CHAPTER THREE STUDY METHODS

3.1 Study design

A cross-sectional study of VCT services in 14 facilities distributed within the Ekurhuleni Metropolitan Municipality in Gauteng, South Africa.

3.2 Study population

All Government funded VCT sites and their managers – including hospitals, clinics, community health centers and NGO facilities – in the Ekurhuleni Metropolitan Municipality. Private hospitals and private practices run by general practitioners were not part of the study population.

3.3 Study sample

Ekurhuleni Metropolitan Municipality has been divided into three Service Delivery Regions (SDRs), the Southern, Eastern and Northern SDRs. In each SDR, VCT facilities were stratified into government hospitals, community health centers, clinics, NGOs and hospices. Because of the small sample size, random selection of facilities was done manually. Names of each facility per stratum in each SDR were written on individual pieces of paper. Each paper was folded to conceal the name. The papers were then mixed and with the assistance of the Ekurhuleni District Assistant Director for HAST, one facility was randomly selected within each stratum. Instead of a sample size of 15 sites, 14 sites were included in the study because the only hospice in one of SDRs did not offer VCT at the time of sampling. The inclusion criteria was that all sites chosen for sampling had been offering VCT services for at least one year prior to the start of the study in order for the sites to have sufficient information for data collection. Far East Rand Hospital where the researcher worked was excluded in the randomized sampling.

The questionnaire was pre-tested in two sites (a hospital in the Westrand district and a clinic in Sedibeng district) in January 2007 before the actual study. The aim was to test the acceptability and clarity of the questionnaires before sampling for the study. Both sites were outside the district of the study sample. No changes were made to the questionnaire following the pre-testing.

Table 3.1 Site selection per service delivery region

Service delivery region	Hospitals		CHCs		Clinics		Hospices		NGOs	
	N	selected	N	selected	N	selected	N	selected	N	Selected
North	1	1	1	1	19	1	2	1	2	1
East	2	1	3	1	29	1	0	0	5	1
South	3	1	2	1	30	1	2	1	7	1

3.4 Data collection

Data were collected between April and May 2007 using three data collection instruments.

a). Questionnaire: Prior to a self-administration of a semi structured questionnaire (Annexure 2) each facility head / manager consented and signed an informed consent form (Annexure 1) for the study. It was a composite questionnaire made up of various parts from the UNAIDS tool kit for VCT services evaluation (UNAIDS 2000). The questionnaire explored demographics of facility managers, staff and training, referral system, guidelines, supervision and support and keeping of VCT register.

b). Checklist: The investigator carried out facility observations and noted certain information using a previously developed facility assessment checklist (Annexure 3). Of importance were the physical structure and the range of services offered by each facility.

c). Data collection sheet: From the VCT register the total number of VCT clients seen in each facility during the specified period was extracted and recorded in a data collection sheet (Annexure 4). The corresponding information kept at the district office was also extracted for comparison.

d). Variables: Variables were identified to obtain the following data for analysis:

1. Facility

a. Site description
    i. Type (hospital, hospice, community health centre, clinic or NGO)
    ii. Site location (stand alone or within main facility)
    iii. Site clearly marked or not
    iv. Having counseling space or not
    v. Waiting area (adequate or not)
    vi. Type of services
b. Number of VCT clients seen over a period of time
c. Type of HIV counselors
d. Number of counselors trained
e. How patients were referred

2. Managers
    a. Position (project manager or clinic head)
    b. Gender (male or female)
    c. Length of time as a facility manager

3.5 Data management and analysis

Each questionnaire together with its facility assessment checklist and data collection sheet was assigned a unique identification code for the purposes of records identification in this study. Names of facilities were not included in the final data analysis and this report for confidentiality reasons. Data were captured into Ms Access Database, cleaned and analysed using Stata (version 10.1). Responses to open ended questions were coded for ease of analysis.

Data analysis was carried out in two stages. The first stage involved frequency distributions of categorical variables, and determination of mean of continuous variables (e.g. number of VCT clients seen over a period of time). In the second stage of data analysis, cross tabulations and student t-test (where applicable) were used to examine differences between subpopulations and the corresponding p-values. The study had a very

small sample size and this limited the use of statistical inferences. Therefore, the results of this study are descriptive and presented mainly as percentages.

3.6 Ethical considerations

All participating health care facilities and VCT sites were provided with a clear purpose of the study. They were given an opportunity to decide on whether they wanted to participate or not. Each facility head or manager consented and signed an informed consent form for the study. Anonymity and confidentiality were assured as no names of participants were reflected on the questionnaires, checklist and data collection sheet. Information extracted from VCT registers both at facilities and district did not include client names. Participants were informed of their right to withdraw from the study at any point without any consequences.

Permission to undertake the study was obtained from the Ekurhuleni Metropolitan Municipality, Health and Social Development Department. (Annexure 5).
Ethical approval was obtained from The Committee for Research on Human Subject at the University of the Witwatersrand. (Annexure 6).