us, as old as we are a chance to see you. What I had before I joined the club was pain in my knees. I could not walk. I visited doctors and the clinics. I was told by one of the patients in the clinic about the club, that I must visit this club. When I first came here I just observed these old women who are gathered here. The old women stood up and they exercised and I was laughing about them. I was making jokes about them with my grandchildren. The following week I did not observe, I just joined and exercised. That day I was able to walk.
I can even lift bags of potatoes or whatever and sell now. I really thank the advice that was brought by Jabu and her friends, because it’s going to be as if we are talking one and the same thing. It’s because of the excitement of what has happened to us. Thank You.

Respondent: I’m so excited. I feel proud of this club. When I heard about this club, and when I joined it. I realised that it’s really helping me. I am suffering from arthritis. So when I joined this club, I really felt like I am with it. I am very much active now. They even make me do all the exercises. This arthritis is really difficult now, because even at night when it comes, I just stand up and do the exercises, and say goodbye to the pain. Even if I have backache I just stand up and exercise. Even my children are imitating me. When I say I’m having a pain now, they ask me why don’t you do your thing. The info I got here about the importance of drinking water, I have my own bottle now that I carry around and drink. Thank You.

Respondent: I greet you in the almighty name. I raise up the old age club. I was so stressed before I joined this club. I talked about a lot of things. So when we come here, we sit together and we share our problems and you forget about your problems. If you did not come here, you feel like things are bad, you feel you really should come here. This club has not been operating here. When it first came here, there was nothing of this instruments that you see now. For her it was also nice when they were also using their own bodies. I am late today. I forgot the club day. Now also these instruments they are contributing to my doubting to come here now, because I don’t like to use these instruments. Now Wednesday’s I wake up early in the morning and really figure out that I want to exercise. I stand for the old age people that come here. It has helped me really with my problems.

Respondent: I am greeting you people from overseas and Ma Jabu. This club has really helped me, even when I joined since last year. It really motivated me. I’ve been going to Nolungile clinic for hypertension, but since I joined the club, if I go there the nurses check my blood pressure and check it again. They ask me what is happening with you. The blood pressure has disappeared, it’s normal, it’s no more high and I keep quiet because I know I use the advice from my class. I do not even experience that sweating business. It’s gone. I’m glad I don’t suffer from that business because I follow the advice and its really helping me and this drinking of water. We did not know about it before, but since we drinking it now. It’s really helping. Even now when I go to the place far away from here, if I don’t have money for the taxi I don’t worry. I just go there and come back walking. There’s also a place called Nyanga also far, he has money for the transport, it has helped him now not to even get into trains anymore, he just walks. So I’m really thankful to Jabu and them for bringing this to us, because I do not have that cramps and pain now, even there at home they know when I have something I just exercise. if I feel something that is pain, I just stand up and exercise in my own house and take my glass of water and drink and exercise.

Respondent: I greet you my friends who is with us today and the club members. I stand up thanking the club. I have my friends who begged me to come. I did not want to come. Those days I was attending the clinic but it was not helping me. One day I decided let me go. Now look at my feet they are no more swollen. I can lift my arms, I could not do it before, and it was too painful. Now I walk and I talk to my children about the exercises that we do here, I could not walk before and I tell them now that I am healthy and happy. I really thank this project.

Respondent: I greet my visitors. When I joined last year I was taught about what to eat. We discouraged from eating fatty meat and using salt in our food. We were told about the importance of exercising, to prevent high blood pressure and diabeties. We were told that even those who have it already, they must control it so that it does not go to a stroke. Even those that had a stroke if they join the club it will prevent them from going to kidney failure. I discovered that we also learn here. When I first came here I had painful arms. When I started exercising I became much better. I thank the initiation of the club and I love you.

Respondent: Okay I don’t know if I can speak English but I just want to give Jabu a hand. I’ve been suffering from high blood pressure and the hypertension. Every morning when I wake up, I would feel like I’ve been tied to a chair or something. It was so difficult to just wake up, but when I came to the club, I started exercising and doing the gym with these instruments. The first time I started with these instruments, I could not even lift it, I thought I’m not going to come back to do these things, but I kept on doing it. I see now, it’s easy to do whatever I want to do. I can even just lift like this action I used to struggle when I hang my washing, my arms were sore, but now since I joined the club everything is easy for me, even my diet it makes me very happy. It’s easy to do whatever, so I just want to praise this thing that Jabu brought to us. Thank you Jabu and School of Public Health. It means now that we’ll stay longer. When we see the white old people, they’re always fresh because they do gym. In our culture we are not used to these things. Now we can see everybody’s moving. We are also moving and we want to keep on moving and we need more if it there is something more to help our health. I praise this club. Jabu you must never go anywhere, I will even raise funds for Jabu to stay if I have to. I feel fresh now. I am inviting everyone, and telling them they must come join us. This is healthy. It’s really helping, because our people die from an early age because they are not doing these things. Now we know it is healthy. That is all I want to say.

Interviewer: I want to ask questions in several different directions. I want to pick up on something that you just said about the white population. They are use to going to clubs and have the health equipment and things like that. I want you to help me to understand the other culture or the other people of your society. You mentioned in your culture you don’t have this as a habit or as a practice, so I would like to learn more about that.

Respondent: In our culture we are not doing these exercises, if you are a woman you have to carry the baby and take things to the river. The men will look after the livestock. So we are not using those things or used it. You
Interviewer: I would like to add one thing about this. Arthritis is brought by these taxis, short distance you just get bored and the husband help each other, and when you went out to work you were exercising. You were not sitting down. When you arrive at work the madam would show you how to do things. We were domestic workers. They would explain to us what to eat in the morning and what to eat during the day. We liked it and we joined it as it is today.

Respondent: We have been envying what we’ve been watching from television. Seeing that these things are being done by white only, now we are happy that we also have these things in our places, although when we started we struggled. We are used to it now, because we’ve been envying it from seeing it from television.

