

The impact of Health Centre Committees on health outcomes in Zimbabwe

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Abstract

This study sought to analyse and better understand the relationship between health centre committees in Zimbabwe as a mechanism for participation in health and specific health system outcomes, including representation of community interests in health planning and management at health centre level; provision of and access to primary health care services and community health knowledge and health seeking behaviour. A Case-Control study design was used, with four case sites with health centre committees and control sites selected in the same districts where there are no health center committees with sufficient distance between catchment areas to avoid spillover of results. This paper reports on the findings from the cross sectional community surveys OF 1006 respondents carried out in February 2003 and the health information system analyses. The study shows that public sector clinics are the primary source of health care for communities in Zimbabwe, but are not well resourced in terms of basic supplies and staffing. Health Centre Committees appear from the study findings to be associated with improved health resources at clinic level and improved performance of the primary health care services.. Communities in areas with HCCs had a better knowledge of the organization of their health services from the indicators assessed, making services more transparent to them. There was also evidence of improved links between communities and health workers in these areas. The study suggests an association between HCCs and improved health outcomes, even in the highly under-resourced situation of poor communities and poorly resourced clinics. This positive contribution of HCCs to health outcomes calls for greater attention to strengthening these structures as an important component of primary health care and of the health system generally.

Key words: Health equity; Community participation; primary health care;

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1. Introduction

Participation of communities is widely argued to be an important factor in improving health outcomes and the performance of health systems. Despite this, and the common inclusion of 'participation' as both means or ends in health policy, participation is poorly conceptualised and operationalised, both in governance in health and in technical health interventions, undermining systematic analysis of its specific contribution to health and health systems outcomes.

Following positive gains in social mobilisation and health service delivery in Zimbabwe there has in the 1990s been mounting public and professional concern over declining quality, access and equity in health services and increasing demand on people to finance and contribute to health services. Surveys have indicated that communities and public health personnel are dissatisfied with both the level and distribution of health resources, particularly in the shortfall to primary care level and to preventive health and with the declining quality of care at primary care level. Hence while equity has continued to remain a core policy of the Ministry of Health in Zimbabwe, there is evidence that old inequities have not been fully addressed, and indeed that some reversals in health equity gains made post 1980 had taken place (CWGH 1998; MoHCW 1997; Loewenson 2000; Ropi et al 2001; Ropi 2000).

There is evidence that enhanced prevention, compliance with treatment and rehabilitation demand dialogue between health services and communities on their mutual roles and the technical, resource and social inputs needed to fulfil those roles (Gilson et al 1994; Loewenson 2000; Mubyazi et al 2003). Loewenson (1999) provides an account of mechanisms for participation in Zimbabwe. This review suggests that a health policy from 1980 that strongly endorsed community participation was implemented within a system where decision-making was

generally centralised and dominated by administrative inputs. The health sector mobilized communities for primary health care programmes, communities contributed to health infrastructures and supported village health workers, child supplementary feeding and drought relief, amongst other initiatives. These programmes were primarily directed by strong state intervention, with community participation expressed as mobilisation for or compliance with state defined programmes. Evidence from studies in the 1990's indicate that the mechanisms used for these processes had become atrophied or non existent, and that people were discouraged by the lack of visible impact of these structures on health services, by lack of formal provision for and support of their roles and by lack of resources for their functioning ((Loewenson R, Chikumbirike T 2000; Loewneson R 1999; 2000).

Evidence from wider experience indicates that building stronger participation is not a simple matter of legal definition or policy directives on structures and roles. The literature documents many problems with mechanisms for community participation in health, including inadequate structural and systemic support, weak information access, limited authority and vague roles. This renders participation face value and weakens the sustainability and responsiveness of such structures (Kahassy and Baum 1996; Bennett et al 1995; Gilson et al 1994; Mubyazi et al 2003).

