THE UNIVERSITY OF CALGARY

"Access to Primary Health Care for Low-Income Women in Urban Kenya"

by

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Abstract

Women throughout the developing world are facing increased levels of pauperization, and this has dire consequences on personal and household health. It has become obvious that economic development does not automatically lead to equitable distribution of resources and income, nor has development benefited men and women equally; women are disproportionately represented among the poor.

The study is in response to the impending female health crisis in low-income urban areas, where population growth and over-crowding has outstripped the capacity of local authorities to provide basic services, and where conditions favouring poor health are increasingly the norm.

This research incorporates the perspective of a feminist geographer, exploring the diversity of women's experiences with a focus on the significance of geographic context (place) in shaping women's experiences in the slum area of Kangemi.

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CHAPTER 1: Introduction

1. 1 The Problem: Women's Health in the Developing World

Women throughout the developing world are facing increased levels of pauperization, and this has dire consequences on personal and household health. Recently, it has become more obvious that economic development does not automatically lead to equitable distribution or redistribution of resources and income, especially to the poorest sections of a population (Jancoles, 1998; Reerink and Sauerborn, 1996). Furthermore, development does not automatically benefit men and women equally, and there is more evidence to suggest that women are disproportionately represented among the poor (United Nations, 1995, 9).

Overall, it has been explicitly recognized that poverty has a gender dimension and that there is a strong correlation between the economic status of women and progress achieved with respect to poverty alleviation in general. The perception is growing around the globe that poverty is becoming increasingly feminized; female poverty is a persistent and unevenly distributed burden that threatens the sustainability of the development process (United Nations, 1995, 45). Recent decades have been characterized by a feminization of poverty: 70 percent of individuals living in absolute poverty are believed to be women (UNDP Human Development Report, 1995). There is evidence to show that women are neither a burden nor a cost to development. On the contrary, they constitute a particularly dynamic factor in the eradication of poverty. This realization, however, while reflected in the academic literature and in the agendas of international development institutions, has not been given due weight in the design and

implementation of anti-poverty issues and strategies (United Nations, 1995, 55). Current investments in women are taking place within a context of noticeable but far from adequate improvements in the condition of women in the developing world (Buvinic, et al, 1996, 15).

On a global scale, there has been an increase in the numbers of poor women living in urban areas (United Nations, 1995, 55). The proportion of the urban poor who are women is estimated to have risen from 54 to 60 percent in the 1965 - 1988 period (UNDP Human Development Report, 1995). Among the factors affecting the increase in the number of urban women among the poor is the growing share of households headed by women, which ties into the linkage between gender and poverty on the one hand, and the situation of households headed by women on the other (Tabibzadeh, et al, 1989, 110). The World Fertility Survey (1980) and the Demographic and Health Survey (1990) both indicate a pronounced increase in the percentage of female-headed households during the past two decades in many developing countries (United Nations, 1995, 55).

Kenya, for example, reported a high rate (approximately 40 percent) of households headed by women in the urban sector. The highest proportion of households headed by women was registered in Mathare Valley in Nairobi, where 60 – 80 percent[1] of all households had women as heads. In addition, the national report further indicated that the highest absolute poverty rates were among households headed by single women (United Nations, 1995, 56).

[1] Exact values are not known.

In the Nairobi Forward-Looking Strategies for the Advancement of Women (1985), health was one of the 3 themes, along with employment and education, of the three goals - equity, development, and peace - of the United Nation's Decade for Women (Herrell and Mulholland, 1998, 80). With the recognition of the vital role of women as providers of health care and the need for strengthening basic services for the delivery of health care came the need to promote the positive health of women at all stages of life and to recognize the importance of women's participation in the achievement of Health for All by the Year 2000 (United Nations, 1995, 107).

It has been recognized that women's health is influenced by biological, social, environmental, political, economic and cultural factors (Turshen, 1991, 13). Many women suffering from poor health are found to lack knowledge, information, skills, purchasing power, income-earning capacity, and access to essential health services. At the same time, women's health, their status, and their multiple contributions are seen as pivotal links between the health of the wider populations in which they are situated. This affects sustainable development - prospects which, despite remarkable progress through the 1960s and 1970s, have been diminishing since the 1980s (United Nations, 1995, 111). In this respect health must be considered in a holistic manner.

Africa is the world's poorest region, lacking both money and trained personnel. Many countries within Africa cannot meet even the most basic health needs of their population (Gunasekera, 1998, 127). Africa has a very complex set of cultural traditions stemming from the customs of many different ethnic groups, along with more recent influences of Islam, Christianity, as well as colonial domination by European powers

(McElmurry, et al, 1993, 13). The health needs for African women have traditionally centred around reproduction and motherhood. Many women still lack access to safer sex, family planning, and maternal child health services (Turshen, 1991, 3-4). High maternal and infant mortality, AIDS and other untreated sexually transmitted diseases, traditional female genital mutilations, unwanted pregnancies, and preventable female related health problems are all major problems (McElmurry, et al, 1993, 13).

HIV/AIDS and other Sexually Transmitted Diseases continue to spread, killing thousands of men and women in the prime of their lives. The AIDS pandemic is concentrated in the poorest parts of the world with 90 percent of those who are HIV positive living in the developing worlds (UNAIDS, 1997). In sub-Saharan Africa, it is estimated that there are already six women with HIV for every five men. This increase in the numbers of HIV positive women reflects their greater biological vulnerability to the disease[2], as well as a consequence of the social constructions of female and male sexuality, and the profound inequalities that continue to characterize many heterosexual relationships[3] (Zierler and Krieger, 1997).

1. 2. The Case for Investing in Women

The culmination of two decades of research and advocacy has demonstrated the important social and economic benefits of investing in women. The 1995 Fourth World

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[2] Biologically, the risk of HIV infection during unprotected vaginal intercourse is two to four times higher for women than men. This is mainly because women have a larger surface area of mucosa exposed to their partners' sexual secretions during intercourse.

[3] Women may find it difficult to assert their wish for safer sex, for their partner's fidelity, or for no sex at all, and as a result their own health and that of their family may be put to risk.

Conference on Women in Beijing highlighted the substantial gaps that remain between rhetoric on, and action to, improve women's lives. While it is recognized that considerable gains had been made over the past 20 years in key social indicators for women, disparities in the well-being of women persist (Buvinic, et. al, 1996, 1).

Particularly of concern was the issue of women and women's health. Half of the world's population is female, and three-quarters of the Third World's population is comprised of women and children. They are the main users of health care services, and women are the main providers of health care - within their families and within traditional and biomedical health care systems (Pizurki, et al, 1987, 43). Until fairly recently, the importance of women as a large, distinctive, and neglected element in the Developing Countries was largely ignored (Groot, 1991, 108). It is logical to suggest based on these facts that there can be no equity in health care until governments take women seriously. Government recognition of women is not just a sufficient condition of democratic health care, but it is a necessary one (Turshen, 1991, 205).

Women's health and development is a term used to depict the complex relationship between the health of women and their social, political, cultural, and economic situation (McElmurry, et al, 1993, 11). The meaning of women's health and development has changed over time with an initial emphasis on equity, human rights, and welfare issues, such as women in poverty (the approach in the 1980s), to a broader meaning that focused on the economic growth and contribution of women (Buvinic, et al, 1996, 3).

Historically, attention to women's health has been associated with a concern about fertility and population growth. As a result of the multiple benefits of family planning - from women's health, to fertility regulation and the prevention of sexually transmitted diseases, that focus is still a major part of interventions targeted at women. The traditional focus on women's reproductive needs, especially contraceptives and safe-childbearing has serious limitations. Firstly, it has meant that women who are post-menopausal have been denied access to health care during the time they may need it most, and secondly, women for child bearing age have not found it easy to obtain care for non-reproductive problems (Garcia-Moreno, 1998, 12). The growing awareness of the overall poor status of women's health, particularly in the developing world, the gender-specific barriers to better health, and the limitations of narrowly defined family planning programs to address these problems, has led to a need for a more comprehensive approach to women's health issues (Buvinic, et. al, 1996, 31).

More recently, the notion of women's health in developing countries has expanded to include an emphasis on empowerment and global development goals and mechanisms that enable women to gain greater control over their lives (McElmurry, et. al, 1993, 11). This more inclusive and holistic definition best captures the emerging conception of women's health and development, reflecting a shift away from a view of women as victims and passive objects towards an understanding of women as independent actors capable of constructing knowledge and affecting change grounded in their lived experiences (McElmurry, et. al, 1993, 11-12).

In East Africa, specifically, health care and education were one of the first social services offered by every independent government. During these early years of post-colonialism, race and class were the burning issues of the time. The access of blacks to segregated medical care and the access of the poor to a system catering to the privileged were items high on the agenda of the new ministries of health. Gender was, and is, rarely addressed; as such the men who ran the government and the medical staff who ran the health care system assumed that women would automatically be covered by services that reached the blacks and the poor (Turshen, 1991, 206). In countries where the black elite replaces the white colonial regime, the health needs of the majority of the population were not likely to be much better served than they were before Independence. Despite widely varied ways of conjugating new and traditional power structures, many African governments retained the colonial health system, which was an urban service, based in hospitals, providing curative care, reliant on sophisticated technology, and devoted to the chronic conditions of the privileged (Turshen, 1991, 206).

Women's health is an integral part of the overall development of a nation (Turshen, 1991; Lerer, et. al, 1998). The current health status of women is strongly influenced by a country's level of development; the poorer the country is overall, the fewer resources there are to be devoted to women's health. At the same time, improving women's health is an important component of overall development. Without discounting the role of men, the health status of women affects not only the health of their children and other family members, but also their contributions to the welfare of their communities and societies. Improving women's health contributes both directly, through

the economic and social contributions of women themselves, and indirectly, though their contributions to the health and welfare of their families (McElmurry, et. al, 1993, 12).

CHAPTER 2: The Study Design

2. 1. Elements of the Study

2. 1.1. Rationale

The study examines the types and levels of access low-income[4] urban-based women have to primary health care, and the forms of responses and coping strategies they use in their societal context. In addition to documenting the status of, and constraint on, women's health, this research supports a rationale for focusing on women's health with the overall justification for investing in women: improving women's health not only promotes equity and improves quality of life, it also has tangible social and economic development benefits.

2. 1.2. Objectives

To this end, this study will:

1. Examine access to, and barriers against, primary health care services for low-income urban women who are alone and with partners;
2. Assess access to, and availability of, information and education on health care in the women's communities;
3. Identify well-being and primary health care coping strategies;
4. Explore the processes of decision-making with regard to women's health issues; and
5. Formulate policy recommendations that would be relevant to local and national government, CBO's and NGO's.

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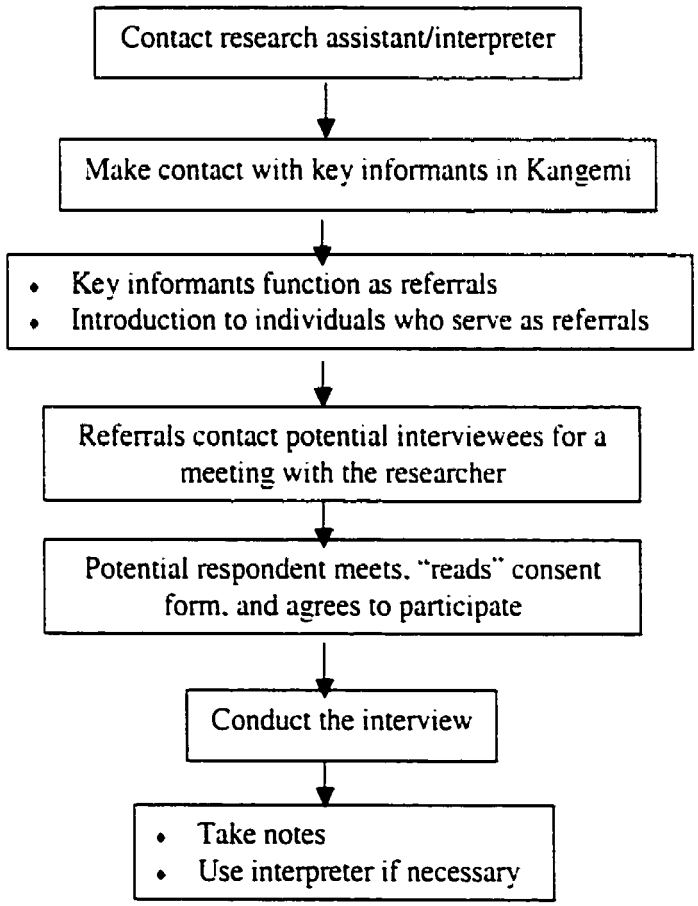
[4] The criteria used to determine low-income status will be to include those women earning a net income, from formal and/or informal activities, of KSH 2000 (Cdn $40) or less per month.

2. 2. The Research Design

Data was collected from a study of low-income urban women in the slum region of Kangemi, Nairobi, over the period of August to October 1999. Figure 1 is a visual representation of the research process. The study was designed to examine the types of access that low-income urban women have to primary health care, and the forms of responses and coping strategies they use in their societal context.

Figure 1: Overview of Research Design and Data Collection Procedure:



Data was collected via single, semi-structured, in-depth interviews, and the questionnaires were read aloud to the respondents in Swahili, Kikuyu, English, or a combination of languages through the help of an interpreter. These interviews were supplemented with a number of unstructured interviews with key informants such as community health care workers, locally trained community health nurses, the director of a CBO, church leaders, and social workers.

In order to capture the private and emotional worlds of the subjects, a non-random purposeful sample of 60 low-income women in Kangemi was constructed. Referrals to these women were obtained via key contact individuals who were already established in the community.

Due to the fact that I was perceived as being from "outside" the community, and due to the sensitive nature of the study, I could not simply walk in the slum areas and approach the potential respondents. Instead, contact with individuals who worked at the various service points, such as the dispensary, Upendo Unit[5], and DollyCraft[6], provided me access to the women I was looking for. An attempt was made to balance the number of "single" and married women. A total of 60 usable questionnaires were obtained in this manner.

Following a referral, a potential respondent was contacted and provided with a one-page description of the study, a sample consent form, usually read by the researcher or the interpreter. If the subject was willing to participate (at the time or a later date), the

[5] A branch of St. Joseph the Worker, a Catholic Church in Kangemi that served as a preschool unit for impoverished children. Here, very poor children were fed a balanced meal at least twice a week.
[6] Also a branch of St. Joseph the Worker; provide low-income women with income generating opportunities through the making of dolls as well as church regalia.

interviews were conducted at a central place (office or room at the service point). A great deal of importance was invested in conducting the interview in a place that was perceived as a safe haven for both the respondent and the interviewer. This was to ensure confidentiality, as well as minimize disturbances and interruptions. Semi-structured interviews were chosen as the primary means of data collection because it was felt that they could best capture the experiences and opinions of these women. While there were clearly some central issues that I wanted to address, semi-structured interviews allowed me to incorporate additional questions as the interview proceeded.

Although some of the questions in the interview addressed potentially sensitive subjects (fertility, personal hygiene, sexual relationships), most of the respondents appeared comfortable answering them. The identity of the respondents was kept confidential, and to ensure anonymity, the respondents were identified by a code, accessible only to the researcher. A sample interview is provided in the appendix, and as noted in the first page, the final ID was assigned based on 2 criteria. Firstly, if the woman was contacted through a community organization (e.g. DollyCraft or BIG[7]), the interviewee was assigned a code "A"; otherwise it was a code "B". The second criteria was whether or not the respondent had a partner, specifically a husband or common-law partner, and if she did, the interviewee was coded as "a"; otherwise it was coded as "b".

Depending on the respondents' level of understanding, as well as the depth of their answers, the interviews lasted anywhere from 45 minutes to 2 hours. Most women

[7] Breastfeeding Information Group, a local CBO that provides information and advice to women who have newborn infants.

felt comfortable enough to speak in Swahili or Kikuyu, and a total of 15 women spoke in English. If there were parts of the questionnaire that needed expanding on, or clarification, my interpreter, Leahy, was able to translate the question into a language that the respondent could understand.

There are clearly more factors involved in understanding women's situations, their status, and health than could possibly be measured in any single study (Stein, 1997, 224). The questionnaires attempted to unravel some of these issues, specifically background variables, demographics, information about women's current situation, health knowledge, health behaviour, and individual and household health status. The difficulty in identifying those elements as being of key importance beforehand is that the relationships depend on interaction and dynamism. What became clear at the end of the data collection stage was that there were no simple answers, or any one or few variables that were necessarily more important or more independent than others. The scope of the questionnaire, while extremely useful in providing an overall picture into the women's lives, did not fully capture all the individual concepts, factors, and indicators from the women themselves. This task would prove to be way beyond the capabilities and scope of this study, but the advantage of having designed a semi-structured, open-ended questionnaire certainly helped alleviate some of these problems. The questionnaires were therefore extremely useful in exploring the women's own views of reality, allowing me, the researcher, to generate theory and direction of questioning. While this method is not necessarily compatible with traditional quantitative methods, it certainly helped me

uncover previously neglected or misunderstood worlds of experience, such as women's relationships with their partners, sexuality, and fertility.

2. 3. Methodological Considerations

2. 3.1. Definition of the Study Population

The relationship between women and their health is multi-levelled. A traditional study design generally focuses on the individual, whereby data is generated from individual-level information. However, in order to answer the research question "how do women stay healthy, and what is in the way to women's overall well-being" this unit of analysis is inadequate.

In order to capture the holistic component of slum life, individual-level data needs to be used to portray a picture of community-level data. This can distort the overall picture because inevitably one is seeking to generalize observations based on a particular study population. This translates into the researcher looking for 'enough' case studies (how many should that be?) and using techniques of gathering and analyzing data from information collected at multiple interacting levels (Stein, 1997, 214).

Therefore, while the primary sources of data, with regard to this study, are the low-income urban women (individual-level data) who live in difficult situations in the slum area, I needed a technique that allowed me to explore the interactions between other levels as well. This issue was a concern because I did not want to purposefully look for *all* interconnections relating to health and women, as this would be impossible given the scope and limitations of the study. Incorporating interviews with key informants such a community nurses, community health care workers, church leaders, paralegal bodies,

women's right activists, and other researchers that had worked with the focus community minimized this. The type of interview questions further aided the process by attempting to cover more than just data generation affecting the women only at the individual level.

Another major issue that occurs with any traditional research design relates to the role of the researched as objects of study. As the researcher, I formulated the research questions, selected a suitable and feasible design, and then identified a suitable study population. In this way, the low-income slum women serve as providers of information only. But how was I to ensure that the process would be of benefit to these women and result in an empowering experience? While it became obvious at the start of my fieldwork that this was not very clear to either women or myself, the open-ended interviews did allow them to speak for and about themselves in ways they perceived as important and crucial to their survival. While defining empowerment to the women was also difficult, nearly all the women made explicit (if not implicit) statements about wanting to gain self-sufficiency and control over events that affected their lives. Many women saw the interview process as one that "opened their eyes", and made their efforts to survive seem worthy of research.

2. 3.2. Researcher bias

Part of the feminist approach is to be able to document the researcher's strength and weaknesses during the research process. Clearly, I was an outsider to the community coming in with my own biases, perceptions, and cultural baggage that were very different from the women I was going to interview. Familiarizing myself with the literature was a starting point that allowed me to become aware of some of my own preconceptions as a

woman and a researcher before the start of fieldwork. As such, I was able to prepare myself to see a community of women who were living a hand-to-mouth existence, and in an environment I was unaccustomed to. Clearly, I was not there to judge their situation nor question how they chose to live their lives, but to learn from their actions, however small or insignificant it appeared to them. By doing that, I was putting aside some of my biases and values as East-Indian, African-born woman in her late 20's who had lived a more or less privileged life.

One approach used to minimized this was to allow myself to "feel" what the women were feeling when they spoke to me about their experiences. And not surprisingly, there were many days I would return to my warm, safe, home and simply sob because it made me realize how difficult their situation was. Inevitably, their stories tugged at my heart, and while I had to keep the perspective of my study in focus, allowing the women to say what they felt was important was enlightening to me as a researcher and as a woman. This was when I came to the realization that it was satisfactory for me to be "subjective" in my approach so long as I allowed a focus to guide me, and that focus was to try and capture as much depth and feeling in the lives of these women, without letting my values and perceptions distort the picture. At the same time, I would allow myself to "feel" what the women felt, and if need be, reflect upon it with my (limited) experience and knowledge of the topic.

2. 3.3. Sample size and Selection

Traditional research designs are graded for their stringency, with the strongest designs demanding random assignment to either an experimental or a control group

(Stein, 1997, 215). Only when one is assured of no pre-existing differences among the groups can one assert that the differences uncovered during analysis are 'true' (Stein, 1997, 216).

However, within a feminist framework, the study design does not necessarily take on these stringent methods because many questions cannot be answered or remain masked within such a restrictive framework. Purposeful sampling strategies were used to identify the low-income slum women after contacting individuals who served as referrals to the women in the slum areas. Owing to security[8] and secrecy[9] issues I was advised by the chief of Kangemi to meet the women in a safe, public place after being referred by my contact person. Once these women agreed to the conditions of the interview from the contact person, they agreed on a time/date and met me at a location close to their place of residence/work that was a 'safe' and familiar area to them. This was either the church, a compound that belonged to an NGO such as BIG- Breastfeeding Information Group, a schoolyard such as Upendo Unit, a community centre, or sometimes at their place of work if it was conducive to the interview process and if the respondent was comfortable with it.

Certain identifying questions were asked to ensure that the potential respondent fit the criteria of the sample population, and that she understood the consent form and what was entailed in the study. Only one woman actually refused to volunteer after being

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[8] Some parts of the slum area are considered unsafe because of crime, and unruly activity due to excessive substance abuse such as alcohol consumption, and the fact that I am an "outsider" in an unfamiliar area and can be prone to individuals who could take advantage of that.

[9] There is a lot of illegal brewing of alcohol in the slums, an activity primarily done by the women. As a stranger in the community, I can be perceived as a threat to their income generating activity if I were to take pictures or report them to the police. In addition, many people in the slums have built their living quarters in "illegal" land and fear eviction if identified.

informed of the particulars in the consent form. We had to turn away 4 women because they did not fit the criteria for reasons such as age, income level, level of comprehension and lack of time to conduct the interview.

At every instance, an attempt was made to try and balance the ratio of women who had partners and did not have partners living with them (1:1), and whether or not the women were contacted through a representative from a community organization (1:1)[10]. However, as I proceeded with interview questions, sometimes this distinction was not all that clear. For example, one woman claimed not to have a spouse, but later on it became obvious that she had a "friend" who supported her occasionally. It was not clear whether he lived with her all the time, or if he had another partner in addition to her. However, I felt that this was only a minor problem, if not an interesting discovery that let me view the idea of relationship from another angle. Indeed, it was what the women did not tell me (explicitly) that was just as important as those things that they did reveal, for example, the nature and perceptions of sexual relationships. Taken as a whole, both these issues were not limitations to the study design and the conclusions drawn from them.

Finally, the number of women to be studied, given the research framework and question, remains an issue. Sample size is determined by the research design, the analysis variables, and the desired power of the test (Stein, 1997, 216). Other issues of consideration include how accurate the sample has to be for the researcher's purposes and the population characteristics of the study area (Neuman, 1991, 220). While there are

[10] Initially I wanted to find out if women who were attached to a formal/informal organization were somehow better off than women who did not have the support of such networks, and over the course of the study, it was clear that this was not a factor in determining which women were better off than others.

several mathematical ways to generate one's desired sample size using equations and formulas within a traditional scientific inquiry framework, for the purpose of this study design and for the questions I sought to answer there were neither predefined formulas nor any rule of thumb that I could parallel. With the help of my supervisor and from the breadth of answers I was looking for, we determined a sample size of n=60, taking into consideration factors such as cost, time, and other unpredictable or unforeseen events that could occur in the field.

Another issue that I did consider while in the field was on the subject of data saturation. Would I come to a point when I would no longer generate any new information from my respondent's answers? This seemed likely, and during the course of fieldwork it became obvious that for some questions, there was no new information being generated. However, since the point of the interview was to explore the women's worlds, it seemed irrelevant in this situation to omit any question because new information was not being created. In the totality of the interview, such questions proved to reinforce various aspects of the women's lives, which I felt, was an added strength. Every woman was able to tell me something important, whether it was repetitive or not, in her own unique way that gave insight into her contextual situation.