Respondent: We blacks in those days, we were living through cultivating the soil, ploughing it. We were eating food rich in carbohydrates and in fibre and that were healthy. Those days we did not see any negativity in that. We were collecting wood from the forest. We were cooking outside on the fire and we were making our own samp using the stick to make the samp. There was nothing to make us exercise. The women would not go to work in those days, it was the male only that would work and provide for the family. That was not negative to us. We were very much committed towards it. Then matters forced women to work and the education demanded that the wife and the husband help each other, and when you went out to work you were exercising. You were not sitting down. When you arrive at work the madam would show you how to do things. We were domestic workers. They would explain to us what to eat in the morning and what to eat during the day. We liked it and we joined it as it is today.

Interviewer: Can you explain a little bit more how that works?

Respondent: It continued now that they are no more cultivating the soil. They are working, so we did not manufacture our own samp and beans. We are to buy the ready-made ones. We eat even rice, which we did not eat before. We were introduced to this wrapped meat like chicken. We are not used to this wrapped meat. We were use to eating meat slaughtered from our own homes. We were then introduced to this high blood pressure. We were even introduced to this beef stock, which we did not know, and this aromat and fish oil. We put them together into our food to make our foods tastier. We then developed high blood pressure, diabetes, arthritis with these foods, but we were never exposed to it when we were growing up.

Respondent: Okay I would also add these are also the type of food that contributed to our eyes, you see. With our eyes it’s difficult to see things clearly because it’s spreads in your body. It ends up affecting your eyes, ears etc, so these stuff contributed a lot to our health problems, than the freshness of the soil.

Interviewer: I would like to add one thing about this. This was 4 or 5 years back. I was in an American Indian reservation in the United States and what you have just said. I heard the exact same thing. They used to have their own land, so they had to work it. They fixed it up and they cultivated. Everything was fresh. The same health problems that she has been talking about, they also invaded the American reservation. They spoke of the same exact problem. They too are trying to do something similar to what you are doing here. They are learning about drinking water and changing the food that they are eating to be healthier with their families.

Respondent: What is more painful now is that our children are not even able to cultivate the soil and they do not know anything. If you can compare our children and the people that were living long ago, there is a great difference. Those who were living long ago, they were much healthier than our children now. Our children don’t even know how to make their own samp. They depend on this ready-made beans and other ready-made things. Now what is even more painful is that there are diseases that are brought by these ready-made things that are cannot be treated. We hear of these diseases which can’t be treated now, which did not happen in the olden days. That is more painful. High blood pressure, arthritis, diabetes and the HIV and other diseases that he has forgotten. Before there was diseases that were treated like STI, not like diseases that are here now and HIV that cant be treated.

Respondent: I also forgot to mention that I used to have, I don’t know whether its depression or stress whatever, but I use to have these sore things here(show) and sometimes here(show), but when I started exercising and started doing and practicing with these instruments, the very first time it went away. Also when I have something coming back I just go back to the machines then it goes away.

Respondent: Let me emphasise and I underline that these diseases were brought by these types of food. These diseases like high blood pressure and all those, they are only present to those high people, like nurses, teachers, magistrates, and high people, not everybody. People that got the money, they suffer from these diseases. People that did not have money, they exercised and did their own kneading, eating milies, they did not have these diseases. They walked long distances to town, having a baby on the back. Arthritis is brought by these taxis, short distance you just get into a taxi. Those days there were none of that. You walked long distances. Children were healthy because there was nothing like purity foods. They were eating things made from the crops, like samp. Even our children at present, we are much healthier than them. They are always sick. In our time we were very strong and healthy as we were eating the old foods. When we grew up we were told that things like eggs are not suppose to be eaten by young girls and newly wed married women. The chicken was not eaten by a young person. Those days when we were told by our parents that we should not eat this, we did not question them, but today when we say this to our children they question us, they ask “why and what will happen to us if we eat this”. Back then they just took orders from the parents. They did not question anything. Now they tell us because we taking
everything from our parents we are being abused. Now there is this word “abused”. If I walk with my children now, if people compare me, they see me healthier than my own children because even when I walk I am much better, I am active. People compare me thinking that they are my sisters or whatever. I tell them that I am like this because of that food that I was eating that I tell you about that contributed to my health status. I taught them how to make their own samp, how to cultivate and plough, but now they tell me that they can’t do that anymore, that was done in our days. There is a mielie that is sold in a watery form, sold here in South Africa, you get it in boxes in the shops, and it’s called mafエ. We were making it using our own hands to grind it. Grinding mielies and cooking it, now they buy it from the shops ready-made.

**Interpreter:** They say they would like to hear your contribution to what they have said, because they are going to repeat one and the same thing. They’ve said a lot. They grew up in different places, but in rural areas not here in Cape Town or in urban areas.

**Respondent:** When we grew up we were looking after our livestock, its only here in Cape Town that I am uneducated because my time was spent on looking after livestock, as I did not get time to go to school, because I was cultivating the soil and ploughing mealies. I thank my opportunity of coming here to Cape Town. I was employed as a domestic worker so that I can be able to afford financial problems, so that I can be able to take my children to school, where in my day I could not afford to go. Today I’ve got teachers in my house, which I did not have myself, so as I am here in the health club now. My club members talked about this beef stock so I know now I don’t have to use this beef stock. Today because these instruments were introduced, so I gained more power. I am able to use them now, so I gained more power. I am active now. Thank You.

**Respondent:** I greet you again, it would be like we talking one and the same thing now, because now we can even meet with white people, so if there is a radio now with music we dance together with them. We are helped by our community workers. I thank Mama Kataza and Christopher our community health workers. When we come here this lady forces us to train. At first I was very angry at her that she was pushing us to train, and yet she’s helping with my own health. Now I can stand (action). The white, we are boasting, now we are together with them. We are able to use these instruments. So now when we are with whites here, I understand some whites come here, so when they come here, she works with them, because when they come here, they work hard. Those days they thought it was going to be them only that got this. When they come here, and we look at them, she just demonstrates to them how to use these things. It’s no more your instruments, its now also our instruments.