Between 1989 and 2002, a network of membership based on civic organisations in Zimbabwe called the Community Working Group on Health (CWGH) initiated a process of setting up or revitalising health centre committees (HCCs) to strengthen the capacities to demand resources for these levels of the health system (CWGH 1998d). The CWGH advocates for and supports primary health care at national and local level, through information sharing, training, promoting community health activities and through strengthening links between communities and district health services. By 2001 the CWGH covered 21 districts, and in about half of these set up health centre committees, and supported these with training and capacity inputs. The committees were trained to identify priority community needs and actions, plan the resource inputs to meet these needs and make organised demands on district health budget and on the Health Services Fund; a sector wide fund comprising retained fees and donor funds allocated to the district and to be spent on a 60:40 ratio at district hospital level and below.

Given the findings of previous research on community mechanisms for health in Zimbabwe, the increased competition for resources within the health sector, and the weakening performance of primary health care services, there was interest in the CWGH and more widely to know whether such structures enhance public participation in health, particularly towards improved allocation of resources for and access to primary care, promotive and preventive health interventions, enhanced community capabilities for health (through improved health knowledge and health seeking behaviour, appropriate early use of services, enhanced mobilisation of resources for health and health services), and improved quality of health care as perceived both by providers and users of services. This paper reports on the research carried out in 2003 to explore these questions.

2. Methods

The study sought to analyse and better understand the relationship between health centre committees as a mechanism for participation in health and the specific health system outcomes noted above. A Case-Control study design was used, with four case sites with health centre committees and four control sites selected in the same districts where there are no health center committees. The sites were selected so that there was sufficient distance between catchment areas to avoid spillover of results. The sites covered wards, a subunit of the district that is a catchment area for a clinic. The study sites and their characteristics are shown in Table 1 below. The four case sites and four control sites were selected from three districts. In one, Goromonzi, the one case-control pair was from peasant farming (communal area) and in the other from a large scale farm

/peri-urban area.

Table 1: INFORMATION ON DISTRICTS AND STUDY SITES

Type of Area	Frequency	Percentage %
Communal	383	38.1
Urban	249	24.8
Per-Urban	128	12.7
Large- Scale Farm	246	24.4
Total	1006	100.0

Province	District	Ward	Ward has HCC?	Clinic	Type of area
Mashonaland East	Goromonzi	Ward 14	Has HCC	Arcturus Mine Clinic	Peri-urban
		Ward 9	No HCC	John Reimer	Large Scale Farm
		Ward 7	Has HCC	Mwanza Clinic	Communal
		Ward 18	No HCC	Rusike Clinic	Communal
Manicaland	Makoni	Ward 4	Has HCC	Vengere	Urban
		Ward 25	No HCC	Tsanzaguru	Communal
Midlands	Gweru	Ward 12	Has HCC	Gunde	Communal
		Ward 15	No HCC	Somabhula	Large –Scale Farm

The study included a community survey. Focus groups discussions were held with participatory appraisal tools to elicit community inputs. There were carried out with groups of women, of men and of youth. The three groups were selected as in mixed groups often only more dominant male views are obtained. Key informant interviews were held and data collected on health indicators from the health information system at clinic and district level. This paper reports on the findings from the cross sectional community surveys carried out in February 2003 and the health information system analyses².

The community surveys were implemented in the 4 study areas sampled, covering ‘case’ wards with HCCs and control wards without HCCs. Within these wards the study population was cluster sampled using the maps. The survey aimed to obtain 30 people in each of the four targeted social groups, viz women, youth, elderly, men. This was to ensure that the sometimes different experience of these groups of community participation and of health care was obtained in the study. In each of the two case-control sites in each of the four study areas, therefore, 120 households were sampled. Individuals within the selected households were selected for interview to meet quotas of 30 people per community fraction (women, youth, elderly, men). The interviewee in a household was selected to be the male, female, youth or elderly in rotation, and if a person of this characteristic was not available the next household was visited. The survey thus aimed to include 120 respondents per ward, or 960 in total. A total of 1006 interviewees were finally interviewed. This represents 0,2% of people in the three areas (1992 census population of 474 586). Table 2 below shows the distribution of the respondents.