2. 3.4. Methods

Methods are generally classified as either qualitative or quantitative, the latter corresponding to a positivist orientation and the former often relating to more inductive strategies (Stein, 1997, 219). In general, qualitative methods are useful in defining social

processes by which problems emerge and for suggesting strategic points of programmatic intervention to deal with particular problems: a way of increasing understanding at the cost of generalizability (Neuman, 1991, 322). Quantitative techniques are most often useful in understanding the extent and scope of specific problems, for defining the parameter within which various potential solutions may be debated, and for facilitating comparison and statistical aggregation of data to produce a broad, generalizable set of findings presented succinctly and parsimoniously (Patton, 1990, 14).

It has been argued that qualitative methods are more suited to the goals of feminist research, while quantitative methods are part and parcel of positivism, best suited for traditional scientific inquiry. However, many feminist researchers are against this dichotomization that leads to oversimplification, overgeneralization, and exploitative methods of data collection (Stein, 1997, 219). According to Toby Jayarathne and Abigail Stewart,

> We believe that the focus of feminist dialogue on 'methods', and particularly on qualitative versus quantitative methods, obscures the more fundamental challenges of feminism to the traditional 'scientific method'. That challenge really questions the epistemology, or the theory of knowledge, underlying traditional science and social science, including the notion that science is, or can be, value free. (1991: 101).

In the case of women and their perceptions of health and the given state of knowledge, it seems appropriate to rely heavily on qualitative methods, thereby increasing understanding, defining the social process, and suggesting strategic points of intervention.

Reliability and validity are the traditional standards by which quantitative methods are evaluated, and attempts are being made to reconceptualize these concepts so that they are more suitable to qualitative and 'postpositivist' research (Stein, 1997, 220).

Reliability in measurement can be thought of as the ability to measure accurately–either the measurement tool or the circumstances of data collection. It deals with an indicator's dependability, such that if you have a reliable indicator (e.g., a questionnaire) or measure, then it gives you the same result each time the same thing is measured, so long as what you are measuring is not changing (Neuman, 1991, 125). Thus, traditional conceptualizations of reliability assume accurately measurable, consistently maintained, and well-defined variables. Reliability is easiest to achieve when the measure is precise and observable (Neuman, 1991, 132). In the case of this study, this becomes a problematic issue. Highly precise questions in a questionnaire or in the interview can give 'reliable' measures, but there is a danger of losing the subjective essence of what cannot be observed or predicted in advance.

Validity is a more complicated concept than reliability since it has many facets and classifications (Stein, 1997, 220). *Internal validity*, for example, assess to the fact that there are no errors internal to the design of a research project (Neuman, 1991, 131). In relation to a 'qualitative' study such as mine, internal validity addresses the conduct of research (Stein, 1997, 221). *External validity* is the ability to generalize findings from a specific setting and small group to a broad range of settings and people, such that a high external validity means that the results can be generalized to many situations and many groups of people (Neuman, 1991, 131). Are the results both believable and useful?

Qualitative methodologies have been struggling with issues of credibility and reliability, and according to Kirk and Miller (1986, 72), "the qualitative researcher can no longer afford to beg the issue of reliability.... For reliability to be calculated, it is incumbent on the [researcher] to document his or her procedure....".

This context is much more complex than in a traditional research situation, where the research is structured so as to reduce the impact of context. The observer – not a questionnaire or an instrument – is the tool, and the situation is 'natural' – not controlled or contrived (Stein, 1997, 239). Therefore, it is unrealistic in qualitative research to expect quixotic reliability (unvarying measurement over time) likely to be applicable to many of the traits and entities related to gender, health, and empowerment.

Consistent with both Kirk and Miller (1986, 52) and Cook (1983, 83), what is most important is a means of ensuring that the findings are grounded in high-quality research that is neither sloppy nor idiosyncratic, and whereby the research process is well documented and sensitive to the circumstances in which it is carried out. Therefore, if validity is defined as the correct interpretation of findings, feminist researchers are now recognizing that validity in qualitative research lies in the skills and sensitivities of the researcher, and how he/she uses himself/herself as a knower and as an inquirer (Rowan, 1981, 244). Validity, therefore, is more personal and interpretational.

With regard to external validity, or generalizability, feminist researchers have questioned the relevance of this concept in light of the recognition that the diversity and process of grounding research in active knowledge is part of the research process.

Evidently, in a research study as this one, the goal of generalizability may be unachievable, or may excessively distort the research.

Biases such as interviewer bias, response bias, sampling bias, etc, arise in all studies, and a great deal of effort was made to design a research study that minimized them. However, I found that the more stringent the design (once again, I am limited by theorizing out of a traditional scientific paradigm that mainly deals with quantitative data and methods), the more narrowly I defined my questions. Since I did not wish to sacrifice content and rich data at the cost of following such stringent controls, I chose to focus on my own ethics as a researcher seeking to reveal these women's real life experiences, and their commitment to a set of beliefs and values that have shaped their lives in the most truthful way I possibly could, minimizing errors and biases that would skew my results.

2. 3.5. Data Collection Design and Other Issues

One issue I faced was the fact that almost all the respondents had no experience with direct personal questions and fixed response categories in the questionnaires. Since I was a younger looking "outsider" of a different ethnic background, the initial response was one of caution and curiosity, many assuming that I was in the villages to make monetary donations for the slum communities. However, with the help of referrals within the community, this misconception was cleared up, and we were able to explain the purpose of the study to potential respondents.

While I employed an interpreter/research assistant (Leahy Gathumbi) for the interviews conducted in Kikuyu, I was present at all times, taking notes as she translated back to me. Since most of the women did speak some level of English, they often helped clarify and/or expand on their responses as they were translated back to me. Leahy was instructed by me to try as much as possible to convey the women's words back to me as accurately as possible, thus minimizing translation issues.

Some women initially felt they had to give me the 'right' or socially acceptable answer to certain questions. However, both Leahy and myself kept reinforcing the idea that truthful answers were what we were seeking, and that confidentiality was of paramount importance. While almost all women agreed to this, the issue itself is one of personal judgement as well as an uncontrollable circumstance.

Over the course of some interviews, both Leahy and I felt that certain questions were irrelevant, redundant, or just unanswerable. At this point we began omitting these questions, and the final questionnaire is the one in Appendix 2. For example, women were initially asked to rate the health of their household members according to a scale of 4 possible answers. This was difficult for women with large households, as well as remembering and determining other individuals' health from their limited perceptions. Omitting such questions meant that we tried to rephrase other questions to somehow incorporate questions we felt were important to ask. There were also several questions that needed to be expanded on during the interview phase, and both Leahy and I made every attempt to keep the wording clear and simple, and at the same time minimize

clarification distortions in an attempt to keep the line of questioning similar for all questionnaires.

CHAPTER 3: Background Literature

3. 1. Development Theory In the Context of African Women

3. 1.1. Women's Situation and Development

While there are many factors that play a role in gender-based stratification, examination of international development during the past half-century provides insight into some of the factors that have shaped global and local political, economical, and cultural forces that have resulted in women's disempowerment and unmet needs.

Since the end of World War II, several competing theories of international development dominated the field and influenced development practice (So, 1990). Early attempts at constructing development theories were marked by the fact that the concepts of development and economic growth were considered one and the same (Blomstrom and Hettne, 1984, 8) commonly known as the *modernization paradigm*, or 'modernization theory'. This was a theory that envisioned a progressive continuum of economic development and growth from traditional primordial society to modern society that would bring social and political benefits to all citizens of all countries (Leys, 1996, 110). In terms of development policy in the African context, the following were recognized as major strategies needed for modernization: (1) industrialization, (2) rapid capital accumulation, (3) mobilization of under-employed manpower, and (4) planning an economically active state (Sen, 1986, 37).

Almost any social or economic change in the developed countries since 1950 can be accounted for as an effect of modernization theory. While there have been successes

and failures since then, what remains clear is that many impoverished people have suffered disproportionately and perhaps unnecessarily as a result of this. Since its inception, international development has been a top-down activity, with international aid agencies at the top, and regional and national political and economic elites usually forming the middle layer. What the theory failed to see is that development is more than just mere economics, and a humanitarian aspect, such as human rights, education, cultural aspects, the situation of women, ethnic minorities, and ecological aspects, have been left out (Van Dijk, 1986, 21).

Modernization theory, in the African context, assumes that the 'backwardness' of Africa is an 'original' state that can only be overcome by the transmission of capital and know-how from the industrialized West (Leys, 1996, 111). What the theory failed to see is that African 'backwardness' was shaped by colonialism, and that the post-independence pattern of trade and investment, the patterns of aid given to local 'elites', or the transfer of Western tastes reinforced the 'backward', inegalitarian structures of ex-colonial African economies.

The major attacks on modernization theory came from the political scientists (*dependistas*) of the developing countries, particularly from Latin America. These dependency theorists posited that the less developed countries were dependent because of their economic relationship with the developed countries, a relationship in which their natural resources and the products of their cheap labor were supplied to Western capitalist countries, which also garnered the profits (Stein, 1997, 17). The dependency

movement made it clear how developed societies were dependent on, and benefited from, the underdevelopment of the third world.

In Africa, the theoretical reaction to modernization began in the late 1960s, particularly after the Arusha Declaration of 1967 in Tanzania. The essence of this reaction was a shift from ignoring many of the external determinants of African development to seeing them as primary, and as almost wholly negative, inspired as they were by the interests of foreign capital and foreign states, not the interests of the population concerned. In this view, the result was an 'external orientation' of the African commodities (geared to exporting primary commodities of low value and importing manufactured goods of high value); a process of 'unequal exchange', and severe inequalities of income and wealth, which further limited the development of the domestic market, reinforced the political power of the ruling classes and gave rise to chronic corruption, political instability, military coups, and so forth (Leys, 1996, 112).

Dependency theory thus brought attention to oppressed groups and to the importance of power relations between nations. Although the theory did not address the effects of dependency on subpopulations (such as women), it did establish a framework within which such a decision was able to take place (Fanon, 1963). The dependency approach, therefore, was an effective critique to the modernization paradigm, providing an alternative perspective in development theory.

One of the major criticisms of dependency theory, however, was that the theory could not explain some of the new international economic patterns that were appearing, and variations in growth in both developed and less developed countries. For example, a

handful of countries (such as Japan) had shown that they could take advantage of the international situation and had done well (namely the Newly Industrialized Countries, or NICs) (Emmerij, 1986, 2-3).

Immanuel Wallerstein, among several others, lead the way for a new, more inclusive theory, and in his *world systems theory*, nation-states were seen as elements of a world system driven by economics (Emmerji, 1986, 5). He recognized a non-linear movement of history, and saw the world as a web of the political, the economic, and the social that is impossible to disentangle, emphasizing both the importance of a broad and an individual perspective. World systems theory, in effect, moved development theory away from positivist assumptions, providing an opening for women for the first time. His recognition of the contribution of non-wage labor to the economy, for example, played an important role in feminist analysis of development. It soon came to be realized that the process of growth did not fulfill basic human needs, and that there were over-consumptive types of development that continuously favored the rich.

At the Cocoyoc Declaration at the UNEP-UNCTAD Symposium at Cocoyoc, Mexico (1974), another trend in development theory was born. This trend can best be summarized in the concept of 'Another Development' popularized by the 1975 Dag Hamarskjold report "What Now", prepared for the Seventh Special Session of the United Nations' General Assembly (Hettne, 1990, 152). This concept is often referred to as

'alternative development'[11] and is compatible with, and to some extent, constitutes a counterpart to the emergence of green politics in the Western World.

Alternative Development addressed issues and concepts that had been ignored by other approaches, yet which are of basic concern to millions of people around the world. It implies a basic-needs-oriented strategy designed to satisfy the fundamental necessities of the people rather than economic growth for growth's sake. The alternative approach seeks to be inward looking rather than outward or export-import oriented; it hopes to be respectful rather than destructive to the environment so that it is an ecologically sound endeavor. Development would be based, wherever possible, on the use of local resources, whether natural, technical, or human – that is, oriented towards self-reliance at the local, national and regional levels. This new approach seeks to be participatory rather than technocratic. Finally, it hopes to use and build upon existing cultural traditions rather than reject them as obstacles of development (Stavenhagen, 1986, 75-76).

In making an assessment of the contributions of alternative development theory, Hettne (1990) follows 4 major themes that he considers important to understanding alternative development. The first is 'Egalitarian Development' where priority is given to redistribution rather than to growth. A good example of a movement evolving from this perspective is the *Basic Needs Approach* (1970s), which favors a direct relationship between development strategy and elimination of poverty rather than to wait for a

[11] Another/Alternative Development can be defined as (1) Needs-oriented (geared to meeting material and nonmaterial human needs); (2) Endogenous (stemming from each society that has its own values and vision for the future, therefore, has no universal path to development); (3) Self-reliant (implying each society relies on its own strength and resources in terms of its natural and cultural environment); and (4) Ecologically sound (rational utilization of resources and being aware of the global and local limits of their development) (Hettne, 1990, 153-154).

'trickle-down' effect of growth. The second is 'Self-Reliant Development' which can be seen as a development strategy that involves the delinking of systems of division of labor in order to avoid self-imposed self-reliance, thus implying fundamental structural transformation. The third trend is called 'Eco-Development' or initially referred to as *sustainable development* which recognizes environmental degradation and diminishing natural resources as important causes of conflict, which in turn forms a crucial part of the poverty complex. Finally, the fourth approach is 'Ethno-Development' which recognized that worldwide ethnic conflicts are caused by economic factors, therefore, development processes need to be appropriate for a particular ethnic group (Hettne, 1990, 167-194).

The 1980s and 1990s can be described as a period of impasse in development theory, owing to an increasing awareness of the negative effects of economic growth on some countries, on some people in all countries, and on the environment (Schuurman, 1993, 72). There can be no unequivocally unilateral evolutionary process that leads to the existence of a multiplicity of ethnic groups to a single world culture, just as there had never been a unilateral evolution from an 'underdeveloped' society to a 'developed' one. Multiple goals have replaced the initial single focus (Soedjamoto, 1986, 28). There is an increasing emphasis on human beings and on the human potential as the basis, means, and the ultimate purpose of the development effort. One important result of this trend is that culture and social structure are gaining special attention as factors that can explain differing patterns of development (Gereffi, 1989).

3. 1.2. Traditional development practices and women

It remains problematic to group together men and women, just as it would be difficult to generalize cultures and ethnic groups together, when analyzing either the level of development or the effects of development strategies (Stein, 1997, 22). For example, differential effects are often masked in measures of development such as income levels which mask groups living in absolute poverty, the frequent inequitable distribution of resources within the household, and the unpaid work and contributions made by women.

The underdevelopment of women and the adverse effects of development on women are central to the field of women's development. Women are disproportionately represented among the poor and are disproportionately responsible for family survival, particularly that of young children. While it is not easy to distinguish between specific effects of development on women and the long-term effects of poverty and patriarchy, the lives of poor women are often incredibly difficult compared to the lives of non-poor women or of men (Stein, 1997, 23). This is not to say that men's lives are easier, or that many men do not suffer as a result of some development practices and from devastating poverty, however, what is important here is that many women face direct and undeniable discrimination due to the fact that they are women.

To be more specific, women are disadvantaged or disproportionately responsible in the areas of education, family health, work, and exposure to poverty, displacement, and environmental hazards (Buvinic and Lycette, 1988). Urban women, for example, receive less education and training than men, and are usually forced into the informal economy – increasing their workload and providing them with jobs that afford no security/stability or

possibility of advancement. They are frequently denied credit and property rights, and are isolated and apart from family and kinship networks. Such circumstances have major impacts on women's health and well-being (Stein, 1997, 23). Finally, women have taken up more community work, such as communal kitchens, waste management, and communal household sharing of items.

3. 1.3. Development Theory for Women

Since the 1970s, there have been a number of players in response to the effects of development on women. There has been a historical progression of approaches to the problem, some imposed by donors, advocates, and practitioners (who may or may not be feminists), and others have come from national women's groups, activists, and from grass roots (Stein, 1997, 25). The 1970s was a time of growing feminism, growing awareness of women's situation *vis-à-vis* development, and increasing activism.

According to Jane Stein (1997, 26), traditional development theory has moved from a belief in concordant and inevitable progress to an understanding that, at least between nations or regions of the world, competition, a need for domination, and differential levels of development represent reality far better. The actors with power include nation states, the elite, financiers, and multinational corporations. Feminist development theory grew out of the observations, and activities of, those in power.

Caroline Moser (1989, 1799) has traced the evolution of the practice of development for women through five approaches, generally from 'traditional' to what can be called 'feminist', which she further categorizes into women's needs that are either

strategic (needs related to a restructured society) or *practical* (needs that are related to survival or basic needs).

The *welfare approach* is the oldest and still the most popular social development policy for the developing countries in general, and women in particular (Moser, 1989, 1807). In this approach, women are classified as targets simply because of their identification as a 'vulnerable group' outside the main economy. They are given assistance because they are mothers, recognized only in their reproductive role. In this model, they are passive recipients of welfare, seen as the problem, not the solution. Such programs include food distribution programs, nutritional education, and population control projects.

The *equity approach* recognizes that women are active participants in the development process, through their productive and reproductive role, both roles providing a critical, often unacknowledged, contribution to economic growth. The subordination of women is identified as the central problem (Moser, 1989, 1810). However, one shortfall of this approach was that although it does advocate a redistribution of power and resources, it did not explicitly challenge the fundamental economic structures of society (that are the causes of conflict).

The *anti-poverty approach* focuses on women's poverty and the failure of modernization to redistribute (or distribute) income. This model is also known as the *'basic needs' approach*, and views underdevelopment as the central problem. Efforts are concentrated on enabling women to become income generators, generally through small-

scale enterprises. However, this model does not take into account women's special needs, and still views women's participation as less important than men's.

The *efficiency approach* is the fourth approach that describes the Women In Development (WID) approach, where women are seen as the solution to problems of the worsening international economy. Economic development is the goal, and it assumes that women's status will improve as a concomitant of their increased role in economic development (Moser, 1989, 1813). In reality, this translates into shifting the costs from the paid to the unpaid economy, particularly through the use of women's unpaid work/time. An example of a project that entails this approach is self-help housing and waste management programs.

The fifth and final approach described by Moser is *empowerment*, which is a GAD (Gender And Development) strategy that addresses both practical and strategic needs organized around practical needs with a consciousness of both economic and gender oppression, and expanding to meet strategic needs. Although this approach has other roots as well, it is often considered indigenous to developing country activists and feminists (Moser, 1989, 1814). As describer by Moser:

> It emphasizes the fact that women experience oppression differently according to their race, class, colonial history, and current economic conditions. While the approach acknowledges the importance for women to increase their power, it seeks to identify power less in terms of domination over others (with its implicit assumption that a gain for women implies a loss for men), and more in terms of the capacity of women to increase their own self-reliance and internal strength. This is identified as the right to determine choices in life and to influence the direction of change through the ability to control over crucial material and nonmaterial resources. (Moser, 1989, 1815).

The main differences between empowerment and the other theories or approaches is the rejection of top-down strategies, the inclusion of consciousness-raising, a recognition of women's multiple roles (reproduction, production, and community), and a belief in the importance of women organizing by and for themselves. Moser sees women's organizations as the key to empowerment strategy.

3. 2. Health and Development in Africa

Africa is host to a number of major disease vectors. Their transmission is aided by a warm, tropical climate and variable rainy seasons. The mean number of infective malaria bites per person can be ten times higher in the forest or savannah areas than in the Sahel or more mountainous areas. In agricultural communities, exposure to infection, especially diarrhoea, malaria, and guinea worm, tends to be greatest during the wet season, when food is in shortest supply and high prices prevail (Better Health In Africa, 1994, 12). This segment describes the main epidemiological and demographic conditions affecting health in Africa.

3. 2.1. Health Status

Africa's struggle to overcome illness and disease over the past quarter of the century has had mixed results. On the positive side, the infant mortality rate has been cut by more than one-third, and the average life expectancy has increased by more than ten years (UN, 1998). On the negative side, however, life expectancy in Africa in 1998 was only 51 years, compared with 62 years for all low-income developing countries and 77 years for the industrial countries. Maternal mortality in Africa is almost twice as high

when compared to all low-income developing countries, and six times higher than in middle-income developing countries (UN, 1998). For example, the maternal mortality in sub-Saharan Africa ranges from 230 (in South Africa, 1990) to 1,800 in Sierra Leone (1990) (UNICEF, 1998, http://www.unicef.org/pon98/stat1. htm).

Child mortality differentials among African countries are no less striking. The mortality of children under five ranges from more than 320 deaths per 1000 live births in Chad, to fewer than 50 in Botswana (UNICEF, 1998, http://www.unicef.org/pon98/ stat1.htm). 1990 figures for maternal deaths per 100,000 live births have been estimated to range from 230 in South Africa to more than 1800 in Sierra Leone and 1,600 in Somalia and Guinea (UNICEF, 1998, http://www.unicef.org/pon98/stat1. htm). Adult mortality – the risk of dying between the ages of 15 and 60 – has been estimated to range from 18 percent in Northern Sudan to 58 percent in Sierra Leone (Feachem et al, 1992, 45).

Mortality also varies widely within countries, revealing inequalities in health status between urban and rural residents, as well as between socio-economic groups. In Zimbabwe for example, childhood mortality in urban areas is 45 percent less than the rate in rural areas (UNICEF, 1993). Differentials between residential areas within urban centres with high and low income classes have given rise to the so called "ten to twenty" rule of thumb, meaning that in most settings, the life expectancy of the richest 10 to 20 percent of the population is approximately 10 to 20 years higher than that of the poorest 10 to 20 percent (Gwatkin, 1991, 4).

3. 2.2. Causes of Death and Illness

Although the major causes of death and illness vary by age group and gender, certain health problems affect Africa at every age. Perinatal, infectious, and parasitic illnesses are responsible for 75 percent of infant deaths. Infectious diseases and parasitic afflictions are also responsible for 71 percent of the deaths of children age one to four (WHO, 1996-7).

In 1985, before AIDS began to affect adult mortality, about half of all deaths of adults age 14 to 44 were also due to infectious and parasitic diseases. Now according to WHO, one in every forty Sub-Saharan African adults is HIV positive (*Daily Nation*, September 1999). In many African countries that have been hit the hardest in terms of the epidemic, AIDS is the major cause of adult deaths. Among older adults (those over 45 years), circulatory system diseases are the most important causes of death (Better Health In Africa, 1994, 17).

Maternal mortality rates in Africa are higher than anywhere else in the world due to a number of difficulties, including haemorrhage, infections, obstructed labour, anaemia, hypertensive disorders of pregnancy, unsafe abortions, and violence. These problems are further exacerbated by substandard prenatal care, patient tardiness in seeking treatment when infection occurs, and a higher risk of sexually transmitted diseases due to multiple partners (Better Health In Africa, 1994, 17).

Although comprehensive data on abortion is lacking in Africa, one study estimated that there were approximately 75,000 abortions in Kenya in 1990. Extrapolations to Sub-Saharan Africa suggest that there are up to 1.5 billion abortions

each year in the region as a whole. Studies from Ethiopia and Nigeria suggest that almost 50 percent of all maternal deaths are due to complicated and flawed abortions (WHO, 1997, 58).

African countries have some of the highest adolescent pregnancy rates in the world. By age eighteen, more than 40 percent of girls had given birth in Nigeria (Population Reference Bureau, 1998). A large share of pregnancies among unmarried women age 15 to 19 is unintended: 77 percent in Kenya (*Daily Nation*, September 1999). This poses a high risk to young mothers because early entry into reproductive life increases the chances of health problems such as anaemia, malnutrition, and sexually transmitted diseases.

Malaria is Africa's largest and most persistent disease problem (WHO, 1998). Pregnant women, foetuses, and young children are particularly susceptible to malarial infection. WHO estimates the global number of malaria cases per year at 110 million, with nearly 80 percent of them occurring in Sub-Saharan Africa. A review of more than 400 studies on the subject suggests that malaria accounts for 20 to 50 percent of all admissions to African health services per year, although only an estimated 8 to 25 percent of persons with malaria visit health services (Better Health In Africa, 1994, 19).

Malaria appears to be worsening in much of Africa as the parasite becomes more resistant to chloroquine and other malarial drugs (*Daily Nation*, September 1999). Some annual growth rates of the disease by country include 7 percent for Zambia, 19 percent for Kenya, and 21 percent for Rwanda (*Daily Nation*, September 1999).

