



Monitoring Hygiene Behaviour Change Through Community Health Clubs

Waterkeyn, J & Rosenfeld J (2009) Africa AHEAD



BACKGROUND

Umzimkhulu Municipality in Sisonke District of KZN was selected by the Department of Water Affairs to pilot this project that was initiated as part of the IWRM (Integrated Water Resource Management) programme being funded by the Danish Embassy (DANIDA). Umzimkhulu was part of the Eastern Cape until it was recently absorbed into Kwa Zulu Natal. The area has one of the lowest levels of development in KZN as demonstrated in this base-line survey which highlights that safe drinking water supply is a major challenge with only 15% of households having access to a safe water source whilst the remaining households have to use open ground water, usually in the form of unprotected springs. As this surface water is open to contamination it needs to be treated or boiled before consumption. Sanitation usually consists of a household pit latrine and although the coverage is high at 90%, around 50% are unhygienic, smell and attract flies which would account for the high levels of diarrhoea in the area. Most social scientists would agree that changing people's hygiene habits is notoriously difficult, and there are few good case studies to-date. Africa AHEAD was commissioned as service provider to introduce a health promotion campaign in the 1st phase of an holistic development package that would build the capacity of the community through health clubs, with the objective of developing a community-led demand for improved water and sanitation. Although Africa AHEAD has initiated Community Health Clubs in informal settlements, this is the first pilot project in South Africa to be implemented in a rural community.

THE COMMUNITY HEALTH CLUB APPROACH

It has been shown in a review of over 100 studies that Health Promotion alone can reduce diarrhoea by 33%, while hygiene changes such as ensuring safe drinking water can diminish diarrhoea by 15%, safe sanitation by 35%, and safe hand-washing with soap by 47% (Esrey, 1991). As the Community Health Club Approach is known to be capable of achieving high levels of behaviour change (Waterkeyn & Cairncross, 2006) it was chosen as the strategy for a health promotion campaign in nine wards of Umzimkhulu. In February 2009, working with the Umzimkhulu Municipality and local councillors, a Community Health Club was started in each ward. Africa AHEAD trained facilitators from the community in how to conduct health promotion sessions using PHAST participatory activities to promote hygiene behaviour change. Almost 1,000 members were registered and weekly sessions were held in all nine wards. Attendance rates varied according to the proficiency of the facilitator, but although most members attended some sessions, there were 550 hard-core members who completed all 24 health topics within six months. Certificates were awarded at a Graduation Ceremony in September 2009, attended by district and provincial representatives which marked the end of the pilot project. In the next phase, relevant government departments are planning to use these well mobilised communities to improve water, sanitation and quality of life through agricultural and income generating activities.

RESULTS

The levels of behaviour change as a result of this project are exciting, with an overall average of 20%, which is considered high comparing similar programmes (WSP-World Bank, 2002). In the post intervention survey (September 2009), it was found that 76% of all registered members are now following the recommended practices promoted during the weekly health promotion sessions. As is shown in the chart below, whereas before the project only 18.1% had safe water, there is an 41% change. Although the water source is still not safe, 51% now treat their water, 86.1% store it safely and 87% take it using a ladle, so minimizing contamination. Sanitation has improved by 14%, from 71.1% with no open defecation to 87.8% of members having ZOD (Zero Open Defecation) defined as clean covered latrines with no faeces. In addition, whereas only 29% of member households had a dedicated hand washing facility near their latrine at the beginning of the project, 70.1% have now constructed a simple facility that allows them to wash their hands immediately upon exiting their latrine. Even more impressive is the use of soap for hand washing that has risen from 40.1% in February to 68.4% six months later. An observable indicator is an 18% drop in Ringworm seen in CHC households, a disease caused by infrequent washing and lack of soap, 87.7% mother can now prepare SSS correctly, so saving babies that might have died from dehydration. There is little doubt that family health has been improved where health clubs have been established in Umzimkhulu, and demand to scale up this programme to all other wards is high. Meanwhile the self-motivated improvements that some Health Clubs have already made contingency measures to protect their water sources, without any external financial or technical assistance. Each CHC now has a trained building group, now constructing safe latrines on demand for members. This display of self reliance validates the CHC Approach, which aims to empower communities so that they manage their own health and utilize existing resources more effectively, at least until government can provide the required services.