Table 2: Distribution of respondents in the community survey

The age distribution across the study areas and across areas with and without HCCs in the sample varied somewhat, with a statistically significantly older population in the areas with HCCs (Chi squared $p < 0.05$). The male:female ratio was relatively constant across all age groups, although with a lower male proportion in the 21-45 year age group (Chi square $p < 0.05$) viz

Below 20 years: Male;female = 51:49
 21-45 years: Male;female = 48:52
 46-60 years Male;female = 55:45
 +60 years: Male;female = 53:47

Statistical data was collected from health centre and district records on health service performance and health financing information. The fact that clinics are not cost centres of the health system in Zimbabwe made it impossible to collect some of the information required. Where information could be collected at health centre level, the information was disaggregated between centres with and without HCCs.

3. Findings

3.1 Characteristics of the community

The populations in the study areas were relatively well educated, with 51% with secondary education and 3% with diploma level and higher. As education is an important factor in both participation in social institutions, in using health services and in community health action, this finding of a relatively high educational level is important. Of the 8% who had not completed Grade 1, 57% were aged 60+ years.

The distribution of educational levels between areas with and without HCCs was not significantly different. Despite reasonably high levels of education the majority of people in the study population are unemployed, or 68% overall. While the majority of the sample were unskilled, 11,2% of the total were skilled or professional. There were higher levels of unemployment in areas with HCCs than in those without, although no difference was found in skills levels between areas with HCCs (10,7% skilled/professional) and those without (11,8% skilled/professional).

3.2 Access to and use of Health Services

The majority of the people in all areas use the public clinics (68,2%),. Table 3 indicates that wards without health centre committees have a significantly higher likelihood of not using health services (12.1%) for last illnesses compared to those with HCCs (9.8%). (Chi squared, $p < 0.05$) In areas without HCCs there is a greater share of users of traditional and private medicine. The field research suggests that these utilization patterns relate in part to issues of access and quality of care.

Table 3: HEALTH SERVICE USED

LEVEL	With HCC		Without HCC	
	No	%	No	%
None	50	9.8	60	12.1
Public Clinic	362	70.7	324	65.6
Public Hospital	68	13.3	53	10.7
Private Doctor/ Clinic or Hospital	16	3.1	25	5.1
Traditional Med/ Pharmacy	16	3.1	32	6.5
Total	512	100	494	100

Use of services also relates to access. As shown in Table 4.below, clinics with HCCs were within 5km of respondents in a higher proportion of cases than clinics without HCCs in two of the three districts.

Table 4: Distance to nearest Clinic

Distance	GOROMONZI				MAKONI (Rusape)				GWERU			
	With HCC		Without HCC		With HCC		Without HCC		With HCC		Without HCC	
	No	%	No	%	No	%	No	%	No	%	No	%
< 5 Km	254	100	143	57.7	121	96.8	122	98.4	107	80.5	38	31.4
5-8 Km	-	-	76	30.6	3	2.4	-	-	16	12.0	14	11.6
> 8 Km	-	-	29	11.7	1	0.8	2	1.6	10	7.5	69	57.0
TOTAL	254	100	248	100	125	100	124	100	133	100	121	100

This survey assessed primary health care use through two indicators, diarrhoeal disease treatment and use of Antenatal care. Household management of diarrhoeal disease has since 1980 been promoted through use of oral rehydration sugar and salt solution. It provides an easily measurable indicator of household knowledge of a critical community based PHC measures aimed at child health. Use of Antenatal case provides another measurable indicator of utilisation of facility based preventive health services. In 15% of households it was reported that there had been a pregnant woman in the past year, while in 13% it was reported that a child under 5 years of age had had diarrhoea. The pattern of Antenatal care attendance and use of oral rehydration solution ORS for diarrhoeal disease is shown in Table 5 below.