The incidence of tuberculosis is also rising in Africa, due in part to the interaction between TB and AIDS, and in part to a breakdown in surveillance and management of cases. By some estimates there are approximately 171 million TB carriers in Africa, and 10 percent of all deaths from TB occur in children under the age of five (WHO, 1998).

AIDS is the most dramatic new threat to health in Africa. It is estimated that by the end of 1999, 24.5 million adults and children in sub-Saharan Africa were living with HIV. Altogether, there are now 16 countries in which more than one-tenth of the adult population aged 15–49 is infected with HIV. In seven countries, all in the southern cone of the continent, at least one adult in five is living with the virus. In Botswana, a shocking 35.8 percent of adults are now infected with HIV, while in South Africa, 19.9 percent are infected, up from 12.9 percent just two years ago. With a total of 4.2 million infected people, South Africa has the largest number of people living with HIV/AIDS in the world (UNAIDS Report, 2000).

Infection rates among men and women are close to equal (WHO, 1998), but young girls and commercial sex workers are most vulnerable. The infection rates in young African women are far higher than those in young men. The fact that, in Africa, women's peak infection rates occur at earlier ages than men's helps explain why there are an estimated 12 women living with HIV for every 10 men in this region of the world (UNAIDS Report, 2000).

HIV/AIDS is a significant - and worsening - health, economic, and social issue for sub-Saharan Africa. Recent research points to complex interlinkages between poverty, inequality - and in particular, gender inequality - and the AIDS epidemic. The

fact that gender inequality both causes and is caused by AIDS is a matter of grave concern for the poorest quarter of the female populations of 10 or 20 African countries.

According to the WHO, the overall life expectancy in sub-Saharan Africa has dropped precipitously over the past 10 years, mostly because of the AIDS epidemic. Life expectancy dropped for female babies from 51.1 years to 46.3 years. For males, the level dropped from 47.3 years to 44.8 years. AIDS is now the leading cause of death in Sub-Saharan Africa, far surpassing the traditional deadly diseases of malaria, tuberculosis, pneumonia and diarrhoeal disease. AIDS killed 2.2 million Africans in 1999, versus 300,000 AIDS deaths 10 years previously. Life expectancy in several countries in southern Africa has been cut 15-20 years off what would be expected in Africa without HIV (WHO Press Release, June 2000).

High levels of other sexually transmitted diseases and the high rates at which new and unprotected sexual encounters occur in Africa appear to be important factors in HIV transmission. Thus the prevalence rates of STDs other than AIDS are probably good indicators of the potential spread of HIV in countries where HIV infection rates are still low.

3. 2.3. Demographic Pressures

The most important factor contributing to rapid population growth in Sub-Saharan Africa has been the rapid decline in death rates combined with high birth rates. Since the 1950s, increases in food production, improvements in water and sanitation, and the introduction of medical technology, such as vaccines and antibiotics, promoted dramatic

declines in mortality (Ashford, 1995, 12). Urban growth has also contributed to high concentrations of people in cities, largely caused by rural-to-urban migration.

Rapid population growth aggravates critical gaps in basic health services, especially when economies are growing slowly or per capita incomes are in decline. This mess of factors has produced an overall negative annual growth rate for most of the countries of Sub-Saharan Africa (*Daily Nation*, September 1999).

Africa is, therefore, a continent of exceptionally high fertility and very low contraceptive use (Goliber, 1997, 7-8). Africa's 1997 total fertility rate (TFR) was 6.0. Women in sub-Saharan Africa generally reported an ideal family size of five or six children, and they have more children than women anywhere else in the world. Maternal mortality rates in sub-Saharan Africa remain the highest in the world: between 600 and 1,500 maternal deaths for every 100,000 births. Sub-Saharan Africa also accounts for 20 percent of the world's births but 40 percent of the world's maternal deaths. Another alarming statistic indicates that in sub-Saharan Africa, the median age at first marriage ranges from 17.0 to 19.2 years, and in 17 countries surveyed by Demographic Health Survey, at least 50 percent of women had their first child before age 20 (WHO, 1999, 2). These are the highest percentages of any region.

3. 2.4. Impact on Economic Development

The effects of poor health go beyond the immediate effects of physical pain and suffering. Learning is compromised, returns to human capital diminish, and entrepreneurial and productive activities are constrained (Better Health In Africa, 1994, 24). In view of the fact that human capital is of paramount importance to economic

progress, it comes as no surprise that any country will be unable to attain a high level of economic development when high infant and maternal mortality, pervasive illness of its workforce, and low life expectancy cripple its population.

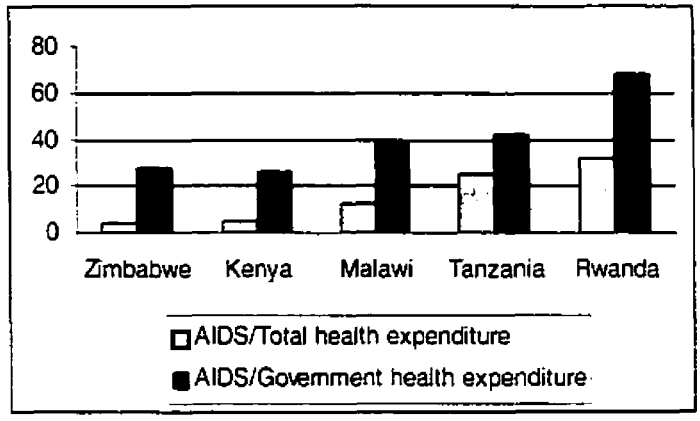
Evidence showing that poor health imposes immense economic costs on individuals, households, and societies at large is strong worldwide. For example, malarial studies in Rwanda and Congo suggest that the direct and indirect costs of an average case were equivalent to about 12 days' output. Accordingly, the annual economic burden of malaria rose from $800 million to $1.7 billion by 1995 (WHO Press Release, June 2000). In Nigeria, Guinea worm disease temporarily incapacitated 2.5 million Nigerians in 1987. A cost/benefit study in one area revealed that, apart from the shortages of financing for agricultural activities, the disease was the chief impediment to rice production. It was estimated that the net effect of the disease reduced rice production by $50 million (UNCEF, 1998).

AIDS will have the most profound effect on sub-Saharan African economies in the decades to come. Figure 2 represents the potential cost of treating all persons infected with AIDS in five selected countries in the early 1990's. The cost of treating AIDS cases in Rwanda, for example, was potentially the equivalent of 60 percent of the public health budget (Better Health In Africa, 1994, 26-27).

AIDS will have immense economic consequences in Africa as the years pass because it is fatal, striking adults in their most productive years. In severely affected countries, the work force is likely to become younger, less skilled, and less experienced. Most models of macroeconomic impact of the disease suggest that adult deaths from

AIDS will cause per capita economic growth to be lower than it would have been otherwise. In Tanzania and Uganda, for example, AIDS has already increased absenteeism and lowered productivity (World Bank Fact sheet, 1999).

Figure 2: Potential AIDS treatment costs as share of total and government health expenditures- various African countries, 1987- 1993



Modified from Better Health In Africa, 1994, 25.

The deaths of parents from AIDS will lower the incomes and well being of their households, thus reducing the consumption levels of the survivors. Household savings and productive assets often have to be liquidated to pay for medical care and funerals. For women in particular, the rise in mortality will be predominantly harsh for them as in most African societies women are not entitled to inherit the property of their deceased husbands. The children of AIDS victims will often be forced to leave school early and go to work, thus weakening their economic prospects. The elderly will also suffer from neglect as well as the added burden needed to make up for the loss of other family members in the household. Thus the AIDS pandemic threatens to create large new pockets of poverty.

The negative effect of poor health on economic activity is unambiguous (Better Health In Africa, 1994, 27). By extension, improved health can be expected to have a positive impact on the economic well being of families by lowering the costs of treatment for disease and easing demands on family members to care for the ill or for their survivors. Better health also helps employers by minimizing the absence of workers with key skills and experience.

3. 3. The Economic Situation of Africa In the Context of Structural Adjustment Programs

African economies have experienced numerous disruptions since independence in the 1960s. In virtually all African countries, the steady growth of the early post-Independence years gave way to economic stagnation and eventual decline. The optimism that was greeted at Independence was being replaced by widespread despondency because as other parts of the developing world prospered in some way, the continent of Africa was becoming impoverished in absolute and relative terms (Mkandawire and Soludo, 1999, 2). The consensus during this period was the need for some form of economic restructuring that might pull Africa out of this slump.

From a historical perspective, the long-standing colonial tradition of African industry has helped perpetuate this situation (Grant, 2000). Colonial powers dictated that African countries were not allowed to develop their own local industries, but instead produced raw materials needed for industrialization in the West. Cheap labour was the driving force that allowed the development of industry such as sisal and cotton plantations. Upon production, these goods were exported to the Mother colonies in

Europe, where they were used in the manufacturing of finished materials and goods. The irony here is that these finished products were eventually sold back to the Africans at an exorbitant rate. This system of industry exploited many countries, creating an underlying dependency on foreign goods, while simultaneously securing an African market for the wealthier Western countries.

At Independence, most African countries were geared towards primary commodity production (mostly agricultural). For most African countries at this time, just a few commodities dominated exports and many countries had one-product economies: cocoa in Ghana, Nigeria and Cameroon, copper in Zambia, and coffee and tea in Kenya. These accounted for up to 75 percent of export earnings (Adepoju, 1993, 1).

During the first decade of independence, many economies were open and the government sector had little control. However, the trend that followed was one of state control. Government involvement in economic activities eventually developed into bottlenecks to development (Adepoju, 1993, 1), and the result was inefficiency and corruption in many public sector enterprises as more and more scarce resources were being consumed.

In spite of these early problems, many African economies grew at significant rates: real GDP grew by 6.5 percent a year in Kenya in 1964-1969, for example. Despite high population growth rates of over 3 percent per year, per capita income also increased significantly, by an annual average of 3.4 percent in Kenya (1964-1973). Typical of many countries, Kenya had a moderate inflation rate of 3.4 percent between 1964 and 1973 (Adepoju, 1993, 2).

However, this period of exceptional growth was short-lived. In the late 1970s and early 1980s most African economies went into a slump. Real growth rates in Kenya fell from 6.5 to 4 percent between 1974 and 1990, and Kenya's inflation rate increased from 3.4 (pre-1974) to 11 percent (1974-1990). Throughout this period, government spending consistently outstripped revenues, resulting in large domestic bank borrowing at the expense of the private sector. Foreign exchange borrowing also increased to meet budget deficits, worsening debt service obligations in foreign exchange (Adepoju, 1993, 2).

The overall setting and combinations of low growth, poor export performance, high debt burdens, and severe financial imbalances finally forced many African countries to consider economic reform. The agreement was that the problems were fundamental, requiring restructuring, and during the 1970s and early 1980s in particular, approximately 30 African countries adopted structural adjustment programmes (SAPs) with the approval and financial support of the World Bank and the IMF (Adepoju, 1993, 2). Kenya, for example, attracted its first structural adjustment loan from the World Bank in 1980.

The policy measures introduced by the World Bank and IMF attached as conditions to formal stabilization and structural adjustment loans aimed at overcoming short-term imbalances. Often this meant reducing budgetary deficits, relating prices to market levels, liberalizing trade, adjusting exchange rates (mainly through devaluation of currency), and controlling the supply of money and credit (Adepoju, 1993, 3). In most cases, specific targets and time limits were set for major economic indicators.

These programmes were aimed at institutional reform, including public enterprises and parastatals. They gave preference to the private sector, using market-

determined prices to influence production and consumption. These policies favoured export promotion, reinforcing the orientation of African economies towards uncertain external markets (Balassa, 1982, Adepoju, 1993).

Thus, from the very beginning, structural adjustment in Africa was very controversial. Although many African countries have acknowledged the need for some degree of economic reform, many countries are not convinced that the prescriptions put forward by the IMF and World Bank necessarily provided the best remedy to the problem. The major drawback against these policies is the narrow emphasis on fiscal and monetary mechanisms, paying little heed to long-term development objectives. The more serious criticism of structural adjustment, however, is that it has tended to ignore the human element (Mkandawire and Soludo, 1999, 51-52). When the SAPs were first introduced, it was the social sectors – education and health above all – that saw their budgetary allocations drastically reduced. In addition, because of higher prices and reduction in public sector employment levels, people's living standards declined, especially in the urban centres. There has been serious erosion in social services, wages, and employment levels associated with structural adjustment. What has become even more dismal is that the most vulnerable members of society – the poor, women, children, and the aged – have suffered the most (Onimode, 1989, 45).

In most African countries today, despite economic improvements in a few areas, there has been a decline in the extent and quality of education and health care, with formal sector employment falling, sometimes drastically. Much of the blame still rests with the economic crisis that preceded structural adjustment, but clearly the SAPs

themselves have contributed to this decline. Now that the importance of protecting social sectors and living standards is more widely recognized, the aspiration that remains is that economic reform in Africa will be designed to ease human suffering, not contribute to it.

3. 3.1. The Kenyan Experience with Structural Adjustment Policies

Kenya was one of the first countries to qualify for a Structural Adjustment Loan from the World Bank in 1980, aimed at helping the economy correct imbalances and achieve some institutional reforms for sustainable and balanced growth. In 1982 and 1986, Kenya signed its second and third Structural Adjustment Loans, primarily to finance structural changes in the industrial sector, reduce the deficit, change the manner of its financing towards non-inflationary means, liberalize trade, and promote exports (Ayako and Odada, 1988). In 1988, another Structural Adjustment Loan was contracted to finance education and health. Agreed policies included 'cost sharing' whereby the beneficiaries of these social services were to pay for them, either partially or fully. The policies also included a reduction in public expenditure, with more support funds to come from the private sector. At this time, the government began reducing the rate of employment creation in the pubic sector in an attempt to reduce public expenditure (Mwega and Kabubo, 1993, 28).

These SAPs have had numerous effects on the economy of Kenya, the most important being inflationary pressures, marginalization of the poor in the distribution of education and health benefits, and a reduction in employment. Inadequate expenditure control has been a major problem in Kenya: total government spending rose relative to

economic activity from about 24 percent of GDP in the late 1960s to an average of around 35 percent in the late 1980s (Mwega and Kabubo, 1993, 30). The two main components of government spending are the civil service salaries, accounting for nearly 70 percent of recurrent spending, and the local currency cost of servicing the public debt – a cost that has been mounting as a result of the depreciation of the Kenya shilling (*Daily Nation*, September 1999).

In the educational sector, Kenya has made significant progress in quantitative terms as indicated in Table 1. Unfortunately, the World Bank saw several problems in this sector and this led them to advise cost sharing schemes and a reduction of government expenditures on social services. These problems included high drop-out rates from schools, limited access to education in disadvantaged areas, low enrolment rates, and a significant drop in adult literacy classes ((World Bank, 1984, 7).

Table 1: Enrolment in Educational Institutions (1979 – 1989)

Year	Primary	Secondary	Technical institutions	University
1979	3,698,196	384,389	13,442	7,292
1981	3,980,763	409,850	14,734	7,588
1985	4,702,414	401,978	19,826	7,608
1987	4,957,700	514,300	18,131	18,883
1988	4,985,400	553,200	17,855	26,000
1989	4,994,300	734,700	19,512	29,900

Source: Modified from Mwega & Kabubo, 1993, 33

The direct impact of SAPs on education may be seen at the primary school level, where cost sharing has hiked school fees. While initial enrollments are high, many children tend to drop out of primary school because of lack of funds for fees, books, and

uniforms. The long-term impacts of such high dropout rates are far reaching. The resulting picture is one of "lost development potential" whereby these children grow up into adults that have a very basic level of education and literacy. Inevitably, this will affect their own as well as their children's levels of literacy and potential for income generating activities. Cost sharing also tends to marginalize the poor by offering opportunities to only those citizens who can pay for such essential services, thereby promoting social inequality in the country. There has been a massive increase in school fees and other charges, a reduction in the quality of educational programs, and an increasing number of school drop-outs at all levels of education (Odada and Odhiambo, 1989, 5).

In the employment sector, SAPs have adversely affected employment in the public sector, the largest source of employment in Kenya (Mwega and Kabubo, 1993, 35). The adjustment policies aim for: a slower growth rate of employment in the public sector, the engagement of additional staff by local authorities only when this contributes to expanded services, reduction of public sector employment through divestiture of expanded services, and a public sector training policy in which trainees will not automatically be absorbed into government employment but will compete for entry, with some going into self-employment or wage employment in the private sector (Mwega and Kabubo, 1993, 35).

Given the limited expansion of employment opportunities, even university and college graduates have become part of the unemployed in Kenya. In 1993, a study showed that 8.92 million people had to find jobs in the informal sector or remain

unemployed (*Daily Nation*, September 1999). The overall effect is that of limited employment and earning opportunities, decline in real wages, and with inflation on the rise, an extremely dangerous economic situation for the poor Kenyan who is living a hand-to-mouth existence.

Similar to educational gains in quantitative terms, health care institutions have increased considerably from 1,544 in 1980 to 2,131 in 1989, while the number of hospital beds have increased from 27,691 to 32,534 during the same period. As seen in Table 2, the number of registered doctors almost doubled from 1,691 in 1980 to about 3,357 in 1990, thereby increasing the number of doctors per 10,000 population from 10 to 14. Other medical personnel have also increased, as seen in Table 10.

Table 2: Registered Medical Personnel in Kenya (1980-1990)

	1980	1983	1987	1990	% Change
Doctors	1691	2514	3071	3357	49.6
Dentists	162	289	492	596	72.8
Pharmacists	60	113	362	443	86.0
Pharmaceutical technologists	229	395	494	604	62.0
Registered nurses	6692	8547	9862	5441	22.9
Enrolled nurses	8722	10168	13202	17734	50.8
Clinical nurses	1681	1921	2355	2630	36.0

Source: Modified from Mwega and Kabubo, 1993, 36.

However, this quantitative increase did not match the rate of population growth, and to make matters worse, structural adjustment policies during this time were discouraging government expenditure on health care services. Thus, the resulting picture was that of declining health expenditure from 7 percent in 1980 to 6 percent of the

national budget in 1986 (Mwega and Kabubo, 1993, 36). Such funding investments were grossly inadequate for the health sector.

Unfortunately, although the quantitative expansion of health care services seems to be an accomplishment, there is cause for concern over the quality of service and care. Numerous anecdotal accounts exist concerning the treatment of patients at all levels of health care. Women often complain that they are treated as though they have neither the intelligence nor the right to know what is wrong with them, there are complaints about the attitudes of nurses towards patients in hospitals, and doctors treat their patients as business clients rather than as human patients (*Daily Nation*, September 1999)

Due to the inadequacy of funds exacerbated by the high population growth rate, the government adopted cost-sharing schemes such as increased contributions to the mandatory health insurance fund for wage workers, fees being charged for public inspection and community participation in training institutions, and maintenance of community health institutions and contributions. In addition, the government levied charges for outpatient services as well as increased public health service charges (Odada and Odhiambo, 1989, 19).

The impact of such measures was felt most severely by the poor, who could not afford to pay for health services. For example, when the government introduced the payment of 20 shillings for all new outpatient cases, many people had to forgo treatment in public facilities (*Daily Nation*, September 1999). Adjustment policies have had other

impacts on the health sector, including the devaluation of the Kenya shilling[12], cuts in public spending[13], high taxation on mass consumer goods, removal of food subsidies on basic foodstuffs and other basic needs[14], and the removal of price controls, all of which has an impact upon the health status and well being of the impoverished Kenyan (Mwega and Kabubo, 1993, 38-39).

The more stringent implementation of fee collection together with the requirement of advance payment at most government hospitals and clinics in Kenya is likely to have a significant deterrent effect, particularly for poor women, with respect to utilization of health services. The introduction of substantial charges for drugs has affected all categories of patients, but is especially perilous for those with chronic diseases requiring long-term drug therapy (e.g., hypertension, diabetes, TB).

The overall effect of structural adjustment programmes on the health sector has therefore been a reduction in household savings, since an increased proportion of the consumer's income is devoted to paying for health care. Devaluation of currency, the most immediate outcome, had led to dramatic increases in the costs of non-health sector inputs that indirectly affect low-income household health. The removal of subsidies and deregulation of prices of a range of basic commodities, especially foodstuffs, has resulted in sharp increases in cost to the consumer. For poor households, particularly women, deteriorations in diets, and thus nutritional status, are inevitable.

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[12] Devaluation of currency increases the domestic prices of imported goods such as drugs and medical equipment, and increased cost of health inputs such as clean and safe water.
[13] This leads to a reduction in training funds (thus reducing the number of trained personnel), less money to buy drugs, vaccines, and medical supplies, and a limited capacity to hire medical staff.
[14] This reduces access to food, thus exacerbating malnutrition and poor housing.

In conclusion, the adoption of SAPs has been to a large extent influenced by adverse macro-economic developments in the 1980s, which lead Kenya to seek high conditionality loans from the World Bank and IMF. The adjustment polices have had an overall negative effect on education, health, employment and trade. Increased unemployment, rising prices, and falling wages are some of the most negative effects of the economic crisis and recession, and to some extent structural adjustment policies in Kenya. High inflation, a consequence of devaluation, has reduced real wages. Food prices have increased as a result of stagnation in agricultural production and the government's withdrawal of subsidies and price decontrols. This has meant a lowering of the living conditions for the majority of the population. The worst affected, however, have been the urban poor who are reliant on a cash-economy. The substantial cuts in public spending have meant higher levels of cost sharing in health, water, and education. The poor depend on these services a great deal, and their removal has been a major economic blow to these vulnerable groups (Musyoki and Orodho, 1993, 106).

Structural adjustment measures on the health sector have also adversely affected the poor, who can barely pay for services. Women constitute one of the poorest members of society, and therefore, bear the brunt of the costs of structural adjustment. They play a key role in the maintenance of households, and these changes have reduced the resources they depend on to fulfil their roles, hence forcing women to stretch their unpaid labour to cover this shortfall. Women now spend more time and money obtaining food, water, and health services. More time, for example, is spent on buying cheaper foods that take

longer to prepare and cook, and in making and repairing clothes (Musyoki and Orodho, 1993, 106).

The situation is aggravated by a lack of drugs and medical supplies in government health institutions and the implementation of user fees. Since health centres and clinics are frequently unable to provide even commonly prescribed medication, patients are referred to private pharmacies. Unlike wealthier patients who use the private sector and are covered by medical aid schemes, the poorer users, especially women, are unable to claim back the cost of drugs purchased.

Things have gotten worse in the pubic sector in terms of employment and earnings, and with limited expansion in the private sector, unemployment is rampant. During the last four decades, real wages have dropped, and standards of living are much worse than they had been at the time of Independence. It is likely, therefore, that as economic pressures increase at the household level, cultural factors and gender bias will combine to work against women and girls. More girls will be kept out of school completely, or will drop out of school at earlier ages than boys. For women, in particular, educational levels have been shown to correlate with take-up of contraception specifically and of health services generally, as well as to influence health practices (Chinemana and Sanders, 1993, 340). Therefore, the potential negative effects of structural adjustment and the economic recession in Kenya has long lasting effects that will inevitably affect all spheres of women's lives.

The most affected are inevitably the poor women, especial single mothers and female-headed households. The single mother who is the sole income earner in her

household, lives a hand-to-mouth existence, making her living selling vegetables in a local market. She has a limited pool of funds from which she buys her produce to sell, and from which she collects a small profit to run her household. In the scenario where she has a sick child, this woman has to now take time off work to line up for hours in order to see a doctor to whom she has already paid a fee, irrespective of the medical examination of her child. The real problem is not just the user fees she has to pay from her scant earnings, but the loss of time that could have been used towards generating a much-needed income. For this woman, her pool of funds is even less now than before, making her an even more vulnerable individual. This faceless woman represents the typical scenario of an African woman barely surviving the so-called "trickle down" effects of structural adjustment.

CHAPTER 4: Theoretical Approaches and Methodology

4. 1. Traditional Perspectives on Scientific Inquiry

Science can be defined as the use of systematic study and methods to identify, describe, investigate experimentally, and/or explain theoretically any phenomena (Stein, 1997, 194). A certain type of science – interchangeably named positivism, logical positivism, or logical empiricism – has long dominated natural science. This philosophy of science posits the primacy of deductive logic as the method used to establish truth and the primacy of observation in assessing the truth of statements of fact (Nielsen, 1990, 3). This viewpoint was first developed and adopted by the natural scientists, but it was later incorporated into the fields of social science.