Observed Home Hygiene after 6 months of weekly health promotion training sessions

 **60%**
Safe drinking water (boiled or treated)

 **68%**
Use of soap to wash hands

 **71%**
Use of new hand washing facility

 **85%**
Clean, covered pit latrines

 **88%**
Use of ladle to take drinking water

 **90%**
No children with Ringworm

 **88%**
Know how to treat dehydration (SSS)

 **90%**
Pot Rack use

 **86%**
Safe water storage

 **92%**
Safe food storage

p>0.001

RESEARCH METHODOLOGY

METHOD

Study Type: Intervention Study
Sampling: Purposeful
Technology: Mobile Research Platform
Enumerators: Seven local CHC facilitators
Health Clubs: Seven
Total Membership: 1000
Hard Core membership: 550
Sample Size Baseline: 469
Sample Size Post Int.: 538

Prior to the training a base line survey was conducted in all nine wards, with most Community Health Club members being interviewed. Each month, this 'household inventory' was redone, and hygiene changes as represented by the 12 observations in household inventory were tracked by the community facilitators. There are more respondents in the post intervention as members increased. Two of the facilitators failed to complete the surveys correctly and the data was rejected. Although preliminary findings were higher in Round 5, (August 2009) the data in this poster shows the final round 6 data using only 7 out of 9 CHCs to ensure correct claims (September 2009) One observation 'pour to waste' handwashing method was ignored as it was obsolete when members adopted the hand washing facility which was a more reliable indicator, being more observable.

TECHNOLOGY

Most household surveys are conducted on paper, and this leads to much human error and spoil forms. To speed up data collection and collation and minimize human error, an innovative tool has been used in this research. A standard mobile phone was issued to each facilitator with the Household Inventory installed. Responses could be keyed eliminating human error, and data sent like an sms to a central website where results were updated automatically and instantaneously. This eliminated manual computer entry, and thus much time and error was saved. The monthly monitoring with cell phones gave facilitators a more glamorous role, and the members responded to this monitoring (Hawthorne Effect) by making changes that were recommended. Thus the monitoring has contributed as much as the methodology to the high rates of behaviour change.

CONCLUSION

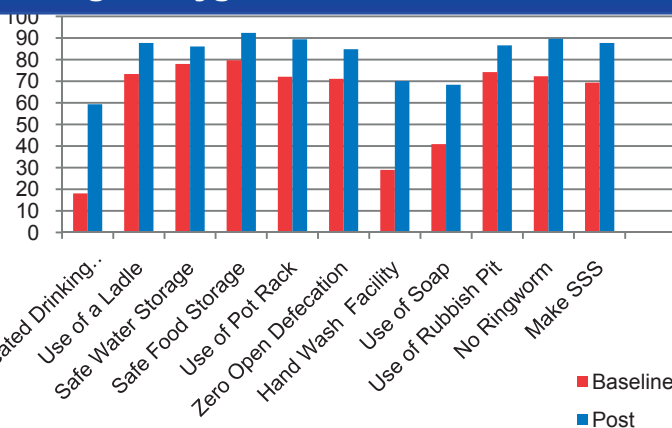
- The hygiene practices of Community Health Club members have been significantly improved as a result of the health and hygiene promotion using the CHC approach.
- There is a high demand for safe sanitation (Ventilated Improved Pit latrines) & safe water sources (protected springs)
- As the faecal-oral transmission route has been broken in all CHC areas by safe water, food, sanitation (Zero Open Defecation), and hand washing with soap, diarrhoea also been effectively minimised in Umzimkhulu.

Demography of the CHC Respondents

Purposeful sample of 3 wards

	Female	Male	Total
Number of Respondents	251	60	311
Median Age	40	38.5	39.2
Marital status & h/hold size			
Married	45%	45%	45%
Single	22%	50%	36%
Widowed	24%	3%	13.5%
Household size	5	4	4.5
Religion			
Christian Denomination	46%	48%	47%
Christian Apostolic	53%	43%	48%
Traditional Religion	0.4%	5%	2.7%
Education & employment			
No schooling	7%	4%	5.5%
Primary only	37%	33%	35%
Secondary	38%	35%	36.5%
Matric + passed	18%	28%	23%
Unemployed with Matric +	70%	56%	63%
No formal income	51%	58%	54.5%

20% change in hygiene behaviour in 8 months



Recommended Practices	N =469	N =538	% Increase
Active Members of CHCs			
	Baseline	Post	% Increase
Treated Drinking Water	18.1	59.3	41
Use of a Ladle	73.3	87.7	14
Safe Water Storage	78	86.1	8
Safe Food Storage	79.7	92.4	13
Use of Pot Rack	72.1	89.4	17
Zero Open Defecation	71.1	84.8	14
Hand Wash Facility	29	70.1	41
Use of Soap for h/wash	40.9	68.4	28
Use of Rubbish Pit	74.2	86.6	12
No children with Ringworm	72.3	89.6	17
Know how to make SSS	69.3	87.7	18
Average Increase in behaviour change			20