**Interviewer:** With the change in your lifestyle in coming from rural areas to the city, were there changes within your family that help support you.

**Respondent:** My children are very happy with my health lifestyle. I wake up having not even thought about my days about coming here to exercise. We come together with my children and make a... and they call me and say “come Ma” they look at me because I demonstrate to them what we do here and they imitate me, and we jump there at home. They want to see me really doing it, and they say they are after my health, so they want to see me doing these things and I do it at home. It’s so nice at home, we enjoy it.

**Respondent:** My children they also support me very much. In as much that if I am late because I’ve forgotten, they wake me up in the morning when they prepare to go to school. They come to me and say don’t forget its Wednesday today, its club day. We’ve made you provision because you do have a bag. Virgin active gave us some bags so that we can have water and food when we come to the class. The children remind me of that. They also include me in their provision for the day, when they make their lunch for school they also make mine and put it in my bag. I will leave my provision there at home, because I don’t like it. They embarrass me by doing this, then I only eat when I go back home. The fact is my family really likes what we are doing here. They mock me and ask, why you exercise, who are you going to hit. I tell them I am not going to hit anybody it’s for my own health. Thank You.

**Respondent:** My children at home love this very much. They liked it from the very word go. They liked it even before these instruments were here. I showed them how we do things here. Even my grandchild that is only six years old, she imitates me. When we started, we got groups and our neighbours and we exercised together in groups. So my neighbours come to my house and that is where we meet. My grandchild only six years old does what I am doing now. At night that is what the grandchild does. Everyday even before we sleep if I forget exercise, my grandchild reminds me and they will just start to exercise. My son is helping us do it, so if I say my arm is painful, I can’t lift it, they say it’s because you did not exercise today. I’m just stressing that since I joined the club my children and grandchildren were so excited.

**Respondent:** When we talk about children it becomes so painful, because I got three grandchildren there who know very much that every Wednesday grandpa goes to the club, because they know that if I come here I bring something healthy home. If I did not get anything here, they always supply fruits here. If I don’t get anything here, I buy it from the stalls, so that means that they love what grandfather is doing. I just want to emphasise that our children are very supportive.

**Respondent:** My neighbours where I stay, they know about my healthy lifestyle. There is a shopkeeper where I stay. He will remind me and say you look very fresh Mama. I see today you were going to the gym. He always reminds me that he did not see me today when we were walking around.

**Respondent:** Let me just tell you what happened to me.
Respondent: I will be happy if we can have that as a plough our own vegetables. It would be very good. We not being attended to. They can borrow it to us so we can ask if we can use their land, because it’s so dirty and it’s school. We are thinking of going to the nearby school and Respondent: There is a piece of land in the nearby you think are healthier for you?

Interviewer: As you were speaking, I have a question. Is there land where you can grow some of your things that you think are healthier for you?

Respondent: There is a piece of land in the nearby school. We are thinking of going to the nearby school and ask if we can use their land, because it’s so dirty and it’s not being attended to. They can borrow it to us so we can plough our own vegetables. It would be very good. We can make it work.

Respondent: I will be happy if we can have that as a class, but where I stay in my own house, I have a land where I plough a lot of vegetables and I come with it here and I share with my club members. If we can get a land like that I will be happy because my husband and me we plough at home. I can also ask them to share with the club members. We will take this and go and plough in the big garden now. I will really be very happy if we can get a land as club members. Even if we get a small place near our homes or wherever, we can use some boxes and things like that to plough. I was taught to grow in boxes and I know how to do it, me and my husband used to plough in boxes so we use less space. I will share that knowledge with all of you. Seeing that you are asking us this question, do you have any intention of helping us?

Interviewer: I’m not a farmer so I don’t know anything about this and seeds. I grew up in a big city so I think chicken comes out of a refrigerator. I’m here pretty much representing myself and others like my family. We are not representing for expectation. If you, as I said I know nothing about seeds, but I know I can help maybe in terms of something like seeds that I personally can try to help you with. They must let me know, I will see how much I’ll be able to help them with.

Respondent: Thank You

Interpreter: They say they are hungry now. Did you ask everything that you want to know about?

Interviewer: Maybe this is a conversation for later. Maybe they will have this conversation with you, maybe I’m not here, but I would like at some point, to ask this question, you don’t have to do it now.

Given the situation in South Africa, given the history and the past, health wise concerning the health. Are they trying to be as healthy as white people, as they see white people? Is that something that is on their minds? Maybe that’s a conversation you guys can have another time and then come back to me. That’s the question that I have.

Interpreter: They want to be equal and be healthy like them.

Interviewer: My other question is do they see white people who are being healthy daily.

Interpreter: They say they are very healthy, they all drive cars and they are strong and healthy and they are tiny.

Respondent: I think also because we have moved from rural areas to urban areas that has really contributed to us wanting to live like them because we no more cultivate our soil now, so we also want to live like them and we want to have money like them.

Interviewer: I know that everybody wants to eat, but that’s a really interesting topic to me so you know…I loved that I asked that questions and I can explore that more.

Thank You so Much...

A brief summary of the group discussion

Participants saw some benefits of attending the health club such as exercising and using the machines that alleviated their pains and body aches. They felt that they had gained information that has helped them deal with their conditions. Participants attending the health club felt that moving to the city leads to changes in their lifestyles which includes easy access to ready made food; use of aromat, beef stock and fish oil (cooking oil), which have been stated as fuelling high blood pressure. The participants appreciate the information they receive from the health club. They always look forward to coming to the club on Wednesdays, and their families support them in attending the club.

4. Comparison of physical activity and dietary habits of health club attendees and community controls in Khayelitsha, Cape Town

A total of 25 female club members and 29 non-members were interviewed. Respondents ranged between 45 and 66 years, averaging 55.96 years. Of these respondents, 85% were unemployed and 76% of the members and 59% of the non-members received no education or only primary schooling. Their home language was mainly isiXhosa, while only two in the control group spoke seSotho as their first language.