According to Joyce Nielsen (1990, 4-5), there are five basic assumptions of positivism that pertain to scientific inquiry:

1. The natural/social world is knowable (objectively) and has objective reality;
2. Objective truth cannot be obtained through subjectivity;
3. Different observers exposed to the same data will come to more or less the same conclusions;
4. There is order in the social world, where social life is patterned, and this pattern takes a predominantly cause-and-effect form; and
5. The deductive method of reasoning from the general, the hypothetical, or the theoretical to the specific is the 'best, if not the only, legitimate way to ground knowledge'. Inductive methods, such as reasoning from specific observations to the theoretical, while theoretically valid, are less acceptable (Nielsen, 1990, 4-5).

According to this reasoning, positivism emphasizes rationality, impersonality, and prediction and control of events or phenomena studied. Inductive methods such as reasoning from specific observations to the theoretical, therefore, while theoretically valid, were less acceptable.

Thomas Kuhn was one of the first to question the inevitability of positivist tenants within the natural sciences in his book *The Structure of Revolutions* (1962), specifically the existence of a knowable reality, the goal-orientation of positivism that equates knowledge with improvement, the objectivity of scientists, and the vilification of inductive reasoning. He observed that science itself progressed in a non-linear and sometimes discontinuous fashion

Following in Kuhn's footsteps, positivism has been attacked by several movements that criticize the limitations of logical deduction as a way of knowing. Feminist research theory is one such example. It emerged as a major challenge to traditional science from the first world feminist movements. Its impetus was the recognition that women were essentially excluded from science: both as scientists within the natural sciences and some of the social sciences, and as subjects or objects of study within the natural science and social science and humanities (Stein, 1997, 201). Traditional science developed within patriarchal societies that did not question the assumption that the search for truth benefits everyone impartially – that what is good for men was also good for women. A male science dominates not only nature but women as well (Stein, 1997, 201). Feminism, on the other hand, posits conflict and competition as

facets of reality, seeing science and politics, or knowledge and power, as not being disjoint, but closely linked.

Evelyn Fox Keller (1985) has identified a spectrum of feminist critiques of science that correspond to the spectrum of feminist politics, ranging from liberal to radical. For example, at the more conservative end is what can be called unfair employment practices where women are not proportionally represented among scientists. A more radical criticism is that, owing to the shortage of women in science, men have defined the problems to be studied (Keller, 1985, 17). She sees as the most radical critique that which questions the very precepts of science, in particular rationality, knowablity, and objectivity.

These three precepts are closely linked: if the world is organized in a fashion that is reflected by rules of logic, and that organization is observable, than it is knowable. If it is knowable, it is predictable and, given a mechanistic perspective, controllable. Furthermore, if the world is so patterned - independent of who is observing it, where they are located, why they are observing it, and history – then objectivity, as it is traditionally understood, is advantageous (Stein, 1997, 202). Feminists, however, would argue that they see the world as one that cannot be captured by logic:

> "traditional scientific methodology permits us to examine only those natural phenomena that are repeatable and measurable. It cannot deal with unique occurrences or with systems that flow so smoothly and gradually or are so profoundly interwoven in their complexities that they cannot be broken up into measurable units without losing or changing their fundamental nature." (Hubbard, 1990, 15).

Feminist science acknowledges complexity and context, maintaining that simplification, based on logical positivist models, distorts the fundamental nature and relationships of phenomena and their social and political context (Bleier, 1986, 56). While this approach embraces a dialectical approach – a search for contradiction and change as part of a process of a constantly evolving understanding – feminist science resists dichotomization, particularly distinctions between subject and object (Stein, 1997, 203).

4. 1.1. Knowledge and Power

Feminist science does not reject the empiricism that underlies positivism; it is in fact based on empirical knowledge, because although science is politics, it can produce reliable empirical information (Harding, 1991, 308). Feminists use empirical methods to look for forms of truth and knowledge, but are trying to develop their own definitions of these constructs; Adrienne Rich (1979, 187) argues that there is no such thing as "the truth" or "a truth" because the truth is not one thing or even a system.

Issues of power and control appear repeatedly in feminist theory. Elizabeth Fee (1986, 48) sees power as the central issue in critiques of science, with gender being only one of a number of "dominant/dominated relationships whose intersections must be analysed and placed at the centre of feminist politics." The overall idea behind knowledge and power is the recognition that there is a need to unlink power and knowledge, using knowledge in order to understand rather than manipulate and control.

And since feminist knowledge is geared to changing the status quo, feminist knowledge must be accompanied by the power to cause change.

The main concern then, is how do we gain (scientific) knowledge given that 'truth' and 'reality' are neither fixed nor unitary? According to Stein (1997, 205) feminist knowledge seeks to make sense of the world by recognizing and accepting its complexity, its dynamism, and its ultimate unknowability. The key element of feminist epistemology here is identifying patterns based on connections between unique entities in order to understand and improve the situation of women.

4. 1.2. Research Methods

Methods are generally classified as either qualitative or quantitative, the latter corresponding to a positivist orientation and the former often related to more inductive strategies (Patton, 1990, 39). In general, qualitative methods are most useful in defining social process by which problems emerge and for suggesting strategic points of programmatic intervention to deal with particular problems.

It has been argued that qualitative methods are more suited to the goals of feminist research, while quantitative methods are a part and parcel of positivism. While this may hold true to some extent, this dichotomization is an oversimplification of the situation. Toby Jayaratne and Abigail Stewart (1991, 101) feel that:

> "the focus of feminist dialogue on 'methods', and particularly on qualitative versus quantitative methods, obscures the more fundamental challenge of feminism to the traditional 'scientific method'. That challenge really questions the epistemology, or the theory of knowledge, underlying traditional science and social science, including the notion that science is, or can be, values free."

Their argument is for the importance of both types of research, and that researchers need to match the methods to the questions being asked, and to the goal of research. In the case of women, health and empowerment, it seems appropriate to rely heavily on qualitative methods, thereby increasing understanding, defining the social process, and suggesting strategic points of intervention.

Since existing methods have been designed by and for logical positivism, the question that arises is whether or not feminists need new methods to reflect their world-view. While some new methods, mostly qualitative, are being incorporated into women's science, variations of traditional methods are also being used (Stein, 1997, 206). Such methods include participatory research, open-ended interviewing, standpoint-derived hypothesis, and an acceptance of the 'validity' of the interaction between the researcher and the researched (Stein, 1997, 206).

4. 2. Research Theory: Feminism and the ISS Approach

In order to consider a valid and verifiable method to capture the social phenomenon under study, this research study will incorporate the Interpretive Social Science theoretical framework that advocates a feminist perspective.

Feminist perspectives draw upon feminist theories and politics that explore how gender relations in space are mutually structured and transformed. Although there is a great deal of variation within this tradition, some common concerns include: (a) critical discourses of women's oppression in society, (b) a commitment to situating knowledge to the view that interpretations are context-bound and partial, rather than detached and

universal, and (c) the interconnections between all aspects of daily life, across the sub-disciplinary boundaries of economic, social, and cultural geography (Johnston, et. al, 1996, 192-3).

Feminist geographers seek to actively explore the diversity of women's experiences, and to focus on the significance of geographic context (place) in shaping these experiences (Nast, 1993, 54-55). They have acknowledged that the social connectedness of women to others is carried out in everyday practices that have fostered ways of knowing (epistemologies) that are different from those of men.

The feminist approach becomes a well-integrated part of Interpretive Social Science because social life is based on interactions and socially constructed meaning systems. For example, the reason for research is to understand and describe women's actions (See Figure 3 below). Feminist theory describes how patriarchy and power are carried through, and potentially transformed by, the body, the mundane, and the everyday, emphases that have traditionally formed the core of women's experiences, which in turn have been the focus of feminist scholarship (Nast, 1993, 60).

Feminist methodology is unique in that research strategies have emerged out of, and reflect women's ways of knowing within, the context of patriarchy (Nast, 1993, 60). This includes the nature of social reality (sexism, patriarchal structures), the women who convey and create meanings to make sense of their social worlds, and the value system that is an integral part of their world, situating them in their particular context.

The Interpretive Social Science (ISS) approach is the systematic analysis of socially meaningful action through the direct detailed observation of people in a natural

setting in order to arrive at understandings and interpretations of how people create and maintain their social worlds (Neuman, 1991, 50). Figure 3 provides a summary of the key issues of concern within this theoretical framework.

Figure 3: A summary of the Interpretive Social Science Approach

1. Reason for research	To understand and describe meaningful social action
2. Nature of social reality →	Fluid dimensions of a situation created by human interaction
3. Nature of human beings →	Social beings who create meaning and who constantly make sense of their worlds
4. Theory looks like →	A description of how a group's meaning system is generated and sustained
5. An explanation that is true →	Resonates or feels right to those who are being studied
6. Good evidence →	Is embedded in the context of fluid social interactions
7. Place for values →	Values are an integral part of social life; no groups' values are wrong, only different.

Modified from Neuman, 1991, 63.

In relation to this study, the ISS approach is relevant because it provides a framework for justifying the research methodology for studying low-income, urban women's choices of health care options in an attempt to study meaningful social action to which these women attach subjective meaning and activity with a purpose.

This approach holds that social life is based on social interactions and socially constructed meaning systems. People possess an internally experienced sense of reality. The researcher can only understand this by getting to know their social world and seeing it from the point of view of the people being studied. This subjective sense of reality is crucial for explaining social life (Bleicher, 1980, 9).

ISS is ideographic and inductive because it provides a symbolic representation or "thick" description of the phenomenon being studied. Such a study is a rich detailed portrayal of a social setting that has internal coherence and is rooted in people's everyday experiences (Neuman, 1991, 53).

Evidence about social life, within the parameters of this theory, cannot be isolated from the context in which it occurs, or the meanings assigned to it by the social actors involved. Facts are seen as fluid and embedded within a meaning system. The facts are not impartial, objective, or neutral. They are context-specific actions that depend on the interpretations of particular people in a social context. A theory is then true if it makes sense to those being studied, and if it allows others to understand the reality as experienced by those being studied (Neuman, 1991, 53-54).

ISS, as understood in the context of this study, provides a feel for another social reality and an in-depth view of a social setting by revealing the meanings, values, interpretive schemes, and rules of living used by people in their daily lives. It describes the informal norms, rules, or conventions used by these people, describing the specific individuals, the locations, the activities, and the strategies used by them. The researcher is encouraged to reflect upon, re-examine, and analyze personal points of view and feelings as a part of the process of studying others. The theory and evidence are interwoven within such ideas to create a unified whole: the concepts and generalizations are wedded to their context (Neuman, 1991, 54).

4. 3. Summary

Feminist research has specific goals: the inclusion of women's perspectives and the betterment of their lives. Its proponents are looking to understand complex and dynamic situations, rejecting the concepts of universal truths and insisting on the inclusion of the realities of those who have little or no power. This requires a rethinking of the tools and methods of research – focusing on intense observations, involvement, and contextualization. "The methodological task has become one of generating and refining more interactive, contextualized methods in the search for patterns and meanings rather than for prediction and control" (Stein, 1997, 226). That is one reason why much of the literature in the field of feminist research is in the form of case studies that focus on actual feminist inquiry rather than on theory and traditional scientific inquiry.

CHAPTER 5: The Study Area

5. 1.The Study Area

5. 1.1. Historical Background of Nairobi and urban development

From small beginnings, Nairobi (Maasai word for 'place of cold water' or 'stream which is cold') grew from being a rest place on the slave route between the interior of East Africa and Mombasa, rapidly developing after the arrival of the railway, at the turn of the century, into the teeming metropolis with its mass of highways, multi-story buildings and tangle of bus routes of today. Nairobi's origins date back to the beginning of the Kenya-Uganda railway between 1896 and 1898 when the railway tracks were laid from Mombasa to Nairobi by the Uganda Railway Company (Mazrui, 1988, 241).

'The Lunatic Line', as it was called, reached the present location of Nairobi, an approximate halfway mark between Mombasa and Kampala, on 30th May 1899. Offices, huts and the first streets sprang up, shops and small businesses were founded on the plain that formed the convergence of Maasai and Kikuyu lands. Within a year Nairobi had been granted town status, a District Officer was appointed, and people began to pour in a steady stream into the already overcrowded temporary railway housing. Such was the unprecedented growth of Nairobi that by 1907 Nairobi had ousted Mombasa as the capital of East Africa (http://www.kenyaweb.com/vnairobi/ history.html).

The railway brought thousands of people with it. The vast majority of the work force consisted of imported, cheap, semiskilled laborers from India, supplemented by a smaller group of Africans. This mobile population turned the temporary railway headquarters into a more permanent town. The urban conglomeration was significantly

enlarged by the drought in 1898-9, attracting hundreds of Kikuyu and Kamba to the railway in the futile hope of employment or food. During these early years, the colonial government was too small to be effective, and the resulting problems of administration, housing and feeding now required solutions far beyond the capabilities or resources of the Ugandan Railway officials (http://www.kenyaweb.com/vnairobi/history.html).

As a result, the first meeting of the municipal committee, held in July 1901, reorganized the location of slums, new buildings and streets. The town was forced to comply with approved health regulations, refuse collection initiated and the founding of a policing system (http://www.kenyaweb.com/vnairobi/history.html).

Throughout its early history Nairobi suffered from the squalid conditions of a makeshift town. Little or no drainage was planned in the early years. Housing and unemployment provided further worries in the early 1900s with the filtering of rural Africans and Asians laid off from their contracts. The spatial evolution of its land-use zones since 1900 reflected the emergence of an urban city segregated along racial and economic lines. The arbitrary demarcation of its boundaries since 1900 enabled the growth of low standard settlements characterized by poor housing, drainage, and inadequate water supply, all contributing to the creation of slum problems (Kahimbara, 1986, 14).

Nairobi's segregated and dispersed residential zoning of the early years made it very expensive for the city municipality to provide essential services, and in the years to come, empty spaces between such dispersed residential zones encouraged the establishment of slums because of a lack of proper land-use control and respect for the

rights of land-owners (Halliman & Morgan, 1967). Furthermore, Nairobi's spatial features reflect the dominance of the railways administration, whose low-grade housing estates rely mostly on communal water supply points and shared toilet facilities (//www.kenyaweb.com/vnairobi/history.html). And despite numerous problems with water supply, drainage, haphazard development, plague outbreaks, Nairobi became the capital city in 1920 (Lamba, 1994, 3).

Throughout the 1920s and 1930s there was much political unrest[15] and uncontrolled in-migration into the city, but Nairobi continued to grow significantly. Between 1942 and 1947 Nairobi's population expanded at the phenomenal rate of 17 percent per annum, inflation reached 400 percent between 1939 and 1945 while wages only went up by 200 percent in that period. The ramifications of this were obvious, especially to the poor African who witnessed the reality of living in the cramped conditions in the locations of Pumwani and Pangani (http://www.kenyaweb. com/ vnairobi/history.html). The resulting atmosphere was that of ineffective needs provision to the majority of the population. Social conditions had begun to deteriorate in many areas of Nairobi and education in the many spheres of political life generated a growing awareness of the need for national Independence.

The call for African representation began with Thuku and ended with Jomo Kenyatta's election as the first President of Kenya in 1963. Independent Kenya became a multi-party political state, but from 1969 it was a *defacto* one-party state[16]. The decades

[15] By the end of the First World War, there was evidence of the beginnings of African nationalism in Kenya with the formation of the Harry Thuku's Young Kikuyu Association.
[16] The dominant political party KANU (Kenya African National Union) was founded in 1960.

following Independence gave rise to important legislation, large-scale building works, road construction and the development of ever-bigger housing estates. If expansion on this scale was a result of prosperity, the population growth that it reflected (between 1962 and 1979 Nairobi's population grew from 266,700 to 800,000) in Nairobi produced its own set of problems for the present and for future generations.

Nairobi is located on the Athi Plains at an altitude between 5000 and 6000 feet above sea level. Nairobi is a model European-type city with extremely high land values that have stimulated the emergence and growth of new satellite towns such as Kangemi within the city boundary (Ayiemba, 1996, 2). It remains the country's political and administrative capital, and the primary centre of commerce, finance, industry, education and communications. Nairobi City Council (NCC) is responsible for the overall administration of the city, members of which are all elected in the general election (Lamba, 1994, 3).

5. 1.2. Urban Development in Kenya

Kenya has one of the highest rates of urbanization in East Africa (United Nations, 1995, 120). Within the Kenyan urban system, an urban centre is defined as an area with a population of 2000 inhabitants or more (Obudho, 1988, 66). The total urban population of Kenya, estimated at 4 million, or 15 percent of the total population, has increased rapidly since independence due to both natural increase and rural-urban migration (Good, 1987, 46). Nairobi, the cosmopolitan national capital, is the major city with an estimated 2.9 million people, or over 72 percent of the total urban population (CIA World Fact

Book, 1999). Other important urban centres include Mombasa, the major ocean port for Kenya and Uganda, Nakuru, a centre of commercial agriculture in the Rift Valley, Kisumu, a growing commercial and industrial centre on Lake Victoria, and Eldoret, a fertile agricultural centre on the Uasin Gishu Plateau west of the Rift Valley (Good, 1987, 47).

Current statistics on urban populations are difficult to get, namely because some urban centres do not have defined boundaries and many rural populations may be included within the peri-urban area. Furthermore, there is a strong tendency for ethnic groups in urban areas to retain links with the traditional homelands through circular migration (Obudho, 1988, 99). However, one of the most important indicators of the extent of urbanization among Kenyans is the degree to which various racial and ethnic groups have mixed as a result of urbanization (Obudho, 1988, 95). With increasing population growth and migration into urban areas, demand for urban infrastructure services such as water, sanitation, housing, health services, and schools is well beyond the government's capacity to provide them (Tabibzahed, et al, 1989, 115).

Most of the development planning strategies in Kenya, particularly health care services, have been urban-oriented, and the social and physical planning have, in practice, been focused on the major urban areas (Obudho, 1988, 229). This urban bias helps explain why most health care services are in the larger urban centres of Kenya. In recent years, urban areas have continued to consume a high share of the national resources for services such as health care. It is estimated that 80 percent of the government's recurrent expenditures for health is spent in the three largest cities, of Nairobi, Mombasa, and

Kisumu. Kenyatta National hospital (KNH) in Nairobi, the country's major training and referral centre, consumes as much as 25 percent of the Ministry of Health's annual budget. Kenyatta Hospital primarily serves residents of Nairobi (about 8 percent of the population), plus referrals. In addition to this, approximately 90 percent of all doctors serve in urban areas. Despite the concentration of biomedical services in such urban areas, there is no hard evidence that the urban poor are healthier than their rural counterparts (Good, 1987, 46-47).

This is of particular importance when discussing the health of urban and rural women. Because there are no definite indicators that urban women are better off than rural women, the overall assumption is that urban women must be "healthier" since they live in areas that have a higher concentration of health care services. However, this argument does not indicate that the urban woman is using such services, and for these reason this research chose to focus on urban women in Kenya.

Health problems in Kenya's urban centres include communicable diseases, social pathologies, and hazards associated with changes in life-style (Good, 1987, 47). Much ill health is linked to the enormous difficulties and lack of success at providing adequate and low-cost housing, safe water, sewage and refuse disposal, appropriate health services, and social services to the rapidly expanding populations characterized by limited employment opportunities (Good, 1987; Tabibzadeh, et al, 1989). Malnutrition, much as it is apparently missing from the official health reports, is also a significant urban problem, in large part because the poor move into a money-economy and can no longer grow the bulk of their own food (Good, 1997, 47).

A large proportion of the population in the larger cities of Nairobi and Mombasa live in extremely crowded shanties, speculative slum barracks, and other makeshift housing that lacks readily accessible safe water and adequate sanitary facilities. In Nairobi, for example, large numbers of the urban poor depend on streams and rivers for drinking water, cooking, washing clothes, and personal hygiene (Obudho, 1988, 72).

5. 1.3. Economic Condition of Nairobi

Nairobi's population growth has strained the city's resources and its ability to provide infrastructure and services. Per capita investment in infrastructure development has declined since the late 1970s, leaving an increasing number of people without access to basic services (Government of Kenya, 1986). Per capita investment in water and sewer, for example, has declined by a rate of 28 percent per year between 1978/79 and 1986/87 (Stren, 1992).

Nairobi's economic position is such that it accounts for half of Kenya's total urban workforce (Kenya, 1985a). Despite its dominant position in the national economy, Nairobi's population growth exceeds the absorption capacity of its economy. As a result, the overall socio-economic well being of the residents is actually declining as is reflected in the worsening housing situation, increased unemployment and widespread poverty, and the inadequacy of basic services, including transport, water, sanitation and health care (Lamba, 1994, 6).

Approximately half of Nairobi's population is considered employed in either the formal or informal sector. According to the 1982/83 Urban Household Budget Survey (Kenya, 1990c), the majority of workers fell into the low-income category, earning an

average monthly income of KShs. 1,822 (approximately Cdn $ 40). Low-income levels are closely related to other socio-economic indicators such as the nature of employment, residential area, skill level and access to adequate and safe water and sanitary conditions. Slum dwellers, for example, will earn far less than what is reflected in the aggregate data. Studies have shown that about 80 percent of the households earned less than KShs. 2,000 per month. Expenditure patterns revealed that 74 percent of earnings of the low-income population are spent on consumer goods (food and household items), while the high-income populations spend less than 30 percent on the same type of goods (Lamba, 1994, 7). For example, a 1991 study of women's shelter needs found that almost half (48 percent) of the households interviewed in Korogocho earned less than KShs 1,000 (Cdn $ 20) per month. It was not uncommon for people living in this slum area to have difficulty affording adequate food, and cooking fuel (Lee-Smith, 1993).

The recent population growth has been at a time of serious economic stagnation, if not reversal, associated with successive implementation of 'structural adjustment' measures, that have reduced private incomes and public revenues (Wallace, 1999, 29). The resulting policies fostered by the World Bank and the IMF responded to the imbalances in the Kenyan economy during the late 1970s and early 1980s when acute economic failures were increasing dramatically. The policies that were imposed attempted to mitigate the deficits in Kenya's balance of payment, primarily by adopting measures that expanded exports, reduced imports, or otherwise attracted foreign exchange into a country. According to the definition of 'structural adjustment' by Stein (1997), measures to curb a government deficit involve increasing government revenue or

reducing expenditure. These actions involve changes in the structure of the economy. Some of the expenditures that are reduced are most often in social programs such as education and health, in subsidies for food supports and other necessities, and in distributional economic programs such as credit availability and government employment (Stein, 1997, 11).

However, the adjustment policies were too limiting, oriented towards achieving short-term macroeconomic stability, and therefore, the overall impact has been dismal, particularly adversely affecting the poor. Table 3 highlights the macroeconomic performance of Kenya, in 1990-95, was the worst period out of the last 3 decades. Overall, there has been increased poverty in all provinces of Kenya. Unemployment remains high (over 60 percent) and there is increasing reliance on the largely irregular and generally small incomes that can be earned in the informal sector, disproportionately by women (Mukui, 1994).

Table 3: Kenya's Macroeconomic Performance 1965 – 1995

Period	GDP Growth (% per year)	Per Capital GDP Growth	Growth of Private Consumption	Inflation
1960s	6.2	2.8	2.9	2.7
1970s	4.4	0.4	5.9	10.1
1980s	4.2	0.5	4.7	11.8
1990-95	1.4	-2.6	4.5	27.2

Source: Modified from Klugman, et al. 1999, pp 34.

The scenario that is becoming predominantly the norm is that of public services deterioration as government revenues fall and are diverted from the social sectors. As the

supply of public service provision has been reduced, and even where a service is available, its quality has deteriorated as evident in the fewer numbers of books in schools, and fewer drugs and medical supplies in the clinics (Gould and Ayiemba, 1996, 15). For the poorer households, adjustment policies translate into increasing tax payments on economic and social services resulting in reduced government spending on services received by the poor, decreased earnings through declines in public employment and official wages, and increased taxes that they pay in the name of reducing deficits. With agricultural policy, the elimination of food subsidies is one of the major adverse effects of structural adjustment policy that disproportionately hurt the poor consumer, including poor households that are producers of food (Sahn, et al, 1997, 7).

5. 2. Poverty and Women

5. 2.1. Poverty in Kenya

Based on the general literature and the country's Participatory Poverty Assessment (PPA) report, poverty is a problem that manifests itself in many forms and at all levels of society, and which threatens the very foundations of society. Poverty in Kenya appears to be an economic, sociological, psychological and political phenomenon, which manifests itself in vulnerability, insecurity, isolation, alienation, domination and dependence, material deprivation, denial of freedom of choice, and a lack of participation and assets (Akayo and Katumanga, 1997, 1).