Wards with HCCs experienced less diarrhoea and used ORS more than those without, signalling both improved disease statistics and higher levels of primary health care implementation. As noted earlier education levels, often associated with ORS use, did not differ significantly between wards with and without HCCs, and clinic distance should be less critical in this instance as ORS can be given at home. In fact there was no statistical association between ORS use and educational status in the survey result. This difference in use may relate to health knowledge, outreach and perceptions, discussed further later. Pregnant women in areas with HCCs were more than twice as likely to attend antenatal care than those in areas without HCCs, a significant difference (Chi square $p < 0.05$).

Table 5: Primary health care indicators

	With HCC		Without HCC		TOTAL	
	No	% total	No	% total	No	% Total
Children <5 yrs with diarrhea in the past 2 weeks	57	11.2%	68	13.8%	125	12.5%
Diarrhoea treated with ORS	47	82.5%	51	75.0%	98	78.4%
Total pregnant women in past year	84		194		278	
% pregnancies attended ANC	69	82,1%	72	37,1%	141	50,1%
Environmental health technician visited in the past month	190	37,1%	95	19,2%	285	28,3%
TOTAL	512		494		1006	

Visits by Environmental health technicians (EHTs) signal the extent to which communities are supported in primary health care outreach. EHTs support monitoring of TB and communicable disease case tracing and treatment, health promotion and environmental health interventions. They are an active link between the community and the health services. Generally EHT outreach was low, with only a quarter of households visited in the past month. As shown in Table 6, distance of households from clinics was inversely associated with frequency of visits from EHTs, indicating that EHT visits seem to be more frequent in areas where clinics are already closer to people. EHT visits were significantly more frequent in areas where there was an HCC than in areas without.

Table 5: Visits made by EHT vs Distance to the Nearest Clinic

Number of times EHT visited in past month	Distance					
	<5km		5-8km		>8km	
	No	%	No	%	No	%
Never	547	70%	82	75%	87	78%
Once	168	22%	23	21%	18	16%
+2	66	9%	4	4%	6	5%
Total	781		109		111	

3.3 Health Service resources and delivery

Statistical data collected from the clinics and district records provide selected health service indicators collected for areas with and without HCCs. There was variability between districts in budget resources available to the districts and reported expenditures by the health centres. The bulk of the district expenditures is on medical supplies (59%-89%) with 2,6% or less allocated to disease control, which include community health promotion activities. As shown in Table 6, the

clinics with HCCs had on average more staff, (nurse, EHT and general) and higher budget allocations from MoHCW than those without HCCs. They also had more EPI campaigns than those without HCCs. Clinics without HCCs appear to perform better in toilet and well construction. In part this is due to the HCC clinics being in peri-urban area and urban areas (Arcturus and Vengere) where infrastructure are already established. Drug availability was higher in clinics with HCCs although overall drug availability at the clinics was poor. Clinics had poor control over drug stocks supplied through Ministry of Health budgets and except for one mine clinic, others reported that they did not know when their next supplies would come and could not predict a consistent supply of drugs. Improved drug availability in clinics with HCCs may relate in part to reported fundraising by communities in those areas giving clinics additional resources for drug purchase.

Table 6: Health indicators for areas with and without HCCs

1-
2-
3-
4-

	Average for wards/ clinics with HCCs	Average for wards/ clinics without HCCs
Number of Health Staff	6 nurses/ nurse aids	4 nurses/ nurse aids
Number of EHTs	0.75	0.5
Annual Budget allocation to Health Centre from MoHCW Z\$ 2002 January-June 2003	212 674.13 131 989.84	74 736.80 70 129.65
Number of EPI outreach campaigns in ward 2001 2002 Jan-June 2003	8.3 11.3 7.5	1.0 0.5 1.5
Number of wells dug in ward 2002 Jan-June 2003	1.8 0.8	2.5 1.0
Number of toilets built in ward 2002 Jan-June 2003	4.5 1.5	13.8 21.0