Members had lived in the city (previously having come from a rural community) for 21 years (median) and likewise non-members had lived in the city for
19 years (median).
On average members joined the health club approximately 2.25 years ago. Members (44%) were less than the non-members (48%) who reported that a doctor or a nurse had informed them about having risk factors for cardiovascular disease.

For the purpose of evaluation of the effectiveness of interventions in improving diet practices and increasing physical activity, community controls were recruited and were interviewed about their dietary habits and physical activity.

Findings

Physical activity
Club members and non-members were compared in terms of minutes walked per day and hours spent doing house activities. There was no difference between the club members and non-club members in terms of minutes spent walking per day. Non-club members seemed to spend more time per day doing house activities than non-members. Club members spent more time doing indoor exercises (gym) than non-club members.

Dietary habits
Club and non-club members were compared in terms of number of fruit and vegetables consumed per week, frequency of consumption of red meat and the method of cooking used (boiling, frying, grilling).

There was no difference in the number of fruit and vegetables consumed per week in club and non-club members. Club members tended to eat less red meat than non-club members did. A large percentage of club members trimmed fat from meat and often boiled their meat compared to non-club members.

These findings confirm the earlier findings (from CHWs) and reflect the impact of socio-economic status in influencing dietary habits among this population.

5. Evaluation of the impact of intervention by stakeholders

Five stakeholders were interviewed. The main points from these interviews are summarised below:

- All stakeholders knew about CHWs' effort to increase awareness about risk factors for NCDs.
- They all thought that the CHWs were doing a good job.
- They all recommended that the project be extended to include the youths and elderly.
- They also recommended that more support groups should be started in other areas of Khayelitsha.

A copy of an in-depth interview with a SACLA representative is presented below:

Date: 12 July 2006.

1. What do you know about the CHWs and their focus on NCDs?
As a nurse for SACLA, I have heard of the CHWs work in the community and from patients at the clinic. The CHWs have been in the community for 10 years although their focus was on other diseases/conditions, more communicable, i.e. TB, HIV/AIDS. Even then, CHWs were doing the outreach work in the community, educating and creating awareness; organising clubs and support groups. They provide outreach to the community and get the community aware about NCDs. They help promote health and awareness in the community. Focus on diseases of the lifestyle, prevention and supporting those affected by the conditions.

2. What do you know about NCDs?
Those diseases that affect the community but can be prevented... do not have to die from; NCDs in the community, i.e. high blood pressure, diabetes—this one is actually killing people in the community, arthritis and also epilepsy. There has also been an emphasis on TB and HIV but these are communicable diseases as opposed to NCDs.

3. What are some of the activities that CHWs have performed about NCDs in the community?
They start up support groups—spiritual, and ones for each type of disease people are afflicted with; work with community and the health gym/club; exercise programmes; physical activity outreach to churches and ministers; functions—education, singing (?/drama); Gardening projects.

4. Have you been involved in any of these activities?
Coordination preferentially—home based care work with CHWs; CHWS report back to her about their progress, their needs, challenges, equipment; advice/assess health status of community members to participate at the gym; Teach CHWs how to take blood pressures – before during and after exercising.

5. How did you hear about the CHWs and the activities?
Not applicable, not answered.

6. What impact/benefit has this programme and activities had for you?... and the community?
Quite a bit; people were eating wrong, excessive stress and poor nutrition; this service is aiding them mentally; has help changed them socially; people are happier, attitude change; look forward to activities; community and participants are talking up the program even outside of the area; people from outside the area now want to come participant in the activities. Everyone is talking about the health club and gym.
For Cynthia, this program and its activities has made her work at SACLA easier, because she has more patients in compliance with medications, CHWs are now able to perform blood pressure checks, so CHWs are creating awareness and screening the community earlier on and alleviating some of the clinic burden. Not that she does not want to see the patients, but for their immediate needs they have the program and CHWs to assist them readily.

7. What do you know about the Community Health Club?
   Not applicable; did not need to ask Cynthia this question.

8. What are your aspirations regarding this project—CHWs and NCDs?
   Need to expand the space—now it is too small, more equipment; Only have one volunteer for the gym, should have more part time and full time staff to assist with operations, assisting club members, enrollment, etc. One person is doing the work of several people.
   More community health clubs and gyms, satellites throughout the community so more people can be involved;
   Need to attract more people for healthy lifestyles...

9. What recommendations can you make that would affect the future success of this project?
   Before I saw defaulters at the clinic not taking their medication (i.e. for high blood pressure) and now those who participate in the health club, there are fewer defaulters, they have now become encouraged and have increased awareness about the correlation between adhering to their medication, proper nutrition and exercise. They realise they can feel better and are more compliant; and can support others with the same condition. A natural support for each other within the community. Now see overall benefit and connection with taking medication.

10. Do you think this is a worthwhile project? If so, please explain why?
   This was a dream for so long and now it has come true; this was a wild dream especially in this location... a township. People have never had this or been exposed to this kind activity, or facility; this activity has changed people’s lives. They have hope to live longer.

11. Additional Comments
   Expansion of the program beyond just those afflicted with NCDs; more to elderly, youth, etc.
   Cynthia was thankful for the CHWs, the health club/gym, programs provided by funding agency, Dr. Puoane and UWC SOPH and others who have contributed.