Kenya experienced no improvement in the incidence of poverty in the 1980s and early 1990s. In this regard, the total number of people living in absolute poverty[17] rose from 11.5 million in 1994, to a projected 12.6 million in 1997. Altogether, rural areas accounted for about 90 percent of the absolute poor, who were 10.3 million in 1994 and were expected to be 1.3 million in 1997 (Akayo and Katumanga, 1997, 1). This would imply that almost half of the population of Kenya was unable to consume a required minimum of food and essential non-food commodities.

Poverty is pervasive and widespread among socio-economic groups. In this connection, the major socio-economic groups amid which the poor are found are female-headed households (53 percent), subsistence farmers (47 percent), pastoralists (36 percent), and private sector workers (31 percent). The landless and refugees make up an important component of the absolute poor, but statistics are unavailable for these groups (Government of Kenya, 1997).

Although poverty in Kenya is predominantly a rural phenomenon, there appears minimal urban/rural disparity in the depth of poverty and income (expenditure) inequalities. Although urban households seem to fare better than rural ones in almost all types of poverty, they are expected to be more vulnerable than their rural counterparts (Ayako and Katumanga, 1997, 7). The overall implication is that poverty in urban areas is considerable and increasing.

[17] Persons who earn a monthly income of less than Kshs: 800 (approximately Cdn $16).

5. 2.2. Definition and Measurement of Poverty

Although there exists no universally accepted index incorporating all the dimensions of poverty, the FGT measure adopted by Foster, Greer and Thorbecke (1984) is the most popular indicator of the degree of poverty. This measure comprises head-count ratio for the incidence of absolute poverty, poverty gap ratio for the depth of poverty, and the coefficient of variation for the severity of poverty and indication of the distribution of inequality in income or expenditure below poverty line (Government of Kenya, 1994).

Based on these principles, poverty can be defined as a multi-dimensional phenomenon comprising economic, political, physiological, and psychological deprivation. Its manifestations are vulnerability, powerlessness, humiliation, social inferiority, physical weakness, isolation, lack of assets, and inaccessibility to basic human needs. In the circumstances, the poor are a disabled lot who lack land, livestock and farm equipment, who cannot participate in the political process and provide decent burial to their deceased, who have many mouths to feed but who live in poor houses, and who suffer from alcoholism, child labour, and insecurity (Ayako and Katumanga, 1997, 6).

5. 2.3. Causes of Poverty in Kenya

The World Bank (1994) attributed continued poverty in Kenya to three main factors: a lack of sustained economic growth, inequality and inadequacy in social expenditure, and ineffectiveness and inefficiency in food security and nutritional interventions. These three factors, however, are symptoms rather than causes of

continued poverty. According to Ayako and Katumanga (1997), the real causes of poverty can be placed into eight categories: dualism, population pressure, state superstructure and policy, legal, institutional and resource allocation bias, poor natural resource base and mismanagement of the environment, gender bias, natural cycles and disasters, exploitative intermediaries, and international processes.

Dualism can be thought of as a drain of resources (in the form of cheap labour and raw materials) from the rural to urban areas, and eventually to the North, and the extraction and accumulation of resources by few individuals (Mukui, 1994). Effects of this strategy are observable in today's rural poverty and skewed income distribution. Both the colonial state and the new independent government have neglected rural infrastructure, information, and marketing systems, and as a result, urban socio-economic groups have fared better than their rural equivalents.

Despite its decline from 4 to 3.4 percent per annum during the 1980s, the population growth rate still exerts enormous pressure on Kenya's limited and often fragile resource base. Signs of the ***population pressure*** result in small land-holdings, landlessness, encroachment of marginal lands, environmental degradation, and an expanding labour force. The result is open and "disguised" urban unemployment: open employment, estimated at 22 percent (1992), is evidenced by the visibly idle labour force, while "disguised" unemployment comprises people engaged in part-time activities such as hawking, shoe-shinning, and car-washing (Ayako and Katumanga, 1997, 12).

Policy, Legal, Institutional and Resource Allocation Bias: The political faction that was in power before the 1992 election was largely made up of "loyalist", that is,

beneficiaries or servants of the colonial state. As a result of their control of the government, the independent state could not address key issues such as fair ownership of land. Instead, the few who controlled political power owned large farms, plantations, and ranches in the country. Many people have no access to land but instead, they subsist on thousands of acres as "squatters"[18] (Ayako and Katumanga, 1997, 12).

Official policies, laws and institutions have had a built-in bias that excludes the rural poor from the benefits of development, evident in the investments in urban areas, emphasis on crops for export, pricing policies that favour imported cereals, subsidies for both expansion of modern sub-sectors, adoption of import-intensive technology, and heavy taxation of export crops grown by small farmers (International Fund for Agricultural Development, 1992).

Poverty in rural areas is compounded by retrogressive administrative and agrarian acts that have not only restricted rural communities from organizing themselves in a bid to improve their economic lot, but also controlled the production, distribution and exchange of agricultural commodities (Ayako and Katumanga, 1997, 13)[19]. Independent Kenya's policies shifted in the late 1980s and early 1990s putting in place a cost-sharing policy as a result of the introduction of Structural Adjustment Programs. In the middle of

[18] Squatter suggests an illegal occupier, often violently evicted from government holdings, or land owned by multinationals or individuals.

[19] Such acts include the Scheduled District Act, the Special Districts Administration Act, and the Outlying Districts Act, which authorize confiscation of property, violate freedoms of association and movement, hinder economic production, and justify violence and marginalization (Ayako & Katumanga, 1997, 13).

all this, indirect taxation systems such as *harambees*[20] consistently manipulate the poor to pay for the services the government does not provide (*Daily Nation*, September 1999).

In relation to health, annual spending per capita declined from US$ 9.82 (1980/81) to US$ 6.20 (1996), and the ratio of doctor/patient dropped from 1:5,600 (1994) to 1:6,800 in 1996 (Owino, 1997). Today, the state cannot provide 50 percent of the total recurrent health expenditure. What is more, existing health facilities continue to depreciate as a result of corruption and mismanagement.

The poor urban dweller cannot enjoy a consistent livelihood because their sources of income are constantly destroyed through forced evictions from shelters. To make matters worse, the government's allocation of land in slums to individuals has dislocated slum life, disrupting their accessibility to health care and education. Furthermore, the Vagrancy Act[21] has made unemployment, homelessness and poverty in urban areas crimes, stating that such a person should be arrested without a warrant and subsequently repatriated to the countryside (Ayako and Katumanga, 1997, 15). The widespread displacement of the poor not only indicates an absence of rule of law that should protect property rights and engenders justice for the poor and powerless, but also intensifies poverty. In these circumstances, the contention that the urban poor are better off than their rural poor is misleading: the transitory nature of urban existence and the inability by the urban poor to gain access to constant sources of food and income make the former more vulnerable than the latter.

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[20] A local community fundraising endavour.
[21] A vagrant is defined as "any person without lawful employment, means of subsistence, fixed abode, begging in the streets, living in a veranda, shop or unoccupied building" (Ayako and Katumanga, 1997, 15).

Kenya is vulnerable to ***natural cycles and disasters***, specifically devastating droughts that have led to fluctuations in food and water supply. These fluctuations affect both the rural and urban poor whose borrowing of food drives them into deeper poverty because they have to eventually pay off such accumulated debts (Ayako and Katumanga, 1997, 15).

Gender bias, rooted in the country's cultural and ethnic traditions, has discriminated against women, denying them access to land, credit, inputs, agricultural extension, and training. In addition, traditional division of labour overburdens women who have to spend time and expend energy on domestic chores, such as fetching water and fuel, and marketing (Ayako and Katumanga, 1997, 15).

Exploitative Intermediaries such as moneylenders, traders, co-operative societies, and marketing boards, exploit Kenya's rural poor. The result is that the poor hardly get the worth of their output and are rendered landless when their land is auctioned in a bid to recover debts (Ayako & Katumanga, 1997, 16).

International Processes such as unfavourable prices for products and protectionism by developed countries limiting access to international markets are some of the international factors affecting the poor, especially the export producing smallholders. Indirect international factors that reduce the government's ability to readdress poverty include the mounting debt-servicing obligations resulting from the rising cost of international debt, the decline in international capital for poverty alleviation projects and programs, and the massive inflow of refugees into the country as a result of political instability and civil strife in neighbouring countries (Ayako and Katumanga, 1997, 16).

Kenya is a country of ***poor natural resource*** base, and although land is Kenya's key natural resource, only 40 percent of it is arable: of the arable land, only 20 percent is of high and medium potential. The remainder 60 percent of the country's land is arid and semi-arid and only suited to pastoralism. The limited natural resource base circumscribes efforts to alleviate poverty. As a result of population pressure in the high and medium potential areas, people have encroached on the marginal lands and, engaging in inappropriate agricultural activities and using inappropriate technologies, have ***degraded the environment***. This degradation that restricts the expansion of cultivated area and increased productivity further limits the country's scope for poverty alleviation (Ayako and Katumanga, 1997, 16).

5. 2.4. Women in Urban Centres of Kenya

Though a large colonial city like Nairobi remained as an area of gender imbalance, increasing numbers of women migrated into urban centres during the early part of the twentieth century. The formal jobs open to women were extremely limited, but women came into these areas retaining their hold in petty trade, marketing produce and prepared food, brewing beer, and selling various combinations of domestic and sexual services. Where the size of the white settler population created a greater demand for domestic labour that black men could fill, women took in those jobs, mainly as *ayahs* (children's nurses) in many parts of Kenya (Berger, 1999, 36).

As the female population in towns began to increase, so did concerns of both colonial officials and African male authorities, although sometimes for different reasons. Since many women who migrated to cities were deliberately escaping the control of

husbands, elders, or fathers, they sought urban relationships that left them some degree of flexibility, thus involving themselves in short term informal "marriages" (Berger, 1999, 37). This was all during the period when colonial authorities were making new and concerted efforts to curb unrestricted urban development for reasons of health, crime, and social control, and so this unexpected influx of women into urban centres demanded constraint. Thus, Nairobi officials, in the name of health, drove African prostitutes from the streets.

As larger numbers of women moved into Nairobi and other towns, the urban demographic imbalance began to shift towards more equal proportions. Some new formal female jobs in the wage economy began to open up, but the vast majority of women continued to work casually and independently as petty traders, beer brewers, and prostitutes, despite the risks involved in brewing in particular (Berger, 1999, 45). These women who came to settle in Nairobi during the early years of the city's formation faced several difficulties. Domestic service, the only formal female occupation in many white settler towns, was the lowest, most exploited of all urban jobs, often requiring a live-in commitment that was difficult to combine with caring for one's family (Parpart and Stichter, 1988, 14). During the Emergency of 1952 to 1956, women were employed in industries such as processing food and tobacco, and at manufacturing clothing, but once the men came back, women ceased to be part of local industrial employment (Berger, 1992, 40).

A more negative experience of women's migration into cities was the attitude of colonial authorities that associated this movement to towns with prostitution, venereal

disease, adultery, alcoholism, divorce and high illegitimacy rates. To these officials, the increasing female independence and the great number of female-headed households was an indication of moral and social ills. One response to this was legal restrictions and educational efforts aimed to alter the moral and social climate of women's lives, primarily through education (Berger, 1999, 46).

Eventually, the numbers of girls attending schools began to increase, but boys still continued to outnumber them by a substantial margin (Berger, 1999, 47). Most attempts at formal education for girls reinforced traditional female roles in the home, thus a heavy emphasis on domestic science.

Independence did lead to more widespread female education at all levels as the new government's responded to insistent demands for improved educational opportunities for women. But the tendency for development projects to accept the existing sexual division of labour as unalterable, or to aggravate this division of labour, meant there was little transformation occurring in the lives of most poor urban women (Berger, 1999, 50). The attainment of Independence in 1963 no more solved the problems of women than it did the other pressing dilemmas of poverty and economic dependency within the capitalist world.

The situation of urban women has altered little since the 1960s, either economically (industrial and commercial capital is still controlled largely by men who dominate the production process) or in terms of negative attitudes towards women that blame them for the "corruption" of family life and view them solely as mothers and wives whose sexuality should be controlled within the family (Berger, 1999, 52). For

most urban women, the need for independent sources of income still remains the main fact of life (*Daily Nation*, September 1999). These women continue doing casual labour and performing multiple activities in order to survive.

The changes affecting women in the last two decades due to urbanization has had ambiguous consequences. The expansion of schooling for girls has increased the number of educated professional women. Yet most women enter stereotypically female fields, and some, while claiming independence and an aversion to marriage, have adopted lifestyles that are heavily dependent on male resources. Increase in wage employment for women, for example, has been mainly in domestic service (Berger, 1999, 52): a low-paying position characterized by extreme vulnerability and weak bargaining rights, in addition to time constraints that create tremendous tension between women's roles as mothers and as wage earners.

What officials seem to ignore is the fact that women are engaging in any income generating activity because there are fewer "legitimate" options available to them. As the most vulnerable member's of society, poor women in Nairobi have become easy targets for overzealous campaigns against prostitution, vagrancy, unlicensed trading, and beer brewing (*Daily Nation*, September 1999).

Because Independence has brought to Kenya conflicting demands for 'modernization' and for the preservation of 'tradition', we see several ambiguities of family policy and attitudes towards family planning. Most women continue to have large families as part of their emotional and economic well-being, and contraception remains a contentious issue. Marriage reforms and attitudes, for example, often combine efforts at

increasing women's rights, but with a reluctance to upset customs perceived as 'traditional', such as polygyny. Some studies have suggested that such contradictions in legislation may increase the tendency of some women to prefer single motherhood to the constraints of marriage (Berger, 1999, 53). Some laws clearly work against women's betterment, such as the 1969 law that voted to annul an act that required men to contribute to the support of illegitimate children (KWEC, 1999).

Regardless of their marginalized situation, many women have struggled both individually and collectively against poverty, an ambivalent social position, and the expectation of subservience to men. Women have collectively voiced their objection towards 'traditional' women's roles, protesting to the deference towards men and the hard physical labour demanded of them (Berger, 1999, 55-56). Beer brewers in Nairobi have formed organizations and informal networks to assist their activities and, occasionally, to invest their funds collectively, this solidarity primarily based on their sense of marginalization arising from the illegal nature of their activities.

The 1990s have brought both new challenges and new opportunities for urban women in Kenya. While the continuing spread of AIDS, the effects and mandates of structural adjustment programs, and periodic crisis such as drought threaten women's economic position, and often their lives, the continent-wide push for democratization is opening up new possibilities for action. With the restoration of multi-party politics in 1991, for example, women's organizations immediately launched campaigns to educate women on democratic participation (Berger, 1999, 61). A variety of dynamic women's groups have addressed and brought forward issues such as labour exploitation, rape, and

domestic violence. While women have been left behind in most formal shifts in economic and educational opportunities, they have struggled independently in urban settings in order to support themselves and their children. They have shown a remarkable ability throughout the last century both to adapt and struggle in response to difficult conditions. This individual and collective resilience is critical to reconstructing gender relations in the future.

5. 3. The Health Care System and Demographics

5. 3.1. The Health Care System in Kenya

As a developing nation with a considerable colonial history, Kenya has long been in contact with Western medicine, dating from the work of the Church Missionary Society in the early years of the last century. The first hospitals in Kenya were established by the British colonial government that promoted the creation of medical centres for the control of major infectious diseases (Beck, 1981, 43). These early medical centres laid the foundation for the development of many of the later provincial and district hospitals (Meck, 1971, 46). This Western medical intervention influenced by the attitudes of the colonial powers remained a legacy even after independence in 1963 (Diesfeld and Hecklau, 1978; Joseph and Phillips, 1984).

Since independence, the health care system has remained influenced by overseas-trained professionals. This is a common picture in many developing countries as they are usually unable to provide sufficient training facilities or personnel for their own needs (Joseph and Phillips, 1984, 31). Until 1969, the administration and running of basic health services was the responsibility of local authorities, that is, at the district and sub-

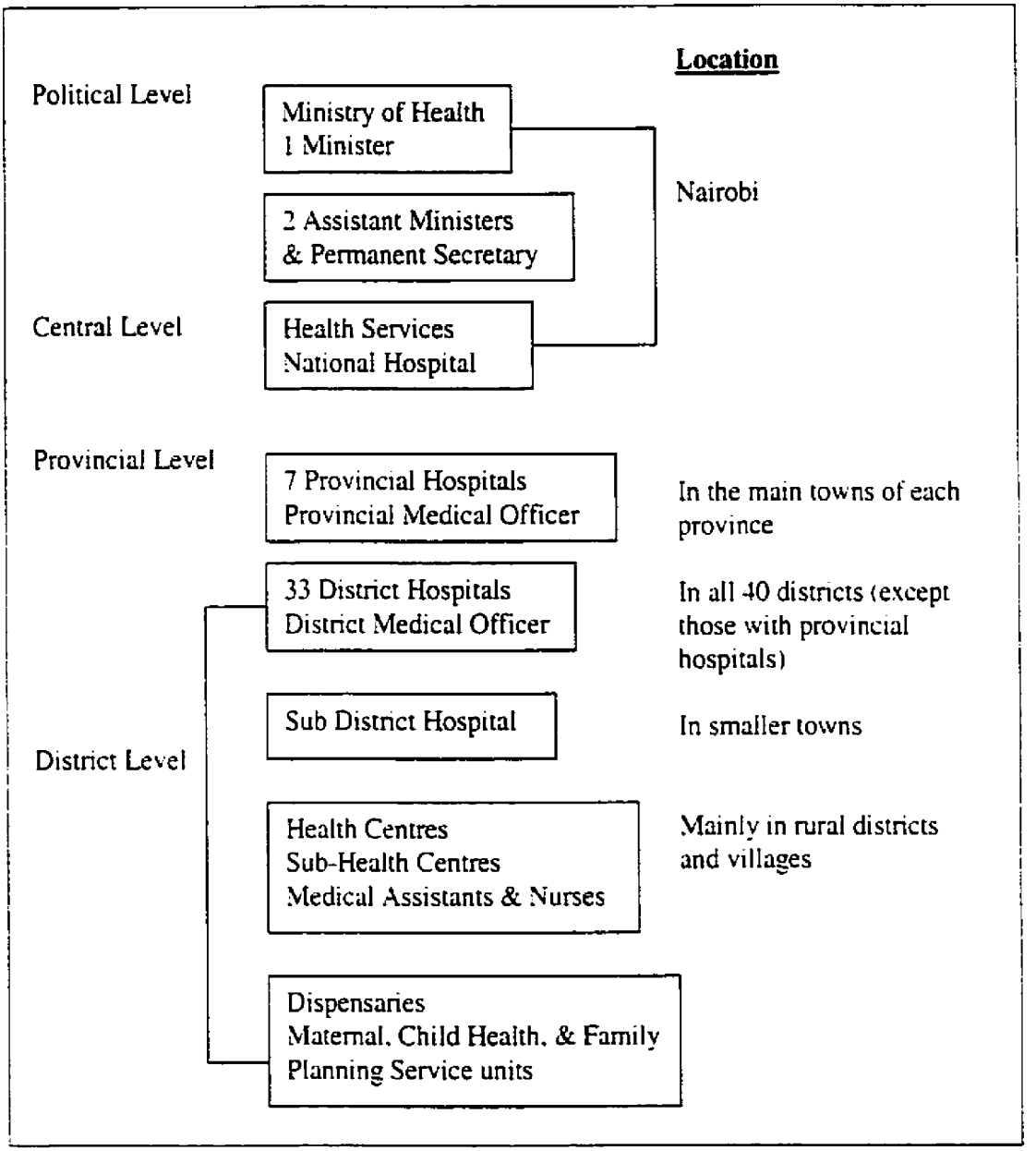
district level, but due to considerable expansion of facilities from 1970, the central government and the Ministry of Health took over the running of basic health services, namely the hospitals, health-centres, and clinics (Nelson, 1983, 4-5).

The health care system in Kenya is classified as public health care, which provides hospital and curative care primarily in the rural areas, missionary health care, and private health care services for which there is a fee. The National Hospital Insurance Fund (NHIF) and the National (Voluntary) Hospital Insurance Fund are Kenya's limited national health scheme, administered under the supervision of the Ministry of Health. This is financed by a flat-rate contribution from employee earnings of more that KSH 1000 per month - approx. Cdn $ 20 (Wa Gethaiga and Williams, 1987, 106).

The Ministry of Health is responsible for the medical and health standards of the nation and issues the corresponding directives. All Central Government medical and health services are administered and maintained by the Ministry. The Ministry also assists private organizations with financial subsidies and administrative and technical advice (Meck, 1971, 40; Buseh, 1993, 35). Figure 4 shows the health care hierarchy in Kenya from the central level to the district level, and the type of health care systems.

Medical units run by the Ministry, the private sector, and voluntary agencies can be divided into 3 main categories. The *hospitals* comprise general and special hospitals. The general hospitals are catered for in Nairobi, and on the provincial and district level. They differ widely in their equipment and staffing. The central hospital of Nairobi (Kenyatta National Hospital) is modern and has research and training facilities.

Figure 4: The health care hierarchy in Kenya



Source: Modified from Joseph & Phillips, 1984.

The provincial hospitals also offer training facilities for sub-professional staff and possibilities for research. A *health-centre* is considered a "key element in health services

for non-urban areas" (Kenya Development Plan, 1970-1974). Such a service provides and coordinates preventative, promotive and curative services at home, village, or community level. The *dispensary* is defined as a small clinic, sometimes in the form of a mobile unit, providing regular, basic curative services to outpatients (Meck, 1971, 47).

Information on health in Kenya is hampered by the lack of any meaningful trends, apart from in-patient/out-patient ratios in some selected health institutions. A study by Anker and Knowles (1980) observed that life expectancy at birth was significantly lower in areas where disease (such as malaria, AIDS, and tuberculosis) is more prevalent, particularly in Nyanza Province and Western Province, therefore indicating that average data can often mask irregularities between regions.

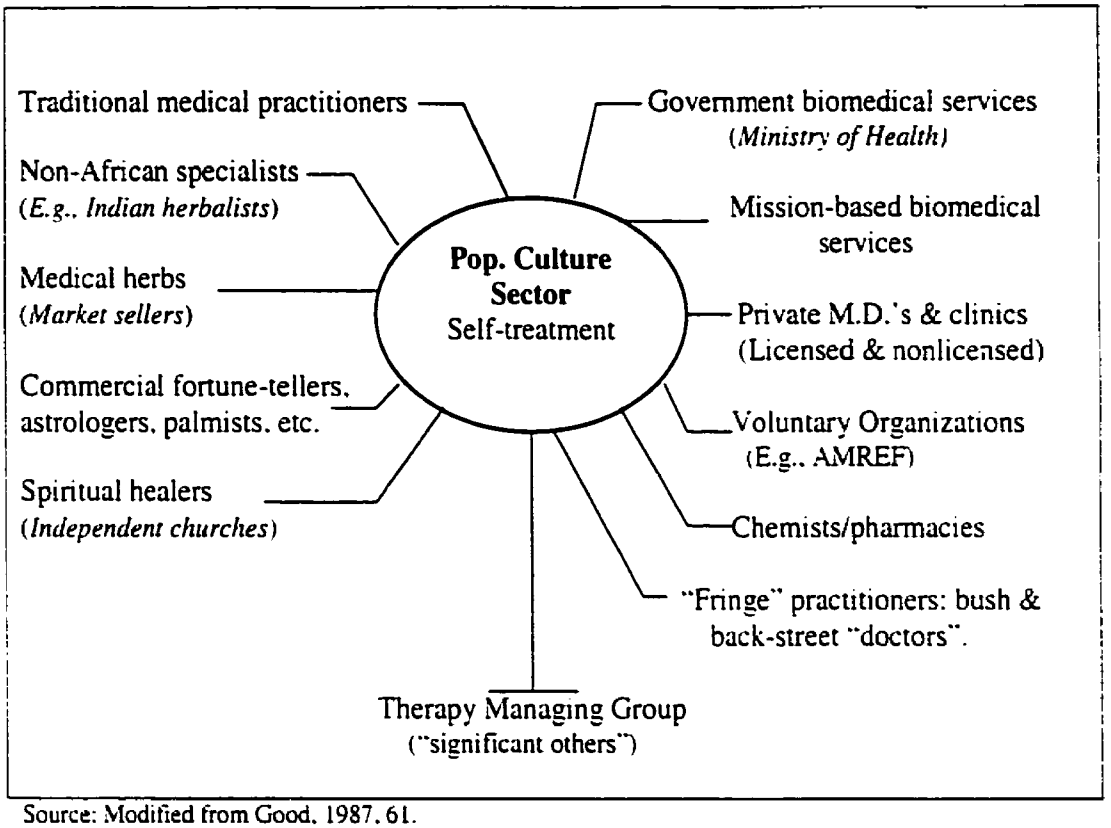
The difficulties in collecting health statistics make it necessary to gain some impression by means of so-called "input" indicators, such as the number of health centres, dispensaries, doctors, nurses, midwives, etc. Although the trends have shown an overall increase, the distribution of health facilities remains regionally inequitable (Van Der Hoeven, 1988, 45). Differences between urban and rural areas remains high, and attention is still given predominantly to curative rather than preventative services, despite dominance of environment-related diseases (Buseh, 1993, 39). The health service infrastructure in Kenya is fairly good, especially when compared to Uganda or Tanzania, but it suffers from urban-rural and regional imbalance, as well as shortage of auxiliaries and medical personnel at all levels (Nelson, 1983, 2). As a result of high population growth, there have been the usual environmental pressures on housing, sanitation, and water supply in several urban areas and consequent health problems.