Table 7: Drugs Available At Clinics

Drugs Available	% clinics with drugs available and average months of drug stock remaining	
	With HCC	Without HCC
Asprin/ Paracetamol	100 2 months	75 1,5 months
Chloroquine Tablets	100 1,5 months	100 2,5 months
Chloroquine Syrup	75 3,5 months	0
Amoxycillin 250mg	25 0,25 months	25 0,25 months
Amoxycillin Suspension	25 0,25 months	0
Cloxacillin Caps 250mg	25 0,25 months	0
Cloxacillin Suspension	0	0
Metformin Tablets	25 0,25 months	0
Frusemide Tablets	50 1,5 months	0
Salbutamol Syrup	25 0,25 months	0

3.4 Health knowledge

TB, malaria and diarrhoea are common diseases in the areas surveyed and treatment approaches have been part of primary health care management for some time. Table 8 summarises the findings on community knowledge of treatment and management of these diseases. People were generally more knowledgeable about malaria treatment, then TB treatment, with least knowledge about correct treatment of diarrhoeal disease. Nevertheless levels of knowledge of 80% of respondents and higher indicates that health knowledge is not the most significant constraint to health practice.

Wards with HCCs generally had higher levels of knowledge than those without across all areas of health knowledge. In relation to knowledge of who manages health in the district this improved knowledge was statistically significant (Chi Squared $p < 0.05$). As education levels do not differ between areas with and without HCCs this cannot be attributed to education status and needs to be related back to other inputs.

Table 8: Health knowledge indicators

	With HCC		Without HCC		TOTAL	
	No	% total	No	% total	No	% total
Correct knowledge of TB treatment	451	88.1%	422	85.4%	873	86.8%
Correct knowledge of malaria treatment	480	93.8%	447	90.4%	927	92.1%
Correct knowledge of diarrhea treatment	416	81.3%	393	79.6%	809	80.4%
Know what the district nursing officer does	54	10.5%	23	4.6%	77	7.7%
TOTAL	512		494		1006	

3.5 Health Centre Committee roles

Participatory appraisals and key informant interviews reported elsewhere (Rusike et al 2004 *second paper for workshop or Loewenson et al EQUINET discussion paper*) gave a deeper understanding of the roles, performance and community and health worker views of the Health Centre Committees. This paper provides brief report of the work of the HCCs to better understand the health system findings above.

Although there was variable knowledge of the HCC amongst the communities in the study, 59% said that they know about their HCC and nearly half of the respondents (48,3%) were able to name the HCC members. Communities reported that they see the HCC as health promoters and advisors, and as bridges to ensuring that health interventions address community health problems. Despite this only 38,9% of respondents in the survey said that people took their complaints and issues to the HCC and a relatively similar share (32%) indicated that the HCC had helped to deal with the problems. A third of the study population felt that the HCC had been able to deal with their problems. This does seem to indicate that there is a 'two way' street between HCCs and communities: Those who know, interact with, take issues to and get feedback from the HCC are reinforced and see the value of the HCC. Table 9 shows the areas where key informants report the HCC has had an impact. The table indicates that these relate to social mobilisation for health promotion, environmental health and some quality of care issues (all priorities for communities). The HCC has had less reported impact on bringing resources into communities than on quality of care issues.

One Health Centre Committee in Mwanza was often cited as an ideal example of an HCC which had been able to become independent in finding ways of addressing problems, The HCC had introduced its own security fund to provide resources for health work, instilled a sense of ownership in the communities of their health centres and a higher level of awareness in terms of health issues and health rights.

Table 9: Summary of areas of impact of the HCC

AREA	GOROMONZI, GWERU and MAKONI HCCs combined
Areas of impact of the HCC	Improved water quality and borehole construction for the clinic and the community Built Blair toilets and staff toilets for the clinic Litter collection and general cleanliness improved Health information to communities Employed a security guard at clinic Negotiated for additional nursing staff Involved in feeding children Bought benches for patients; Fenced the clinic Contributed to drug purchases for clinic
Money for health in the community	Through Food aid to orphans. Security fund for benches, security guard and drugs
Quality of clinic health services	Reduced health staff workload through visiting the sick and home based care. Renovated clinics, improved security Improved health staff living conditions through construction of staff toilets and water tank for the clinic Improved drug supplies
Community priorities in the health budget	Improvements in budget resources for water purification

4. Discussion

This study shows that people generally use public sector clinics as the primary source of health care, making it important to them that these function well. There is some variation around this: highly vulnerable groups use traditional medicine; those living close to public hospitals use these for primary care instead of clinics and some in urban and farm areas use private services instead of public clinics.