6. Brief summary of the external evaluation
   • Mean BMI of CHWs decreased.
   • Knowledge of CHWs regarding NCDs improved (risk factors and preventive measures).
   • Physical activity levels of participants increased because of implementation of buddy/mentoring system and support groups.
   • Consumption of fruits and vegetables did not change because of social economic constraints and environmental barriers.
   • Other stakeholders (i.e. Virgin Active) became involved in the initiative for prevention of NCDs.
   • The first gym in this community was established.
Achievements

Achievements that were reached through this project include the following:

- The community members are currently driving the project, with the assistance of UWC staff members, who monitor their activities and anthropometric measurements.
- A training manual in primary prevention of NCDs was developed for use by CHWs.
- A sustainable community programme (the Health Club) which is run by CHWs was developed.
- A monitoring and evaluation tool to be utilised by CHWs was established.
- Since the initiation of this programme, three other groups have been trained. The SOPH has recently been contracted by the provincial government of the Western Cape to train 31 support group facilitators working with clients who have chronic conditions. There were 31 participants from different NGOs around Cape Town, and facilitators were SOPH staff, as requested by PGWC.
- Other institutions, governmental and non-governmental organisations have become aware of the activities of CHWs in the community and come forward with contributions to assist in the success of this programme. Examples are, Virgin Active who donated exercise equipment, and a Khayelitsha counsellor who offered the community structure be used to house the equipment. The first gym was launched in Khayelitsha during June 2006.

Lessons learned

The study demonstrated the importance of involving CHWs in the initial process of developing a targeted community intervention. By utilising a multi-stepped process and data collection, an active participatory approach was conceived. The approach identified cultural and environmental beliefs and attitudes of the CHWs which influenced their behaviour and that of their community.

Constant moving of the club participants (between Eastern Cape and Cape Town), made it difficult to assess individual progress.

Lack of funding to retain CHWs. Some of the CHWs sought paid employment and could no longer participate in the club activities.

Challenges

Challenges experienced during the process of developing the interventions include the following:

- Because of high unemployment rates in Khayelitsha, many of the street vendors sell unhealthy, cheap foods that include meat.
- Access to inexpensive unhealthy foods is readily available as opposed to more expensive fresh fruit and vegetables that are nutritious. These social environmental conditions impose limited availability of recommended foods.
- Crime and violence in the township hampered the physical activities, such as walking and jogging.
- The training lasted longer than originally planned because of prior obligations and time constraints of the CHWs, and continued for over a year. Some of the sessions were delayed because of conflicting community meetings.
- The Zanempilo (previously SACLAC) funding terminated at the end of 2003. This meant retrenchment of the CHWs. All but seven CHWs took employment elsewhere, which also delayed the progress.

Conclusion

The implementation of the WHO global strategy for the prevention and control of NCDs is difficult in poor communities. Developing community-targeted interventions for NCDs can be achieved by involving CHWs at the initial stage and utilising a multifaceted approach. However, educating community members and CHWs does not guarantee behaviour modification. Unless the environment encourages healthy living, NCDs will continue to be a burden among the poor population of South Africa.

The positive role of CHWs, as key agents in improving health, has been widely documented (WHO, 1989) by this project, and highlights their role in managing NCDs. By influencing the community, including those at risk to adopt healthy lifestyle, CHWs can help reduce the prevalence of NCDs. Aside from these preventive measures and health education, they can assist in the management of the disease since the workload in primary health care facilities are often cited as a reason for the poor control of the disease.

By creating and developing an intervention model for NCDs, we can begin to educate the community members of Khayelitsha for healthful...
change. This model could then be adapted to be utilised in other South African communities.

Although not enough time has elapsed to see dramatic changes in the community, there are promising signs. These include requests from prominent community members, such as help with developing walking clubs and education regarding healthy eating. With this model in hand and CHWs who are trained and enthusiastic, the aim of the project to establish healthier lifestyles in this community is within reach.

Several organisations have recognised our work and have contributed towards the success of the project. For example, Virgin Active donated T-shirts and tracksuits for the club members. During the diabetic awareness week, members of the diabetes association contributed their time and resources to test and educate the community members on preventing diabetes.
Recommendations

- Healthier alternatives should be made available and affordable in order for people to adapt to healthier lifestyles.
- Ongoing evaluation of CHWs is needed as more health-care providers and NGOs increase their use for outreach programmes.
- Interventions such as these should be encouraged among adolescents as NCDs usually emerge early in the life-cycle.
- Interventions should aim at focussing at the whole population and not only individuals already affected.
- Existing support groups can be used as a vehicle for primary prevention of NCDs.

To further address diabetes, the following steps are recommended:
- Broaden use of the drama to other settings such as schools, church group and other organisations.
- Develop follow-up processes after drama performances such as information leaflets, referral to health services, contact details of CHWs.
- Promote and support further work in healthy nutrition through integrated programmes.
- Develop strategies to promote adherence to optimal treatment of diabetes and other conditions.
- Extend use of this model to other chronic conditions, particularly hypertension.
- There is a need for policies to promote healthy food choices, physical activity and a supportive environment.
- Policy makers should ensure user-friendly food labels stating the benefits and consequences of eating unhealthy food.
- Formal links need to be developed between CHWs and NGO’s to strengthen the formal primary level health services.
REFERENCES


PROJECT OUTPUTS

Published Manuscripts


Reports


Training Manual


Conference Presentations


Puoane T, Rosling L, de Goede J, van der Meij B. Environmental influences of eating patterns in urban black women in Cape Town, South Africa. Poster presented at 17th International Congress of Nutrition, Vienna, Austria, 26-31 August 2001c.

Puoane T, Matwa P, Steyn K, Rosling L, Mahalela X. The meaning of food and the contexts in which food is used: Experiences from a population residing in a black township in South Africa. Poster presented at the American Public Health Association, Atlanta, Georgia, USA, October 2001d.


Puoane T. Transforming the Health Services to meet the emerging epidemic of non-Communicable diseases. Presented at a plenary session: PHASA conference, Durban South Africa, 4-6 June 2004.