The philosophical and structural changes that must occur to move Kenya towards the World Health Organization target of "Health for All by the Year 2000" will not materialize (World Health Forum, 1998). Kenya's official biomedical system, which is heavily patronized by the minority who have regular access to it, is still hospital-based, doctor-and technology-dependent, and profession-oriented; the roots of this system are entrenched in the early colonial period. Because it has become so resource consuming, in terms of both physical infrastructure and expensive labour, it is not a sustainable system within the limits imposed by Kenya's demographic growth and budgeting capabilities (Good, 1987, 67).

5. 3.2. The Range of Health Care Options in Kenya

Figure 5 is representative of the range of the 12 therapeutic options available in Kenya (Good, 1987), but are not meant to be inclusive of *all* the strategies that may be available to individual Kenyans. Most case studies reveal that people resort to a wide variety of combinations of strategies in their quest for healing (Good, 1987, 62). For example, in theory, one could assume that persons living in urban areas will have direct access to all, or at least most, of the strategies shown in Figure 5. In contrast, rural folk have a much narrower range of options from which to choose, unless they are willing to travel and absorb the related expenses to obtain health services they prefer.

Figure 5: The range of therapeutic options in Kenya



Source: Modified from Good, 1987, 61.

In order to document low-income women's access to primary health care in urban Kenya, it is important to recognize these various therapeutic options available to them, and their reasoning behind certain choices they make regarding health care. In urban Kenya, it is often assumed that women have equal access to primary health care services, but the limitations of the many existing institutionalized health care services are their failure to enlist community participation and the fact that they are not linked to other services, such as education, or social planning (Hetzel, 1978; Good, 1987).

The therapeutic options are divided into three basic "spheres": The traditional, non-biomedical range of options, the biomedical range of options, and the popular culture

sector which represents self-treatment and home remedies. There is a wide range of non-biomedical options available to Kenyans, including the *traditional medical practitioners* (referred to as *waganga* in Swahili), the *non-African specialist* (such as the Indian or Arab herbalists), the *market herbalists*, the *commercial fortunetellers* and *astrologers*, and the *spiritual healers* from independent churches (Good, 1987, 61).

Little attention is paid to the *traditional medical sector* and its linkages to the biomedical sector. However, particularly in reference to urban areas, traditionally based healing occupies a major position in social and economic life. In addition, urban areas in Kenya are key locations where traditional medicine is growing and adapting in response to population growth and the need of a society undergoing cultural conflict and social change (Good, 1987, 61; Obudho, 1988).

The *popular culture sector* of health care is where illness is first perceived and acted upon, either by individuals directly or with the assistance of their close associates. Although it is not a main focus, it is essential to recognize that the popular sector is typically the first form of action for the Kenyan population (Good, 1987, 60). The popular sector is also the link between the various strategies that together comprise the potential range of therapies found in the local ethnomedical system (Good, 1987, 60). The "*significant others*" in the lay community play a varied but often central mediating role in the process of choosing and evaluating therapeutic options for ill persons (Good, 1987, 62).

The Central Government, through the Ministry of Health, has the primary responsibility for *biomedical services*. *Mission-based* services are also of great

significance, particularly in rural areas, while *private doctors* tend to locate their "surgeries" and clinics primarily in the larger town or cities (Good, 1987; Wa Gethaiga & Williams, 1987). The provincial and district hospitals that are supported by Central Government are seen as referral points for the health centres and dispensaries that form the main infrastructure of "rural health services" (Good, 1987, 65).

Kenya also has numerous *private voluntary organizations* (PVO's) that provide health services. These include agencies such as The Family Planning Association, Saint John's Ambulance Society, and Kenya Society for the Blind. The African Medical and Research Foundation (AMREF) is among the largest PVO's in Kenya. AMREF's programs are generally designed to complement and provide research support for the government's health programs. The East African Flying Doctor Service, founded in 1957, is perhaps the best known of AMREF's functions, strengthening the rural and primary health services (Good, 1987, 68).

In most towns in Kenya, *chemists (pharmacists)* perform important roles that overlap with biomedical and popular sectors. They serve as primary consultants for the sick who often wish to avoid the cost or inconvenience of visiting a doctor or an outpatient clinic. They give advice about sickness and prescribe and sell drugs (Good, 1987, 68-69).

Marginal, self-styled, and unscrupulous practitioners who operate on the fringes of both biomedical and traditional healing are also an increasingly important force within the spectrum of therapeutic options in Kenya. Attracted by the opportunity for financial gain from vulnerable persons desirous of "modern", quick cures, these *"bush doctors"*,

or *"back-street doctors"* and *"bus-stop dispensers"* form the range of *fringe practitioners* (Good, 1987, 69).

There is an increasing emphasis on the definition of *health* in a broader sense, rather than on the traditional perspective, which focused on specific medically diagnosed diseases. The interpretation of health now being adopted reflects the definition proposed by the World Health Organization, which suggests that health is complete mental and physical well being, rather than just the absence of disease (Johnston, et all, 1996, 242). *Health care* can be interpreted quite broadly to include a range of care intended to promote good health, prevent illness and treat people who have become ill. Health care is often viewed as comprising both *primary health care* services (provided in community-based clinics or in people's homes) and *secondary and tertiary services* (which are usually hospital based). However health care may also be taken to include both 'informal' care, provided by non-professionals such as relatives, neighbours and friends, and self-help (Johnston, et al, 1996, 242).

The term 'primary health care' as defined by the World Health Organization (WHO) denotes the provision of comprehensive health care at a local level:

> Primary health care is taken to mean a health care approach that integrates at the community level all elements necessary to make an impact upon the health status of the people. Such an approach is an integral part of the national health care system. It is an expression or response to the fundamental human needs of how can a person know of, and be assisted in the actions required to live a healthy life, and where a person can go if he/she needs relief from pain and suffering. A response to such needs must be a series of simple and effective measures in terms of cost, technique and organization, which are easily accessible to the people in need and which assist in improving the living conditions of individuals, families and communities. These include preventative, promotive, curative and rehabilitative health measures and community activities. (World Health Report, 3-4, 1998).

Such a definition of health care embraces the emphasis on community participation, contrasting with existing public health services by its emphasis on the periphery rather than on central planning and organization of 'vertical services' (Zakus, 1997, 14). In a study by Djukanovic and Mach (1975), it was argued that the greater the participation of the community in the development of primary health care services, the greater the motivation to accept and use these services. Furthermore, with greater acceptance and use of such services, there was less need for expensive curative care (Hetzel, 1987, 4).

5. 3.3. Demographic and Health Characteristics

Early estimates put Nairobi's population at over 11,000 by 1901. As indicated in Table 4, by the time of the first census in 1948 it was estimated that the city's population was 118,794.

Table 4: Nairobi's Area and Population, 1901-1999

Year	Area (km^2)	Population
1901	18	11,512
1926	25	29,864
1936		49,600
1948	84	118,976
1962	291	266,795
1969	590	509,266
1979	684	827,775
1989	684	1,342,570
1999	684	Approximately 2.9 million

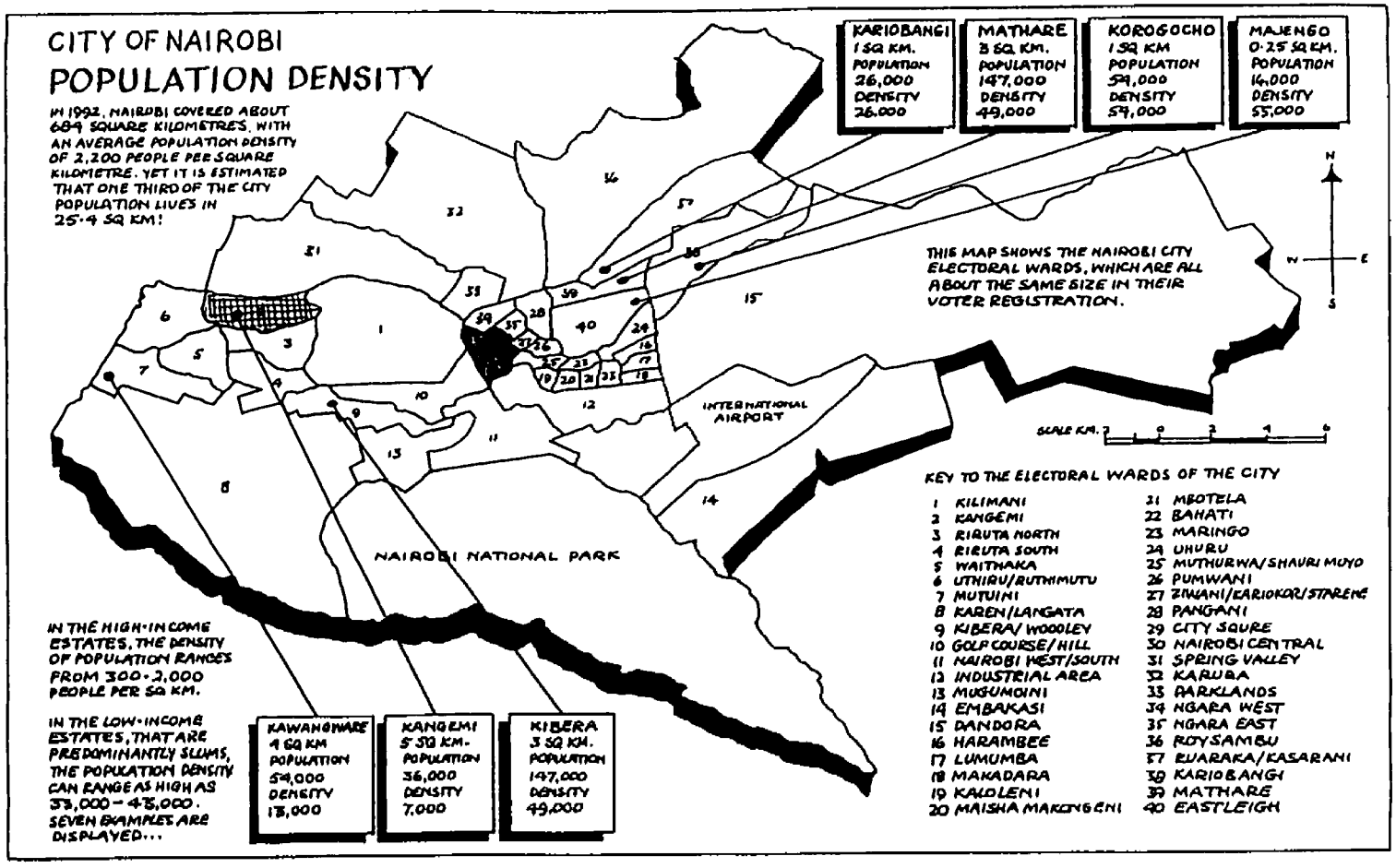
Source: Modified from Lamba, 1994, 4.

After independence in 1963, the population of Nairobi grew rapidly, and was over half a million people by 1969. By the 1989 census, Kenya's population was 21.4 million, and Nairobi's population was 1.35 million, or 6.3 percent of the total population (Lamba, 1994, 4). It was estimated that Nairobi's population at the time of the August 1999 National Census was about 2.9 million (*Daily Nation*, September 1999).

Since the first national census, its highest population growth rate of 8.93 percent annually was recorded between 1962 - 1969 (Ayiemba, 1996, 3). Between the period 1979 - 1989 the city's annual growth rate was 4.5 percent, compared to a national growth rate of 3.4 percent and a total urban growth rate of 7.7 percent (Lamba, 1994, 4-5).

As indicated in Figure 6, Nairobi covers a total area of 684 square km, 114 sq. km of which is the Nairobi National Park, located within the city boundary. Taking this into consideration, the average density of the inhabitable area of the city is 2,600-persons/sq. km (Lamba, 1994, 4). However, densities within the city vary greatly; high-income locations have average densities ranging from 300 to 2,100-people/sq. km., while low-income areas have densities as high as 33,000-to 43,000-people/sq. km. These low-income, mainly slum areas, also experience high annual growth rates far above the city's average, ranging between 5 and 7 percent annually (Development Solutions for Africa, 1992). These informal settlements are growing faster than the rest of the city because they are home to new migrants from rural areas. In addition, severe economic hardships during the last decade have likely forced increasing numbers of people to live in informal settlements who otherwise might have been able to afford better housing (Lamba, 1994, 4-5). (See Table 5).

Figure 6:Map of the city of Nairobi showing the location of various slum regions



Source: Modified from Lamba, 1994, 5

Table 5: Selected Slum Areas in Nairobi

Sub-location	Area (km^2)	Population (1992)	Population density (1992)
Kibera	3	147,258	49,086
Huruma	1	63,140	63,140
Mathare	2	54,120	27,060
Korogocho	1	53,875	53,875
Kariobangi	1	26,339	26,339
Majengo	0.25	13,804	55,216
Kangemi	5	36,000	7,200
Total	**13.25**	**394,536**	**40,274**

Source: Modified from Lamba, 1994, 6.

The demographic impact of rural-urban migration is registered in Nairobi's age-sex pyramid. According to a 1999 CIA World Factbook, the city's population is youthful; the age-group 0 to 14 years represents 43 percent of the total city population, with the 15 to 64 age group being 54 percent, and 65 years and over being only 3 percent. Residential areas are predominantly made up of the four main ethnic groups: Kikuyu, Luo, Luhya and Kamba (Ayiemba, 1996, 5).

Although the fertility rate is still high in Nairobi, it has been gradually declining and is much lower than that of other provinces in Kenya (Lee-Smith, 1994, 12). For Kenya as a whole, the average fertility rate is 3.88 children born/woman (CIA World Factbook, 1999 estimates). However, the analysis of the Crude Birth Rate (CBR) based on the city council vital registration statistics does not accurately reveal a trend in fertility levels largely due to under-registration of births (Ayiemba, 1996, 4). Analysis based on mean births per woman indicated an upward trend of fertility levels between 1969 - 1979. However, by 1989 there was a decline in fertility, and the estimated Total Fertility Rate (TFR) for Nairobi fell from 4.6 to 3.4. According to the 1993 Kenya demographic Health

Survey (KDHS), about 45.4 percent of women in the city were using some method of contraception (Kenya Government, 1993).

Nairobi remains the principal focus of the national migration system, attracting migrants for jobs and a wider range and better quality services than are available in most rural areas (Gould, 1990). While some of the natural increase and migrational growth has been in new suburbs, poor quality services and infrastructure and over-crowded housing in poorly serviced areas are common.

Although housing density data is incomplete, it is estimated that over half of Nairobi's population lives in informal settlements such as slums and squatter settlements, and these occupy only 5.84 percent of residential land. In such slum areas there are sometimes 15 people sharing a room, often several families together and up to 80 percent of households in such areas have only one room for all household activities (Jones, 1995, 3-4).

5. 3.4. Health and Lifestyles of the Urban Poor

Nairobi's high population growth rate has contributed to the current spatial patterns of urban sprawl and slum settlement with the city and on its periphery. These slums are characterized by poor conditions of shelter, lack of basic infrastructure such as water supply, sanitation, education, and health facilities (Kunguru and Mwiraria, 1991, 43). Consequently, high levels of over-crowding in such settlements are associated with the spread of communicable diseases such as cholera, meningitis, tuberculosis, and others. It is further observed that the migration linkages between Nairobi and malarial zones in Kenya have been responsible for the importation of malaria into the city.

Migration, therefore, has contributed to the deterioration of urban health in Nairobi (Ayiemba, 1996, 6).

Malaria is frequently reported, but the diagnoses are not usually confirmed by laboratory tests. Fevers of any kind tend to be attributed to malaria (by medical practitioners as well as patients themselves), so the real incidence in Nairobi and its slums is unknown (Lamba, 1994, 24). For the city as a whole, upper respiratory tract infections/illnesses are the most commonly reported outpatient disorders, followed by diarrhoea, malaria, accidents, and skin disorder. Other common ailments include eye infections, rheumatism/joint pains, gonorrhoea, accidents/fractures, and intestinal worms (Development Solutions for Africa, 1992).

Research indicates that the urban poor have a different health profile in terms of mortality and morbidity in relation to other health groups[22]. For example, in a study done in Manilla, the infant mortality rate (IMR) for the whole city was 76/1000 compared to 210/1000 in Tondo, a squatter area (Harpham and Stephens, 1991, 62).

The children in slum areas are frequently ill; a report from AMREF (1992) reported that Nairobi slum children under the age of five have an average of 11 episodes of diarrhea. Findings from another study reported that 63 to 76 percent of mothers had a child who was sick within the previous two weeks of the survey. The main ailments were acute respiratory infections, diarrhea and worm infestation. The study also checked the nutritional status of children and found that 30 percent of the children were underweight

[22] Several studies have also provided a clear picture of the intra-urban differentials in nutritional status, with poorer groups being at a distinct disadvantage in nutritional terms.

for their age. One-third of the children were nutritionally stunted (low height for age) (Mbungu, 1992).

Undoubtedly, the high incidence of diarrhoea, worm infestation, and skin disorders is related to poor sanitary conditions. Respiratory disorders are more readily transmitted in the overcrowded and poorly ventilated conditions of the slums. It is very clear that the environment of the slums is hazardous to health, and so it makes sense that the most important and effective health intervention would be to improve the infrastructure and services in the slums, particularly in relation to sanitation (Lamba, 1994, 24).

Studies repeatedly cite relationships between the poor health of children and the mother's level of education, her income, and how often she takes her child to a medical clinic. The emphasis on mothers reflects the reality that childrearing responsibilities fall overwhelmingly on women, and such information does help to identify interventions that might improve child health. While such interventions are beneficial, it ignores the father's role (or potential role) in the care of children, and in so doing, subtly absolves them of this responsibility (Lamba, 1994, 25). There were no examples in the literature comparing child morbidity, nutritional status, or other child health indicators with the father's level of education, knowledge of appropriate treatments for illnesses (e.g., diarrhea), or any of the numerous factors used to describe mothers. This remains problematic because in spite of the fact that a man is present in the household, he is assumed to be the head, regardless of the actual division of responsibilities within the household (Lamba, 1994, 25). For such reasons, in addition to paying more attention to

men's responsibilities, health and environment interventions must be planned so as not to place disproportionate demands on women.

Most efforts to improve health have focused on health care delivery systems and especially on curative services. Nairobi has over 170 public and private health care facilities, ranging from single purpose clinics to full service hospitals. Together, NGOs and NCC (Nairobi City Council) are the main providers of health services to Nairobi's poor and low-income residents. But the slums remain under-serviced (Lamba, 1994, 24).

NGOs such as UNICEF, Family Planning International Assistance (FPIA), and African Medical and Research Foundation (AMREF) have a strong presence in the slum areas, providing a variety of community based services, some of which are integrated programs combining health care with other activities such as income generation projects, education, and empowerment. These groups are the major providers of immunization and nutritional programs, and maternal and child health/family planning services. NGOs are an important part of the health care sector, but even the combined services of NCC and NGO providers cannot meet the health needs of the poor, particularly in light of the serious lack of primary heath care in slums areas (Lamba, 1994, 24).

Despite the presence of both NCC and NGOs, there are serious limitations. NCC facilities are typically over-crowded and understaffed and they experience chronic shortages of medical supplies, drugs, and equipment. These constraints adversely affect the quality of care provided to Nairobi's poorest dwellers. At the same time, NGO facilities may have limited hours of operation, making it difficult for some people to use them, or they may offer only specialized and limited services. The quality of care is

considered adequate, but the facilities are unevenly distributed, so many areas continue to be under-served (Lamba, 1994, 24). Considering that approximately 50 percent of Nairobi's poor live in unplanned informal settlements, the lifestyles of the urban poor reflect a history of neglect and maldevelopment that dates back to the city's early years when there was little provision of housing for the African population (Lamba, 1994, 21).

Nairobi's informal settlements are nearly as old as the city. The history of Kibera, for example, dates back to 1912 when the colonial government allowed Sudanese Nubian soldiers, who had served with the Kings African Rifles, to settle in the area. Their residency was never secure because the government reserved the right to reclaim the land at any time and thus allowed only semi-permanent structures. Although this settlements' future has never been certain, it has continued to grow, attracting new residents. From a population of about 20,000 in 1970 (Kunguru and Mwiraria, 1991), it is estimated that 147,000 people live there today.

As in the case of most large slum areas in Nairobi, Kibera is divided into self-defined villages, each with a local chief and other community leaders. There is no such thing as a typical slum village because each develops its own social, economic, ethnic and political characteristics. Studies show that there is a wide range of incomes and significant variations in other social indicators within and between slum villages (Lamba, 1994, 22).

A major problem within the slums has to do with land ownership. There is little or no data available on who owns the slums, but it is known that some land occupied by squatters is privately owned. Other land is publicly held, either by the central

government or the city (Lamba, 1994, 22). The predominant scenario, however, is that of illegal landlords (who may not live in the slums themselves) who collect rent from illegal tenants (Kiamba, 1988). The village chiefs and elders within the slums allocate land and the prices to be paid for the plots. Since the slums are illegal, authorities recognize neither the allocations nor the ownership of plots. However, this process is a functioning system and the only planning system in place for most informal settlements (Lamba, 1994, 22; Kiragu, 1999).

In absence of any formal recognition or a legal system allowing ownership or some kind of security of tenure, tenants and landlords can never be entirely confident that they will not be forced out at some point in their occupation. This insecurity further limits incentives and restricts residents' abilities to improve structures and neighbourhoods.

Unsanitary conditions, over-crowding, substandard buildings, unsafe or inadequate water supplies, poor drainage, and deficient sewage and waste disposal characterize Nairobi's slums. They are often located on undesirable land, especially on flood plains, steep slopes, or near hazardous or noxious industrial activity (Lamba, 1994, 22). Houses are usually built in rows with only narrow paths between them. Floors may be dirt or cement, and the walls made of any combination of metal sheets, flattened cans, timber, cardboard, plastic sheets, mud and wattle – whatever is available and affordable. Corrugated iron sheets are the most common type of roofing.

The vast majorities of slum households rent their dwellings (80-90 percent in most slum villages) and occupy a single room. Rooms of 10 by 10 feet to 12 by 12 feet

accommodate households of 3-5 people. In some cases, a single room may accommodate as many as ten people, which is accomplished by sub-letting beds for an agreed number of hours per day (Kunguru and Mwiraria, 1991). Few families have any kitchen facilities, and most cook with kerosene and charcoal in the same room that is used for living and sleeping (Lamba, 1994, 22).

A study of the basic needs and the affordability of food in four of Nairobi's slums found that on average only 16 percent of the structures were made of permanent materials (stone, brick, or cement blocks). Other buildings can be described as crowded and prone to fire hazards. Households averaging four persons occupy an average of 1.4 rooms. Eighty percent of the households live in only one room, 85 percent are renters and 70 percent of the households reported having incomes of less than KShs 2,000 (1992 US $61) per month. Only 4 percent of the households had their own supply of piped water, while 75 percent had to purchase their water from vendors or landlords. The remaining 21 percent had access to water from a public tap (Kenya Consumers Organization, 1992).

The Nairobi City Council (NCC) is responsible for the city's infrastructure and services like water supply, sewer and drainage systems, roads, refuse disposal, and health care. With few exceptions and apart from water connections, NCC has never provided services in the slums (Kiamba, 1988). The fear has always been that providing services would confer legitimacy to their existence and the argument has been that the city administration has no mandate to service illegally settled areas. But in not providing services, the city neglects its duty to serve all its citizens regardless of their circumstances or living conditions (Lamba, 1994, 21). The slums may be illegal, but the people are not.