Public clinics are generally but not always accessible, and shortage of fuel for outreach and of transport to clinics breaks links between communities and their health services. There seems to be a vicious (or virtuous) circle where distant clinics do not have strong outreach and thus have significantly reduced interaction with their communities, while closer clinics also have more outreach contact.

Resources to clinic level are not easy to determine, as clinic spending is not clearly defined in district budgets and allocations not managed at clinic level. This itself may weaken the allocation of resources to community and clinic level as clinics do not manage their own budgets. The bulk of the district expenditures in the study districts in 2001 was on medical supplies with less allocated to disease control, the vote which includes community health promotion activities.

Health Centre Committees appear from the study findings to be associated with improved health outcomes. The study showed that clinics with HCCs had on average more staff, (nurse, EHT and general), higher budget allocations from MoHCW, more EPI campaigns and better drug availability than those without HCCs. It could be argued that improved health performance and staffing in these areas is associated with an improved capacity to draw and use health resources. If this is the case then there is a virtuous cycle for those clinics with HCCs and a vicious cycle for those without.

Areas with HCCs also performed better on Primary Health Care (PHC) statistics (EHT visits, ORS use) than those without, and there is reported to be improved contact with the community in areas with HCCs. Community health indicators (health knowledge, health practices, knowledge and use of health services) were higher in areas with HCCs than in those without. Communities in areas with HCCs had a better knowledge of the organization of their health services from the indicators assessed, making services more transparent to them. There was also evidence of improved links between communities and health workers in these areas.

The evidence indicates that areas with HCCs thus perform better on a range of health indicators compared to those without, both in the level of resources within the clinics, in PHC coverage and in community health indicators.

5. Conclusion

This study suggests an association between HCCs and improved health outcomes, even in the highly under-resourced situation of poor communities and poorly resourced clinics.

Health Centre Committee have acted on and improved primary health care services. Community, HCC and health authority sources all reported that HCCs have taken up environmental health and service quality issues. Their primary mode of action seems to be more of an additional service outreach and link. They find out community needs and organize service inputs such as drug purchases, building waiting mother shelters, water tanks and toilets. They also provide health information.

A separate paper by Rusike et al (2004) describes further the evidence from this community study on how communities perceive the HCCs and their representation of their interests. The study found that a third of respondents (33.2%) felt that the HCC had dealt with their priority problems, but that a further third (37.1%) said that it had not and a quarter (26,2%) did not know what the HCC was doing. Indeed the study found a relatively constant third of the community who actively engaged with the HCC and found it beneficial. The focus group discussions indicated however that the roles the HCCs play and positive outcomes achieved enhance their credibility with the community and the health staff. In two cases they were able to draw on this legitimacy to mobilize additional resources for health from community and other sources.

There is strong evidence of positive health outcomes associated with HCCs in this study. The evidence, supported by the mechanisms of community resource mobilisation, information outreach and social actions around health, indicate that HCCs play a positive role within health systems. They provide evidence of roles for community participation beyond dialogue and consultation.

This positive contribution of HCCs to health outcomes calls for greater attention to strengthening these structures as an important component of primary health care and of the health system generally. The finding cited in the literature review (Loewenson 2000; Mubyazi et al 2003) that these structures often lack formal recognition, are weakly resourced and poorly trained for their

roles is thus an area to be addressed, to strengthen the health system.

It may be argued that the strengthening of HCCs as a vehicle of community participation is thus deeply bound with the strengthening of the PHC and primary care level of the health system. There are clear signals in this study of the virtuous cycles of positive health outcome between HCCs and performing clinics. This calls for greater investments in policy, practice and resource plans to strengthen this base for health systems performance.

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