Other Presentations


Student Output

<table>
<thead>
<tr>
<th>Name</th>
<th>Degree</th>
<th>Status</th>
<th>Thesis Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xoliswa Mayekiso</td>
<td>MPH</td>
<td>Graduated November 2003</td>
<td>Health messages given to diabetic patients: how do they perceive them?</td>
</tr>
<tr>
<td>Lungiswa Tsolekile</td>
<td>MPH</td>
<td>Graduated September 2007</td>
<td>Urbanisation and Lifestyle changes related to non-communicable diseases: Exploration of experiences of black men and women who have relocated from the rural areas to Khayelitsha, urban township in Cape Town.</td>
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<tr>
<td>Tintswalo Baloyi, Nombuyiselo</td>
<td>B.Sc. Dietetics</td>
<td>Completed November 2006</td>
<td>Evaluation of knowledge retention on non-communicable diseases among community health workers (CHWs), who were trained in the primary prevention of non-communicable diseases in Khayelitsha, Cape Town.</td>
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<tr>
<td>Roshaan Isaacs</td>
<td>MPH</td>
<td>Finalising thesis report</td>
<td>Comparison of Physical Activity and dietary habits of health club attendees and community controls in Khayelitsha, Cape Town.</td>
</tr>
<tr>
<td>Octavia Tsuebeane</td>
<td>MPH</td>
<td>Finalising thesis report</td>
<td>Ability of the health workers to manage hypertension in Maluti Local Service Area.</td>
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</table>
## Appendices

### Training of Community Health Workers on Primary Prevention of non-communicable diseases: Summary of presentations

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Topics</th>
<th>Objectives</th>
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<tbody>
<tr>
<td>Pre-test(1)</td>
<td>Focus group discussions</td>
<td>To determine beliefs/myths around • Causes • Effects/complications • Prevention • Treatment of hypertension</td>
</tr>
<tr>
<td>Advocacy meeting</td>
<td></td>
<td>To advocate for community support in Primary Prevention of chronic diseases of lifestyle by Community Health Workers</td>
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<tr>
<td>Pre-test (2) Structured interviews</td>
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<td>To identify knowledge of and beliefs of CHWs about Hypertension and diabetes and related risk factors</td>
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<tr>
<td>Session 1</td>
<td>Orientation</td>
<td>To give participants and facilitators an overview of the training programme and methodologies to be used To discuss expectations and concerns about training programme</td>
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<tr>
<td>Session 2</td>
<td>Basic Anatomy and Physiology</td>
<td>To describe the structure and basic functions of the heart, Lungs, pancreas</td>
</tr>
<tr>
<td>Session 3</td>
<td>Basic Anatomy and Physiology Session 2</td>
<td>To describe the structure and basic functions of the heart, Lungs, pancreas</td>
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<td>Session 4</td>
<td>Risk factors for chronic diseases Session 1</td>
<td>To give participants a basic understanding of the role of Nutrition, physical inactivity, smoking and alcohol in causation of chronic diseases</td>
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<td>Session 5</td>
<td>Risk factors for chronic diseases Session 2</td>
<td>To give participants a basic understanding of the role of Nutrition, physical inactivity, smoking and alcohol in causation of chronic diseases</td>
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<td>Session 6</td>
<td>Hypertension Part 1</td>
<td>To understand the Causes/Effects/complications/Prevention Treatment of hypertension To understand the different levels of prevention To understand the importance of prevention in hypertension To gain a practical understanding of the concepts of pressure and raised pressure, and to relate this to the human body</td>
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<tr>
<td>Session 7</td>
<td>Hypertension: Part 2</td>
<td></td>
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<tr>
<td>Session 8</td>
<td>Diabetes: Part 1</td>
<td>To understand the • Causes • Effects/complications • Prevention Treatment of Diabetes including monitoring and self care</td>
</tr>
<tr>
<td>Session 9</td>
<td>Diabetes: Part 2</td>
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<tr>
<td>Session 10</td>
<td>Catch up/Revision session</td>
<td>To revise learning objectives</td>
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<tr>
<td>Session 11</td>
<td>Utilisation of medicines</td>
<td>To understand the role of medicines in the management of Hypertension &amp; diabetes</td>
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<tr>
<td>Session 12</td>
<td>How to take anthropometric measurements Part 1</td>
<td>To develop skills in taking Blood pressure, weight and height measurements</td>
</tr>
<tr>
<td>Session 13</td>
<td>How to take anthropometric measurements Part 2</td>
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<tr>
<td>Session 14</td>
<td>How to conduct a situational assessment Part 1</td>
<td>To practically conduct a situational assessment (including Fieldwork): Data Collection: Interviews; Observations; Mapping</td>
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<td>Session 15</td>
<td>How to conduct a situational assessment Part 2</td>
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<td>Session 16</td>
<td>How to conduct a situational assessment Part 3</td>
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<tr>
<td>Session 17</td>
<td>How to conduct a situational assessment Part 4</td>
<td>To practically conduct a situational assessment (including Fieldwork): Data Analysis</td>
</tr>
<tr>
<td>Session 18</td>
<td>Presentation skills</td>
<td>To develop presentation skills</td>
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<tr>
<td>QUESTIONS FOR IN-DEPTH INTERVIEWS WITH COMMUNITY STAKEHOLDERS</td>
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<td>---------------------------------------------------------------</td>
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<tr>
<td>What do you know about the CHWs and their focus on NCDs?</td>
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<td>What do you know about NCDs?</td>
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<td>What are some of the activities that CHWs have performed about NCDs in the community?</td>
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<tr>
<td>Have you been involved in any of these activities?</td>
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<tr>
<td>How did you hear about the CHWs and the activities?</td>
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<td>What impact/benefit has this programme and activities had for you and for the community?</td>
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<tr>
<td>What do you know about the Community Health Club?</td>
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<tr>
<td>What are your aspirations regarding this project—CHWs and NCDs?</td>
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<td>What recommendations can you make that would affect the future success of this project?</td>
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<td>Do you think this is a worthwhile project? If so, please explain why?</td>
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<td>Additional Comments...</td>
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</table>
Situational Analysis

A copy of a questionnaire used during community situational analysis
Xhanywa's area section C (C area) 24-10-02