Another issue that is of concern relates to information availability on informal settlements in Nairobi. There is no systematic collection of data on the socio-economic or environmental conditions of Nairobi or its slums. In many instances, the data needed simply do not exist, or the relevant information has been derived from outdated population statistics, or inferred from limited studies and reports. The Ministry of Health has a Health Information Section (HIS) that collects, analyzes and reports health statistics for all health care providers in Kenya. The only information available for Nairobi is 1989 outpatient morbidity, and only 73 percent of the total number of health care facilities submitted reports and this data was not dis-aggregated by sex or age. In addition, the NCC Public Health Department has its own information system. Both the NCC and HIS data systems suffer from severe limitations in terms of reporting, analysis and usefulness of data. The only specific information available on the health of slum dwellers comes from select community studies that focus primarily on child health (Lamba, 1994, 24-25).

Most of the demographic data available is usually in the form of small scale community studies, often carried out in preparation for a project or done as project evaluation (Lamba, 1994, 22). These community studies are limited in scope and mainly depict maternal and child health or fertility and family planning. Yet, despite these limitations, community studies offer the best information and insights available on Nairobi's slums. The main problems that characterize the urban poor relate to issues concerning water, sanitation, and garbage or waste disposal, and these are the key concerns that will be discussed.

5. 3.5. Supply and Demand of Water

Nairobi obtains most of its municipal water supply from the Sasumua Dam north of the city and Chania River to the northeast while Kikuyu Springs and the Ruiru Reservoir supply smaller amounts (Lamba, 1994, 27). Boreholes also provide a considerable amount of water for Nairobi, however, there is no reliable data on the extent to which groundwater is being extracted. Hotels, industry, low-density residential and agricultural areas of the city rely almost exclusively on such wells (Lamba, 1994, 27).

The increasing city population and associated socio-economic activities are a strain on available resources in the region. Table 6 below shows the historic and projected future demands for Nairobi. The total demand in 1985, for example, was estimated at 203,000 cubic meters per day, and by 1995, the demand was expected to be 327,000 m^3/day, growing at a rate of 5 percent per year.

Domestic (residential) water demand accounts for most of the water supplied through the municipal system, about 60-63 percent. This is followed by the commercial sector (15-16 percent), the central government (11-12 percent), industry (8-10 percent) and Nairobi City Council itself (2-3 percent) (Lamba, 1994, 28). What is clear, however, is the disproportionate use of water within the city. High-income residential areas, that represent 12 percent of the population, use 30 percent of the water supply. Low-income areas, on the other hand, make up 64 percent of the population and consume 35 percent of the domestic supply. Nairobi's average per capita consumption of water is about 90 liters/day, but per capita consumption in high-density areas is over 200 liters/day, while in low-income areas it is only 20 liters/day (Lamba, 1994, 28).

Table 6: Nairobi Water Demand Projections

Category	Historic 1975	Historic 1985	Projected 1995	Projected 2010
Total Population	73,000	1,162,000	1,950.000	3,860.000
Water Consumption (000's) m^3/day				
Domestic	49.6	81.1	167.5	337.3
Commercial	13.9	20.6	35.2	84.7
Industrial	9.1	12.9	28.8	63.5
Public	8.2	17.5	29.9	71.6
Total Consumption	78.1	132.1	261.4	596.7
Unaccounted	*15.7*	*71.1*	*65.4*	*149.2*
Total Demand	**93.8**	**203.2**	**326.7**	**745.8**

Source: Modified From Lamba, 1994, 28.

A serious problem in Nairobi is what is known as "unaccounted for" water (Lamba, 1994, 29). This is water for which the city receives no revenue, most of which is wasted through leakages and pipe bursts in the system, overflows in the reservoirs, and unmetered and illegal connections, some of which is used for fire fighting and cleaning treatment works. This is common in every city, but this unaccounted rate is exceptionally high in Nairobi: in 1985, such losses were estimated at 40 percent (Stren, 1989). In addition to a loss of revenue, water leakages and pipe bursts act as points through which the water supply can be polluted.

The 1983 Urban Housing Survey reported that 42 percent of households have a private source of water, while 38 percent obtain their water from communal sources (GOK, 1983). However, studies in informal settlements show that the number of households with a private tap is negligible, and the overall supply is far from adequate. Access to clean and safe water in slums is an important determinant of health of

households. An inadequate piped water system results in the use of alternative, unreliable, and unsafe sources of water.

Almost 75 percent of households purchase water from a vendor, which is a rising problem because vendors charge exorbitant rates, so that residents pay almost 10 times the legal rate of water (UNICEF, 1989). This high cost of water limits consumption, affecting personal hygiene and increasing the risk of infection and disease. In addition to low water consumption, methods used for drawing stored water can lead to contamination and risk of disease. When people cannot afford the price, they draw water from nearby streams and rivers that are more than often polluted (Kunguru and Mwiraria, 1991).

In addition to obtaining water from communal points and vendors, a 1988 survey found that informal settlements also get water from roof catchments, open sewer drains, and nearby polluted streams. The choice of water is dependent on so many factors, such as distance, time of day, cost, day of the week, the weather, the use to which water is to be put, and the age and sex of the person available to fetch the water. Rivers and streams are used for bathing and washing. Water from open sewers and streams is added to earth to make mud and wattle housing structures (Mairura, 1988). Inevitably, these sources of water and their use ultimately affect health outcomes.

5. 3.6. Waste Water and Sanitation

As cities consume more water, they also produce more wastewater, which includes sewage, sullage/gray water, water used for domestic purposes, and commercial

and industrial waste water. About 80 percent of the water consumed ends up as wastewater (Kenya, 1985). More people in the city have access to water services than to waste water disposal services (Lamba, 1994, 30). Overall, sanitation facilities fall short of the need in Nairobi. Sewer facilities are over-loaded, poorly maintained, and both treated and untreated wastewater emitted into waterways has become a serious source of pollution (*Daily Nation*, September, 1999).

Sanitation and waste disposal generate severe problems for slum areas. Studies done on several slum areas in Nairobi by AMREF have found that many communities had only one pit latrine for every 19 households. However this varied within villages, with a range of 8-80 households per pit latrine (AMREF, 1992). The situation has been getting worse as more people move into these areas and landlords remove latrines to make space for more rental rooms. Latrines were found to be filthy, inaccessible, offered little privacy, and are generally considered unsafe to use, especially at night. The report also found that the residents were exposed to industrial runoff that seeped into open drainage running through the slums.

The majority of the pit latrines found in low-income areas are mainly the unventilated type. They are poorly maintained and are usually constructed close to houses due to space limits (Lamba, 1994, 31). Such human waste that is in and around these pit latrines contaminates the environment posing serious health concerns, especially for children. The environment is foul smelling, decomposition is occurring, and these areas are infected with flies and worms. Communal toilets are also a problem because they are often points where people are attacked by thugs (Mairura, 1988). This would

imply that actual usage of such communal facilities is far less than what is theoretically assumed; the mere presence of a communal toilet is one thing and its usage is another.

5. 3.7. The Garbage Problem

Residential waste in many slum areas is often disposed of on the ground and into open drains, polluting the immediate areas and eventually the waterways. Solid wastes (garbage) are dumped in open drains that eventually accumulate and overflow to surrounding areas. Stagnation often occurs when such garbage impedes the flow of water, providing breeding grounds for flies, mosquitoes, rats, and other disease carriers.

As with other service provision, solid waste management is the responsibility of the Nairobi City Council (NCC). However, there is evidently an overflow of garbage all over the city of Nairobi. Garbage often sits for weeks in bins and piles before it is collected. In the poorest sections of the city, garbage is virtually never collected! What is even more depressing is that this situation has been a problem for decades, and instead of getting better, it is getting worse.

Poor garbage collection is only part of the garbage problem. Much of the garbage is dumped in uncontrolled open dumpsites, such as abandoned pathways and alleys. In addition to this, the city has no sanitary landfills and no facilities for processing hazardous wastes. Garbage sorting is done informally, by the very poor, who look for reusable or saleable items and who work at their own risk. A few NGOs have started recycling programs, but the scope for such efforts is limited. The city itself does not

sponsor any recycling programs, nor does it have any system of waste separation or provisions to avoid contamination problems (Lamba, 1994, 32).

By most estimates, the city council manages to collect only 20-25 percent of garbage generated in the city. Private garbage firms serve the affluent neighborhoods and the commercial and industrial areas of the city. When garbage in the low income areas fails to be "collected", people find other ways to dispose of it; burning and illegal dumping are the more common alternatives. In the slum areas of Nairobi, garbage is seldom collected partly due to the lack of roads, although this negligence mainly reflects the attitude of the NCC that it is not responsible for services in what it considers illegal settlements.

Another part of the garbage problem is that the city does not have enough garbage trucks to collect the refuse, and is not able to keep its existing fleet in working order (*Daily Nation*, September 1999). In 1989, only 10 of the city's fleet of 40 collection trucks were on the road (Stren, 1992). Trucks often sit idle due to a lack of spare parts or skilled mechanics to repair them. One of the main obstacles to improving this situation is that NCC has consistently favored conventional (and expensive) methods of refuse collection relying on imported equipment, and rarely considering alternative methods and low cost technologies and equipment. In 1992, the NCC discussed a plan to use pushcarts for collection in some areas (Lamba, 1994, 34), but to date this idea has not been implemented. Pushcarts appear to be a good alternative because they are inexpensive to make, can be made locally, and can easily reach slum areas with no formal roads.

The environmental implications of poor waste disposal can be very serious and far-reaching. Since most of the garbage left to decompose in residential areas is organic, the process of decomposition is mostly anaerobic, and piles of waste emit foul smells and act as breeding grounds for insects and rodents. This rotting garbage is often found close to food being sold at small kiosks, markets, butcheries and restaurants, aggravating an already serious environmental health problem (Lamba, 1994, 35). Contaminates that make their way into rivers are transported over long distances, often polluting water supplies for people downstream. Large quantities of earth and debris from the construction and quarrying are dumped in open spaces that scar the landscape and impede the natural flow of drainage. These disposals of earth further cause unseen dangers by their exposure to rain and sediment deposition into waterways (Lamba, 1994, 35). Clearly, poor waste management in Nairobi poses a serious problem that is escalating unless effective measures are put to place.

CHAPTER 6: Results and Findings

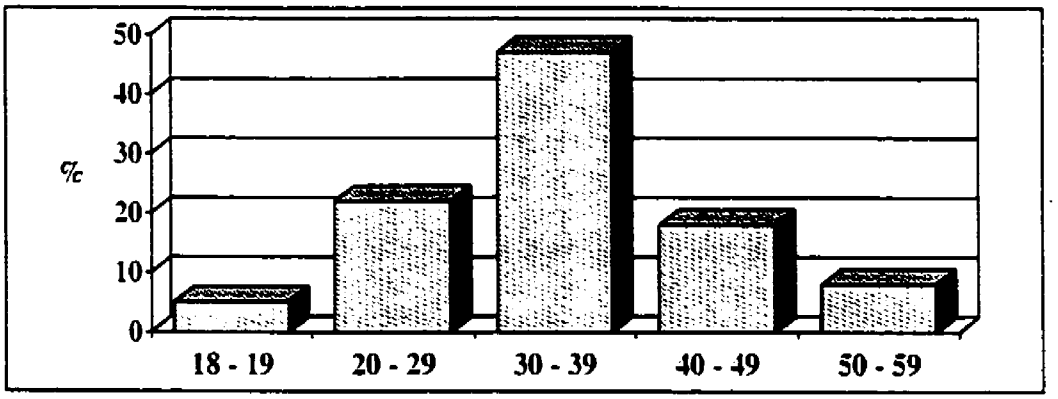
6. 1. Respondent's general profile

This sections looks at a general overview of the respondents, and unless specifically mentioned, the total sample size is always 60 (n=60).

A. Demographics

As seen in Figure 7 below, the ages of the respondents ranged from 18 to 57 years, with the mode falling in the 30 to 39 year age group. The average age was about 34.35 years. As this study was a purposeful sample, it was interesting to see that the range of ages follows a more or less bell-curve, including the ages of young adults to older women.

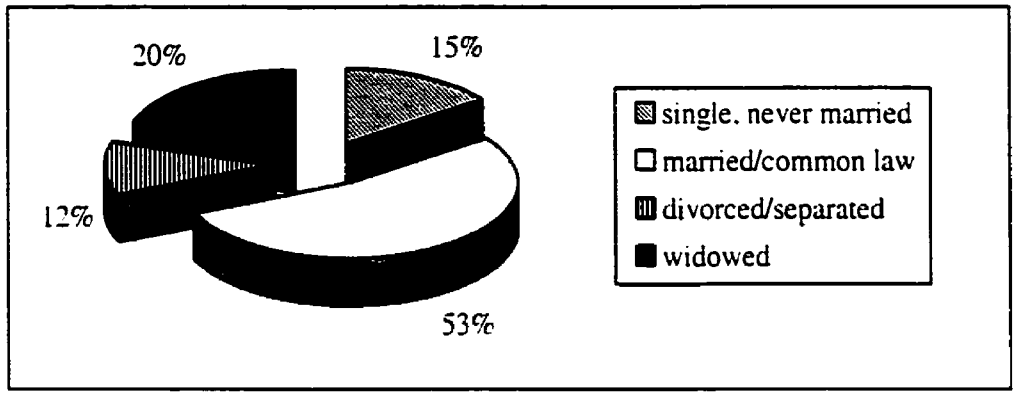
Figure 7: Respondents' age categories



As indicated in Figure 8 below, the majority of the women at the time of the interview were married (or common law) with a spouse present (53.3 percent). The remainder of the women were without a spouse, although over half of these women

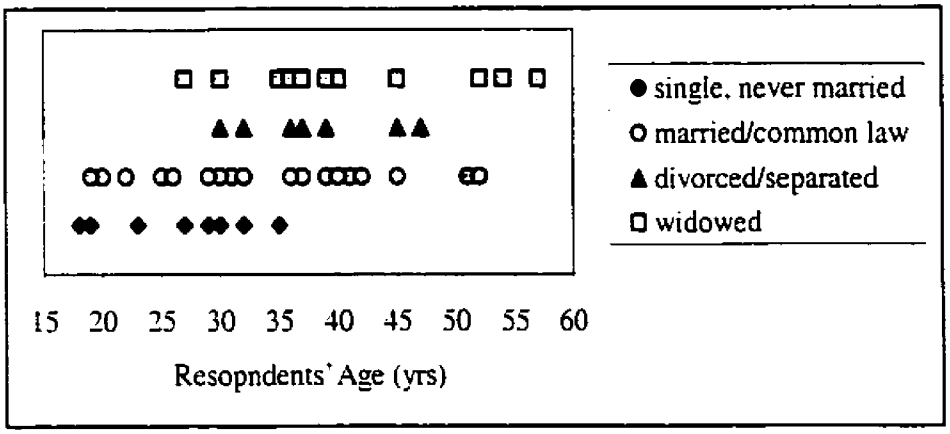
admitted to having a sexual partner. Of these women, 20 percent were widowed with their ages ranging anywhere from 27 to 57 years of age. The single, never married women represented 15 percent of the sample size and women separated represented 11 percent. None of the women claimed to be legally divorced at the time of the interview.

Figure 8: Respondents' marital status



From Figure 9 below, it was somewhat surprising to see that many widowed women were very young in age. For example, one would not expect to see so many widowed women between the ages of 27 and 40. It was also surprising to see that a few women in their 30s were not married, considering there is a stigma attached to never-married women in African society.

Figure 9: Respondent's age and marital status



Note: Some symbols represent clusters.

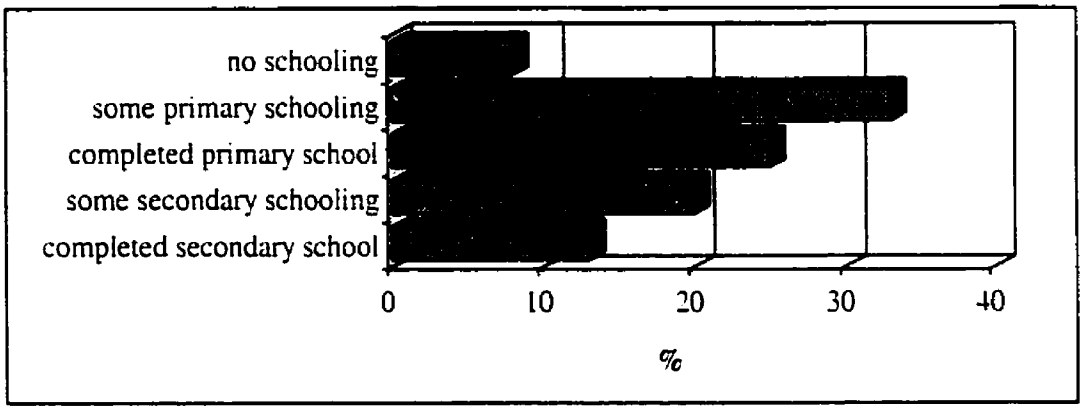
The majority of the women (56 percent) interviewed were of Kikuyu descent, the largest ethnic group in Kenya, followed by Luhya (17 percent), Luo (16 percent), Akamba (6 percent), and the remaining 5 percent included 3 women who were Meru, Nubian, and Kisii.

D. Religion and Education

I was interested in exploring religion and education and their potential impact on women's basic health, knowledge of health care, and access to health care. All the women claimed to be affiliated to a religious sect, with the majority being Christian (98 percent). Of this group, 60 percent belonged to a Protestant faction, while 38 percent were Catholic. The remaining 2 percent represented the 1 woman interviewed who was a Nubian Muslim. Since a little more than a third of the women were Catholic, it is possible that their use of contraception, for example, was lower.

As indicated in Figure 10, over half of the women (n=35) interviewed had some level of primary education (grade 1 to 8). However, only 15 out of the 35 women, or 25 percent, actually completed primary school. Similarly, only 8 women (13 percent) completed secondary school, indicating that dropout rates continue to remain high.

Figure 10: Respondents' level of education



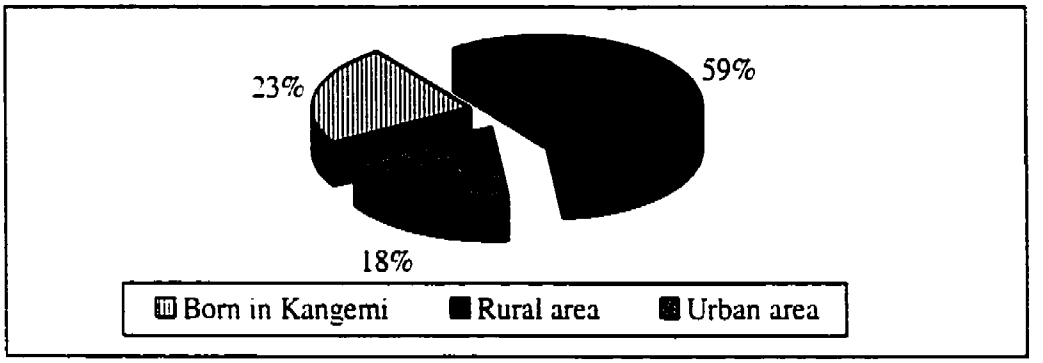
Low levels of education impact other spheres of women's lives such as employment, contraceptive use, knowledge of nutrition and self-medication. It would be interesting to see if low levels of education play a role in the women's overall well-being as has been documented from other studies where women with low education suffer from poor health and health related behaviour.

6. 2. Respondents' residential information

From Figure 11, the majority of the women had migrated into Kangemi from a rural area (59 percent) and 18 percent had migrated from another urban area. Since only 23 percent of the women were actually born in Kangemi, this indicates that rural to urban migration, as well as urban to urban migration, remains a strong force behind the choices

women make to migrate towards centres that offer more perceived opportunity than their source area. In addition, people are moving from other residential areas in Nairobi to slum areas such as Kangemi due to the higher rents elsewhere and the staggering economic situation in Kangemi (KWEC, 1995). Since rents are much cheaper in Kangemi, it is likely that many residents will remain there for long periods of time[23].

Figure 11: Respondents' residential birthplace

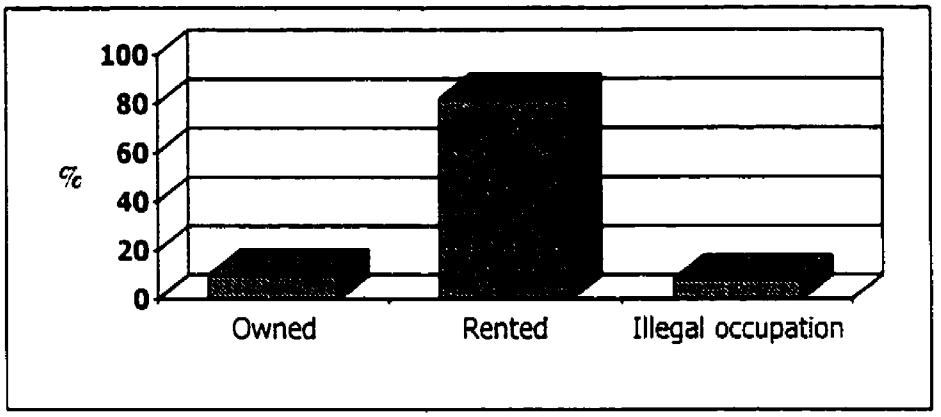


In terms of the status of the women's living quarters, Figure 12 illustrates that most women were renting their dwellings (82 percent), while 10 percent claimed to own the house (belonged to a household member), and 8 percent of women were occupying a house or plot of land on which they built a house illegally. These women feared eviction most of the time, and thus were the least likely to invest in upgrading or renovating their houses. For those women who were renters, they were primarily responsible for the upkeep of their own house as well as of the surroundings around their houses because landlords rarely took responsibility for their property. The most common scenario for

[23] As indicated by a CBO worker in Kangemi.

these women was the instability of renting because they had few or no rights as tenants. Clearly many women who were renters had very little control over their immediate environment; they were subject to rent increments[24], they had no say as far as allowing other renters in their compound who might threaten their safety[25], and were responsible for many duties that were traditionally the duty of the landlord. In addition to this, women felt it was their responsibility to maintain drainage gutters during the rainy season and to clean the communal latrines. All these conditions added to the women's problems.

Figure 12: Respondents' status of living quarters



The average rental property costs about KShs 1,073.00 (or Cdn $22), although some women paid rent as high as KShs 2,700.00 (Cdn $ 54) per month. While there are some

[24] Many women expressed the frustration that landlords could increase the rent as much as 50 percent in a month, allowing the women little or no opportunity to earn the extra money needed. In addition to this, some women felt this was blatant harassment, something they could do noting about as tenants.

[25] Some women claimed that they we unable to voice their concerns about tenants who were clearly a bad influence in their compounds, and such individuals included prostitutes and young men who were perceived as being a bad influence because of their "immoral" behaviors (Respondent # 020). By this, the respondent meant bad habits such as alcohol consumption, promiscuous behavior, etc.

landowners who have title deeds over land, the predominant scenario is that of illegal landlords, so many of the women are not protected by law as tenants. As indicated in the questionnaire, the women were asked to identify some of the advantages, as well as the disadvantages, of their housing location and Tables 7 and 8 represent the various responses identified by the women. The logic behind this sort of questioning was to attempt to understand the kind of living conditions that may or may not affect the women's perception of their situation, as well as to see if it had any implication on their overall well being. For example, several women identified the fact that they did not pay rent as an advantage of their residence, however, this "advantage" was a source of constant stress and pressure because of the fear of eviction. This did have an impact on the quality of their residence (as indicated earlier), as well as the woman's peace of mind because she lacked a safe and stable housing unit.

Almost half of the women (45 percent) said that they perceived their current residence as advantageous because they had access to water (Table 7). However, this access was mainly in the form of communal taps in their residences. Safety, accessibility, proximity to place of work, good neighbours, and clean compounds were seen as the most important positive features of the women's current place of residence. Seven women (or 12 percent) did not see any advantages of their present housing location, and the majority of these women claimed to be occupying a piece of land illegally. As good sanitation facilities and spacious compounds are not characteristically associated with slum areas, they were a luxury for only a few individuals.