Question: Where do you buy your grocery?
Answer:

Question: How long does it take?
Answer:

Question: Where do you buy meat?
Answer:

Question: What kind?
Answer:

Question: Are there any people who are overweight?
Answer:

Question: Are there any people who've got high blood pressure?
Answer:

Question: Who are the most overweight people between young and old people?
Answer:

Question: Are there any soccer fields or grounds to play?
Answer:

Question: Who are the people who watch television the most?
Answer:

Question: Do you exercise?
Answer:

Question: You've got a big body, do you like it?
Answer:

Question: Who are the people who drink the most?
Answer:

Question: Which type of alcohol do they like?
Answer:

Question: Where do they buy it?
Answer:

Question: When do they open?
Answer:

Question: Are there any written flags or boards where they are selling
Answer:
Interviews with Community members

Objectives of the interviews:
To assess the perceptions of community members about chronic diseases of lifestyles

My name is .............................................................. .

I am working for Zanempilo Health Trust. We are trying to obtain information about what the community members think about chronic diseases.

We would like to ask you a few questions if possible. The information that we collect will be used to plan strategies to improve health in this community.

Interview questionnaire

Date of interview: .............................................
Name of the CHW: .............................................................
Category of key informant interviewed: .............................................

How long have you been living in this community?
- less than 1 year: .............................................
- 1-2 years: .............................................
- 3-5 years: .............................................
- more than 5 years: .............................................

According to your knowledge, what are five common health problems in this community?

Do you know any people who suffer from the following diseases?
- Hypertension (Hi-Hi) 1. Yes: ..................... 2. No: .....................
- Diabetes 1. Yes: ..................... 2. No: .....................

Are these diseases a problem in your community?
1. Yes: ..................... 2. No: .....................
If yes, in which way explain

...........................................................................................................
...........................................................................................................
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...........................................................................................................
...........................................................................................................
...........................................................................................................
INTERVIEW OF STREET VENDOR OWNERS

Date of interview: …………

1. Name of the CHW: …………

2. Sex of person interviewed 1. Male: …………) 2. Female: …………

3. Age of the person
   1. Less than 20 years
   2. 20-30 years
   3. 31-40 years
   4. 41-50 years
   5. More than 50 years

4. When did the person start the business (year): …………

5. Why did he start the business?
   1. To earn living
   2. Took it from someone else
   3. Other: …………) explain: …………

6. List five items sold by this person:

7. Now does this business help you and your family? Explain: …………

8. Do you have regular customers? Yes: …………
   No: …………

9. How does the business help community members? …………

10. Do you think that the foods that you sell are good for your health? Yes: …………
    No: …………
    Explain why: …………

Thanks for your time
# KNOWLEDGE AND ATTITUDES OF CHWs ABOUT DIABETES AND HYPERTENSION

**Khayelitsha 2004**

<table>
<thead>
<tr>
<th>Study number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Interviewer’s name: …………………………………</td>
</tr>
<tr>
<td>2. Date of interview: 20 0</td>
</tr>
<tr>
<td>3. Gender: 1. Male 2. Female</td>
</tr>
<tr>
<td>4. Age at last birth: …………………</td>
</tr>
</tbody>
</table>

5. What is the highest standard that you have passed at school?
- Up to Standard 5/Primary 2
- Standard 6 - 8 3
- Standard 9 - 10 4
- Tertiary / diploma 5

6. How long have you been working as a CHW?
- 1-2 years 1
- 3-4 years 2
- 5 years or more 3

7. Did you ever attended any course/training on:
- Diabetes 1. Yes 2. No
- Hypertension 1. Yes 2. No

8. Do you have a close relative who suffer from:
- Diabetes 1. Yes 2. No
- Hypertension 1. Yes 2. No

9. Have you ever been told that you have any of the following conditions?
- Hypertension/high blood pressure 1. Yes 2. No
- Stroke 1. Yes 2. No
- Diabetes 1. Yes 2. No
- Eye problems: diabetes or cataract 1. Yes 2. No
- Feet problems e.g. ulcers gangrene 1. Yes 2. No
- Kidney problems 1. Yes 2. No
- Arthritis/joint pain every day 1. Yes 2. No

10. What do you think causes diabetes?
- Taking too much sugar 1. Mentioned 2. Not Mentioned
- Eating a lot of starch 1. Mentioned 2. Not Mentioned
- Eating a lot of fats 1. Mentioned 2. Not Mentioned
- Overweight 1. Mentioned 2. Not Mentioned
- Inheritance 1. Mentioned 2. Not Mentioned
- Defective pancreas 1. Mentioned 2. Not Mentioned
- Don’t know 1. Mentioned 2. Not Mentioned
- Other 1. Mentioned 2. Not Mentioned
11. What do you think causes high blood pressure?

<table>
<thead>
<tr>
<th>Cause</th>
<th>Mentioned</th>
<th>Not Mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking too much sugar</td>
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<td></td>
</tr>
<tr>
<td>Eating a lot of starch</td>
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<td></td>
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<tr>
<td>Eating a lot of fats</td>
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<tr>
<td>Lack of exercise</td>
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<tr>
<td>Overweight</td>
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<tr>
<td>Inheritance</td>
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<tr>
<td>Defective pancreas</td>
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<tr>
<td>Don't know</td>
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</tr>
<tr>
<td>Other</td>
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</table>

12. What organs are affected when a person suffers from diabetes?

<table>
<thead>
<tr>
<th>Organ</th>
<th>Mentioned</th>
<th>Not Mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart</td>
<td></td>
<td></td>
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<tr>
<td>Lungs</td>
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<tr>
<td>Liver</td>
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<tr>
<td>Kidneys</td>
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<td></td>
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<tr>
<td>Pancreas</td>
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<tr>
<td>Don't know</td>
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<tr>
<td>Other</td>
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</tbody>
</table>

13. What organs are affected when a person suffers from high blood pressure?

<table>
<thead>
<tr>
<th>Organ</th>
<th>Mentioned</th>
<th>Not Mentioned</th>
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</thead>
<tbody>
<tr>
<td>Heart</td>
<td></td>
<td></td>
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<tr>
<td>Lungs</td>
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<tr>
<td>Liver</td>
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<tr>
<td>Kidneys</td>
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<td></td>
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<tr>
<td>Blood vessels</td>
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<td></td>
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<tr>
<td>Don't know</td>
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<td></td>
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<tr>
<td>Other</td>
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</table>

14. What advice (lifestyle modification and patients education) is given to a patient who is treated for hypertension?

<table>
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<tr>
<th>Advice</th>
<th>Mentioned</th>
<th>Not Mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eat less salt</td>
<td></td>
<td></td>
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<tr>
<td>Eat less fat</td>
<td></td>
<td></td>
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<tr>
<td>Do not smoke</td>
<td></td>
<td></td>
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<tr>
<td>Do exercises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have time to relax</td>
<td></td>
<td></td>
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<tr>
<td>Don't know</td>
<td></td>
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<tr>
<td>Other</td>
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</table>

15. What advice (lifestyle modification and patients education) is given to a patient who is treated for diabetes?

<table>
<thead>
<tr>
<th>Advice</th>
<th>Mentioned</th>
<th>Not Mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not use sugar</td>
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<td></td>
</tr>
<tr>
<td>Eat less fat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eat 3 small meals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eat lots of vegetables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoid/eat less starchy food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do not drink alcohol</td>
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</tr>
<tr>
<td>Don't know</td>
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</tr>
<tr>
<td>Other</td>
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</tr>
</tbody>
</table>
16. From your experience, what things do diabetic patients do to keep healthy? (DO NOT PROMPT THE ANSWERS)

<table>
<thead>
<tr>
<th>Control their weight</th>
<th>I. Mentioned</th>
<th>2. Not Mentioned</th>
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<tbody>
<tr>
<td>Don't take sugar</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Eat low fat diet</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Eat lots of vegetables</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Reduced my alcohol intake</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Use traditional Medicines</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Use mixtures e.g. vinegar, dagga, aloe</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Exercise</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Other</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
</tbody>
</table>

17. From your experience, what do people use to lower high blood pressure? (DO NOT PROMPT THE ANSWERS)

<table>
<thead>
<tr>
<th>Control their weight</th>
<th>I. Mentioned</th>
<th>2. Not Mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eat low fat diet</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Reduce salt intake</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Reduced my alcohol intake</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Use traditional Medicines</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Use mixtures e.g. vinegar, dagga, aloe</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Use homemade alcohol</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Exercise</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Stop smoking</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Do nothing</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
<tr>
<td>Other</td>
<td>I. Mentioned</td>
<td>2. Not Mentioned</td>
</tr>
</tbody>
</table>
Examples of mapping

Promoting healthy lifestyles
Masiphakame ngempilo yethu health club: Member information

<table>
<thead>
<tr>
<th>Category</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members who are not yet diagnosed with any NCD</td>
<td>36</td>
<td>52</td>
</tr>
<tr>
<td>Known Hypertensive</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Known Diabetics</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Known Arthritis</td>
<td>07</td>
<td>13</td>
</tr>
<tr>
<td>Diagnosed with Diabetes</td>
<td>03</td>
<td>12</td>
</tr>
<tr>
<td>Diagnosed with Hypertension</td>
<td>05</td>
<td>15</td>
</tr>
<tr>
<td>Diagnosed with Arthritis</td>
<td>00</td>
<td>07</td>
</tr>
<tr>
<td>Total club members for the year</td>
<td>96</td>
<td>152</td>
</tr>
<tr>
<td>Referred to nearest clinic</td>
<td>08</td>
<td>34</td>
</tr>
<tr>
<td>Adult Females (35 - 84 yrs)</td>
<td>86</td>
<td>92</td>
</tr>
<tr>
<td>Adult Males (35 - 84 yrs)</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Young Females 18 - 34 yrs)</td>
<td>00</td>
<td>15</td>
</tr>
<tr>
<td>Young Males (18 - 34 yrs)</td>
<td>00</td>
<td>25</td>
</tr>
</tbody>
</table>
Walk for life briefing

The Mother City put on her best face when the community health workers recently had a fun walk through site C, Khayelitsha, to raise awareness of diabetes.

There was a sense of excitement and anticipation in the air when community health workers employed by SACLA (South African Christian League Assembly) recently had a fun walk to mark World Diabetes Day and raise awareness of diabetes in their community.

These health workers are members of the community who are elected by their fellow community members, and then act as a link between the community and the more formal health sector. They do home visits in their community on aspects of health such as TB, HIV/AIDS and chronic diseases and also treat minor ailments at their own homes, such as burns, coughs, colds and flu.

The health walk formed part of a training programme that will empower these community health workers to help prevent the emergence of diabetes by encouraging the adoption of healthy lifestyles, such as healthy eating, exercise and weight control. This fun walk was aimed at letting the community see their health workers engage in healthy exercise.

After the health workers were put through their paces, the community was invited into the SACLA Christian Mehlo Health Promotion Centre to have their blood sugar levels tested, and to be advised on aspects of healthy living. Aside from a few ‘ouches’ when their fingers were pricked, everybody showed a keen interest.

This project is a collaborative venture between the MRC, Joint Primary Health Care Programme (made up from the NGOs Zibonela, SACLA and the Health Care Trust), and Universities of Cape Town and the Western Cape.

“Diabetes is increasing in the urban populations of South Africa at an alarming rate, with considerable cost to both the individual and government. Response to this crisis is slow and is largely eclipsed by the HIV/AIDS and TB epidemics currently ravaging our country. We hope that lessons learnt from this project will be extended to similar communities in the country so that people will increase their chances of remaining healthy and lessen the chances of becoming diabetic,” said Dr Hazel Bradley from the Joint Primary Health Care Programme.

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