Table 7: Advantages of present housing location

Positive features
Most Important Positive features:
Access to water
Good security/feels safe
Accessible (road/path)
Near place of work
Good neighbours
Clean compound
Other Important Positive Features:
Affordable rent
Does not pay rent
Availability of electricity
Availability of jobs/business
Near schools
House/compound not overcrowded
Good landlord
Good sanitation

Table 8 represents the respondent's responses when asked to identify the disadvantages associated with their current place of residence. Most women (45 percent) identified poor or no access to water while other key issues that emerged were a lack of security (unsafe areas in terms of crime and frequent theft), overcrowded rooms and housing compounds, poor or no sanitation and garbage disposal facilities, and no access to, or rationing of, electricity. Only 3 women (5 percent) said that their present housing location was not easily accessible to a medical facility in terms of distance. Nine women (15 percent) said that they did not perceive their current housing location as disadvantageous, but as indicated by one respondent, this may not be an indication of

satisfaction with housing location, rather "relative" satisfaction in light of their overall situation.

> *"Compared to my neighbours, I have to say that I do not see any problems with where I live. I have access to a [communal] tap and because our toilets are always locked, we can only access them by obtaining a key from the landlord. This way we know that the toilets will be somewhat cleaner than in other compounds. However, if I had a choice and made more money I would like to move into a better residential area..." (Respondent # 012)*

Table 8: Disadvantages of present housing location

Negative features
Most Important Negative Features:
No/poor access to water
No security/unsafe area
Overcrowded rooms/compound
No/poor sanitation
Garbage problems/dirty area
No/rationing of electricity
Rent is too high•
Other Important Negative Features:
Poor road/path access
Poorly constructed houses
Fear eviction
Bad/hostile neighbours
No medical access
Uncooperative landlord
Alcohol brewing in neighbourhood

• Includes rent increments

Many of the women's houses lacked proper ventilation and were located close to garbage heaps. On average, most households consisted of just one room, and the sleeping, cooking, and living were all done in that room, affording little or no privacy to individuals; this was an overcrowding of essential living space. Clearly, housing location

and related issues of overcrowding and overall hygiene will affect the women's perception of their health, as well as the health of their families. This became more obvious when the women were asked to identify some solutions that could better their current health status. In Table 8 women clearly point to the fact that a cleaner environment (personal space and surrounding homes), that is less crowded, and houses that are well maintained (a responsibility of the landlord towards his tenants) will impact their overall health. As one respondent said,

> *"Women in Kangemi are concerned about the lack of cleanliness in the villages and how it negatively impacts our health.... I feel that we need to come together and solve this problem, because only then can we achieve the level of health needed."(Respondent # 019)*

While most women in many slum areas share several of these grievances, Kangemi is a better-served community than most slum or squatter areas in Kenya (Lamba, 1997, 12). However, as indicated in this study, most women still have no or poor access to very basic necessities such as water, electricity, sanitation, and security all of which impact their overall well-being. Issues of cleanliness and garbage disposal remain an unsolved issue for the women. While the women attempt to manage their own homes, landlords and city council continue to neglect such communities.

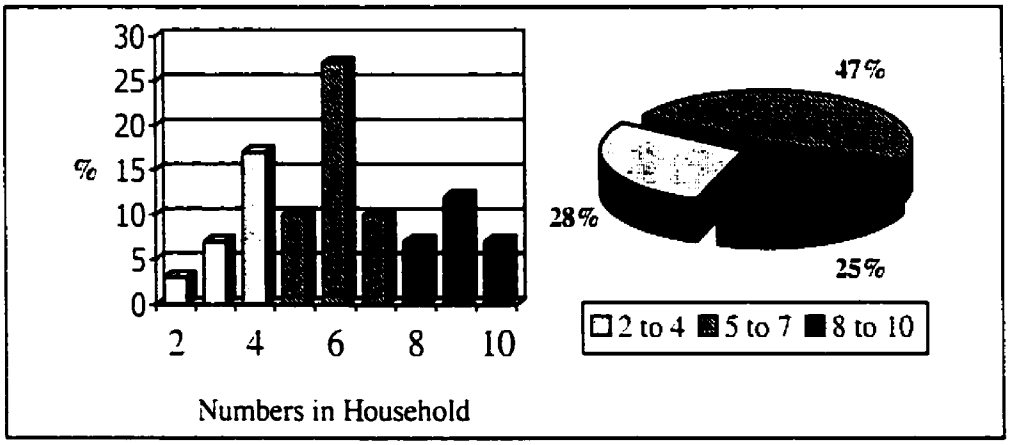
Safety issues were a big concern for the women. Theft and harassment by men were serious problems for the women, especially because paths, and communal toilets were poorly lit, making these target sites for thugs. Taken altogether, all these issues were worrisome for the women, who, in addition to struggling in an impoverished

environment, now had the added burden of a lack of very basic necessities that could help lessen their problems.

> *"Kangemi is not a good place to live and bring up children. I do not make a lot of money and my rent is expensive...I have no peace of mind because I have to worry about cleaning the garbage around my house, spending a lot of time lining up for water, and I am always worried for mine and my children's safety."* (Respondent # 004)

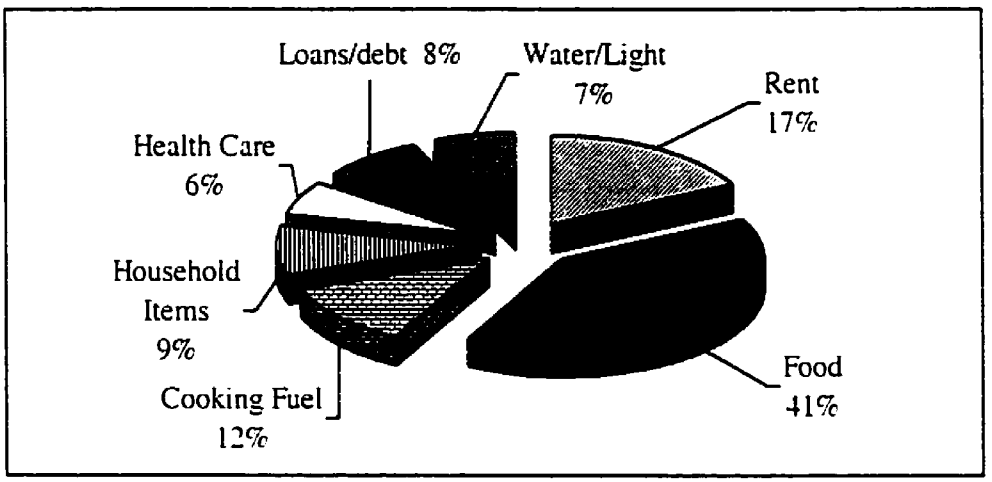
Another related issue is the number of individuals living in one household unit. From Figure 13, the average household consisted of 6 individuals. The tendency in this community was to have large households, a problem for women who were the sole income earners of the household. As indicated in the pie illustration, almost 50 percent of women interviewed had between 5 to 7 people living in one household. This is highly problematic since many of these households consist of only one or two rooms, further contributing to overcrowded living accommodations, and poor health in the long term.

Figure 13: Number of individuals living in a household



When the respondents were asked to identify their household expenses, the purchase of food represented the largest household expense (Figure 14). However, aggregate data from this chart conceals the fact that many households did not have adequate nutrition simply because they could not afford to buy enough food. Altogether, women spent a small portion on buying water and electricity (7 percent) and health care (6 percent). For the woman who earned KShs 1500 (Cdn $30) a month, that averaged KShs 600 on food, which translated to Kshs 20 (Cdn 0.40) a day in food expenditure. To make sense of the situation, it costs on average about KShs 15 (Cdn $0.30) for a loaf bread in Nairobi today. How then was she supposed to run her household, pay for health care, and bring up her children on such scanty earnings?

Figure 14: Respondents' average household expenses



When asked which individuals contributed money toward her household, approximately half of the women interviewed (46 percent) said that they were the sole income earners in the household (Table 9). This portion of women could be considered

to represent "female household heads" in terms of economics. Slightly under half of these women had a spouse present, indicating that even women with a partner were primary, if not the exclusive, contributors of household income.

Table 9: Percentage of households by source of monetary contributions to the household

Type of contributor	Percentage
Female headed households who were solitary contributors	46
Households with male spouses/partners who contribute	28
Households with children who contribute	19
Households with siblings who contribute	5
Households with parents who contribute	2

In 28 percent of the sample, spouses (or partners) contributed to the household income; this figure is rather startling considering that 50 percent of the entire sample consisted of women living with a spouse/partner. Evidently, the very few male-partner contributors towards the household indicated some level of irresponsibility towards overall household coping strategies. While some women said that their husbands' (or partners') were not employed at the time of the interview, the overall picture is that many men seem to be opting out of contributing towards the household. Contributions by a child (or children) represented 19 percent, and very few siblings and parents of the respondents were able to contribute money towards the households. As one respondent said,

> *"My earnings go into looking after the house, feeding the children and paying the rent. I cannot expect my husband to help out, unless I do not make any money. He spends his money on alcohol and other things that make him happy."* (Respondent # 004)

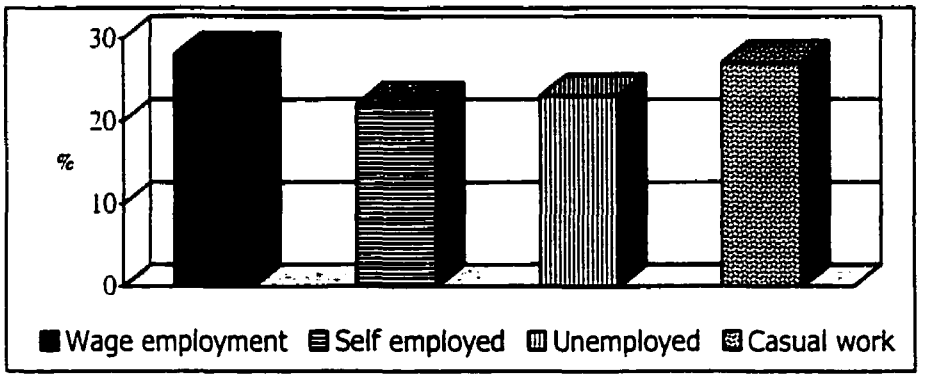
When we consider the issue of the women's residential and household information in its totality, particularly in terms of their income, income contribution to the household, household structure and location, and household expenses, it is evident that a majority of the women are particularly vulnerable to infrequent and sporadic events that diminish their monetary capacity towards caring for themselves as well as their households. This point is further emphasized in the next section when we consider the women's employment information.

6. 3. Respondents' employment information

A. Employment status

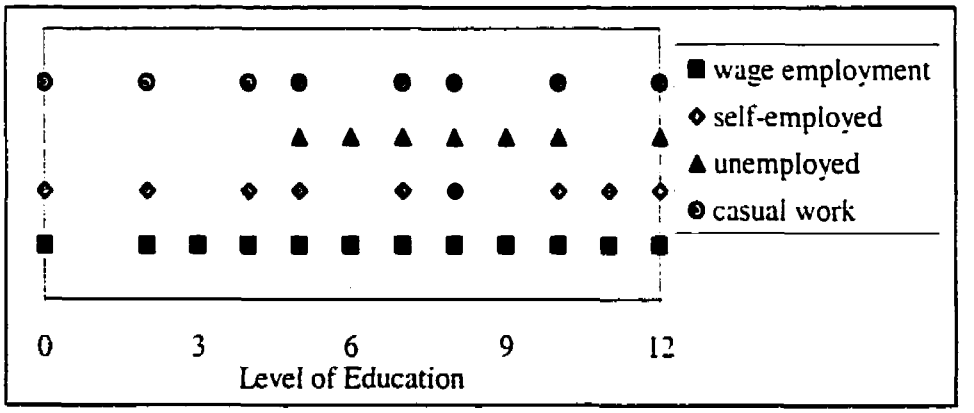
From Figure 15, it is evident that there is a similar representation in all four employment categories. The largest category represented women engaged in wage employment (28 percent), indicative of those who got paid a more or less monthly salary from an employer. The next category of women did casual work (or sometimes referred to as informal employment), characterised as those types of work that are not permanent, and are irregular odd jobs that women spent a lot of time looking for. Such jobs included domestic work as house servants, washing clothes for neighbours, digging, and commercial sex work. Fourteen respondents (23 percent) claimed to be unemployed currently and in the month previous to the interview, and women who claimed to be self-employed (22 percent) were those women who were market sellers, owned kiosks, or sold cooked food to labourers.

Figure 15: Respondents' employment status



I was interested in finding out whether the women's level of educational attainment affected their income earning potential. Figure 16 below compares the levels of education with type of employment. One would expect that the higher the educational attainment, the greater the potential for making money, usually indicated by the nature and stability of one's income generating activity, wage employment being most stable. However, this is not that apparent. There is only a marginally significant correlation between level of education and employment status. Women with no education to higher

Figure 16: Individual respondent educational attainment and employment status



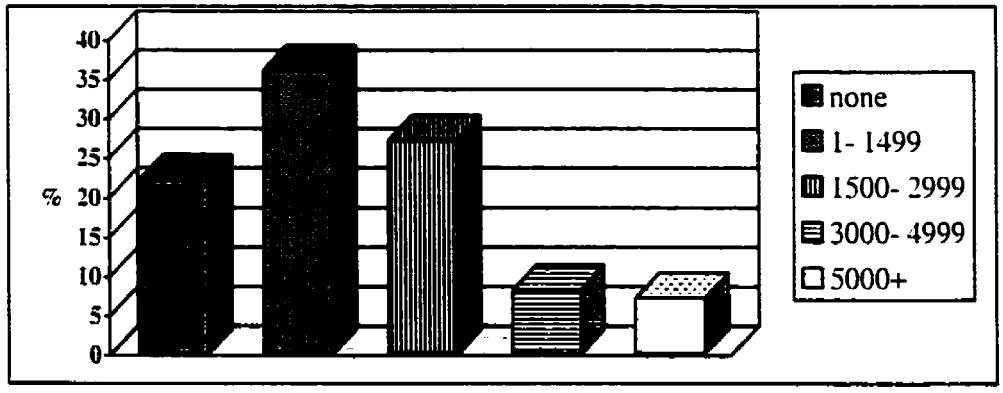
Note: Some symbols represent clusters.

levels of education (grade 10 and upward) were engaged in wage and self-employment activities. The only anomaly was the women who were "unemployed" at the time of the interview because these were the women who had some level of education between grades 5 to 10. While this sample size is too small from which to generate trends, it would be interesting in future studies to further explore the issue of level of education (and skill) and the nature of women's employment activities.

B. Income level and stability of income

The nature of one's employment activities affects the income generation potential for each woman. From Figure 17, the ranges of personal income (as indicative of earning of month previous to interview) were from no income (13 women) to small amounts of KShs: 200.00 (Cdn $ 4) to 9000.00 (Cdn $ 180) per month. The average wage earned was about KShs 1770 (Cdn $ 34.5), and the mode range of income was between KShs 1

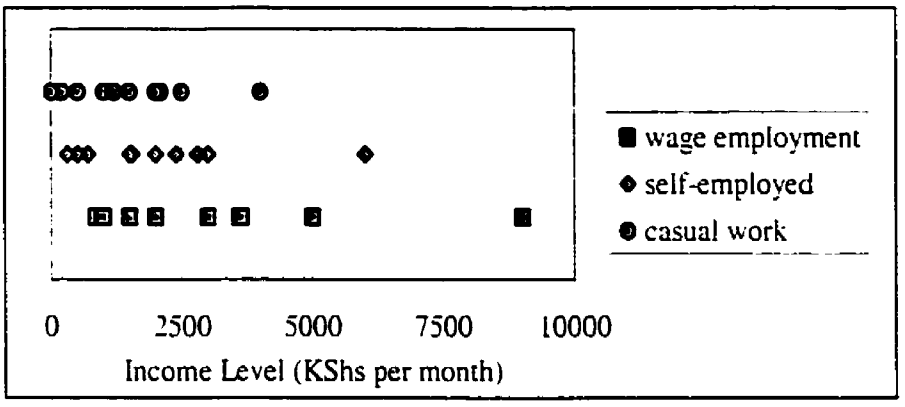
Figure 17: Respondents' income level (in KShs)
(approximately KShs 50 = Cdn $ 1)



and KShs 1499 per month. While some women appeared to earn reasonable incomes, they might still be impoverished due to factors such as large families, lack of assets and poor living conditions. In addition, self-employed women would be forced to invest some of their earnings back into their micro enterprises.

As one would expect, the type of income generating activity impacts the income generating capacity for the women. As indicated in Figure 18, women who did casual work were within the low-income bracket, earning less than KShs 2,500 (Cdn $50) per month.

Figure 18: Income levels and nature of women's employment



The one woman who earned the most money was engaged in wage employment; however, in general, wage employment salaries were still low for many women. Therefore, irrespective of the women's employment status, earning potentials were low for all 3 categories, but relatively lower for those engaged in causal types of employment. While it appeared that some women were above the country's absolute poverty line, in terms of actual stability of income ("did this amount equal an average amount for every

month?"), most women (78 percent) said their sources of income were not stable. When we consider the nature of the women's employment activities, and their potential earning capabilities, it becomes clear that for most women their monthly income was not stable in terms of actual amounts expected.

As previously mentioned, the type of income generating activity (or activities) affects the stability of the women's economic contribution to the household. If we consider the information obtained from the section on women's residential data, it is quite conceivable that many of these women are indeed vulnerable based on the fact that they are unable (for whatever reason) to secure for themselves a stable and conducive residential and working environment. The vulnerability of the households becomes clear in types of responses generated when the women were asked about what they did cut back on when they were short of money (Table 10). This kind of question allowed

Table 10: When short of money, what do you cut back on?

	Items cut back on	Frequency	Percentage (%)
Necessities	**Food**	**42**	**70**
	Rent	14	23
	School fees	11	18
	Health care spending	9	15
	Cooking fuel	7	12
	Household items	6	10
	Transportation costs	4	7
	Buying water	3	5
	Buying clothes	1	2
Other	**Does not cut back, but relies on debt/borrowing**	**22**	**37**
	Buying food on credit	10	17
	Skipping/substituting meals	10	17
	Just sits and waits	2	3

women to identify several possible responses. Most women (70 percent) said they cut back on food, while others resorted to skipping meals (usually lunch for dinner) or substituting one meal for another (eating less protein and more starch).

Cutting back on basic necessities such as food, water, health care, school fees, and clothes are sobering responses that highlight the precarious situation that slum women are in. An interesting response when asked the question "what do you cut back on when short of money?" was that 37 percent of the women said they relied on borrowing money (increasing their debt) when short of money. While this does not evidently signify "cutting back" per say, it does, however, indicate a type of response that is used by the women in coping with their situation. This response was one that was also echoed in the section under household coping strategies. As indicated by one respondent.

> *"When times are hard and I have little money to run my house with, I try and increase my debt by borrowing from friends or taking an advance on my salary. I try as much as I can not to cut down on spending money on essential things like food and buying water because cutting back on these things can impact the health of my children, and that is something I will try to overcome." (Respondent # 006)*

6. 4. Household coping strategies

One of the major objectives of this study was to identify some of the women's coping strategies in light of their impoverished situation in Kangemi slums. Household coping strategies are one way of identifying those measures that the women are taking in order to survive their daily hardships. As indicated in Table 11. the most obvious response to the question "what are your household coping strategies" was doing other casual jobs whenever it was possible. Twenty-five women (or 42 percent) resorted to

Table 11: Respondents' household coping strategies

	Strategy	Frequency	Percentage (%)
Monetary	Relies on her job/business	17	28
	Relies on debt/loans	15	25
	Money from husband/partner	12	20
	Family members assist her¶	11	18
	Salary advance	3	5
	Women's merry-go-round contributions	2	3
Other	Does casual jobs"	25	42
	Skipping/substituting meals§	10	17
	Small business from home	9	15
	Children are sponsored	8	13
	Borrowing household items from friends	6	10
	Working for her landlord	2	3
	Young children work‡	2	3
	Buying second-hand clothes	1	2

¶ Mother, uncle, and sister.

" Washing clothes, digging trenches/gardens, braiding hair, selling fruits and vegetables, and selling cooked food to labourers.

§ Eating less meat and milk, eating porridge instead of bread and butter, etc. Also relying on firewood. Fed by BIG twice a week, and school fees paid by Upendo Unit.

‡ Help collect plastic bags and newspapers to sell.

this form of coping that enabled them to provide for themselves and their households when times were hard. Once again, this points to the fact that many women do not have monetary security in their income generating activities. These casual jobs included washing clothes, digging trenches and tending to gardens, braiding hair, selling fruits and vegetables, and selling cooked food to labourers. Many of these jobs involve hard, arduous work, in addition to time spent away from the women's families.

The fact that 25 percent of the women said they relied on borrowing money further stressed their financial insecurity. While there were moneylenders, most women were wary of them and tended where possible to secure loans from individuals they were familiar with, such as employers, friends, and women's groups to which they were affiliated. Even though this informal borrowing did not usually involve high interest levels, the women were still seriously disadvantaged against future earnings and crisis.

For ease of interpretation, the responses from Table 11 have been divided into monetary coping strategies, and "other" coping strategies that include skipping/substituting meals, working a small business from home, borrowing household items from friends, and buying second-hand clothes (in Kenya often referred to as *mitumba*). It was interesting to see that having your child sponsored (by the church or another organization) was identified as a coping strategy because it allowed the women some degree of relief as far as feeding, or paying school fees, for the children. Two women said that when times were extremely hard they got the children to help out by collecting newspapers (etc) and selling them, an indication that child labour is a source of income in impoverished households, and provides additional income that helps in economic household coping.

In household coping strategies, economic coping is just one facet of "survival", and tapping into some of these coping strategies may help us to understand the women's coping mechanisms and how these can be used to inform policy makers. Clearly, in terms of economics, providing women with more secure and stable venues for income generation is vital to household survival. Complementing this is their lack of a safety net

in terms of what they can fall back on when money is short, and borrowing money is one way that appears to temporarily relieve the problem. While this study does not look at the specific details of borrowing money (logistical issues such as interest rates, if any, duration of payback time, the ease with which one can get a loan, etc), the possibility of providing credit facilities to slum women remains an option, one that is often emphasized in studies that propose to empower women economically.

Of specific interest here is how these coping strategies negatively affect women's health and well-being. For example, women who spent their time looking for laborious jobs like digging drainage trenches often complained about their health. One respondent said. *"I know that I have back problems because of the kind of work I do [digging drainage trenches], but I have no choice. We have to make ends meet" (Respondent # 017).* At the same time, skipping and substituting meals while engaging in such backbreaking affords these women poor nutritional status, and many suffer from malnutrition and weakness.

> *"There are days when I go without food for up to 2 days, and all I do is drink tea [without milk] and water. When I am able to buy some food, I look for bulk foods (quantity) rather than nutritious (quality) food, and even then, I first make sure that the children eat. Yes, I worry about my health..." (Respondent # 030)*

> *"When money is less, I substitute milk for meats, eat less vegetables, and substitute porridge for bread and butter." (Respondent # 001)*

6. 5. Health information

This section deals with issues relating to the women's health and well-being, and covers topics that include the types of health care services used, the various strategies and health care options available to the women, individual perceptions of health and well-

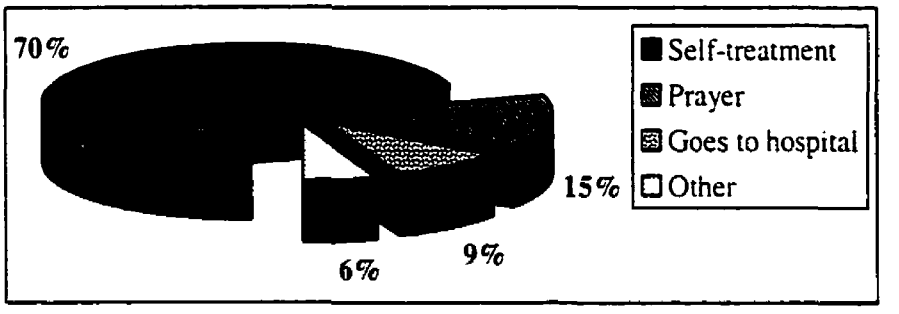
being, community initiatives towards health care provision (direct and indirect), the barriers to achieving optimal health, and issues relating to family planning, fertility, and STDs and HIV/AIDS.

6. 5.1. First response of treatment

When the women were asked what their first response of treatment was when they felt unwell, most women (70%) said they resorted to self-treatment, usually in the form of self-medication[26] (Figure 19). However, it was the variety of responses that were interesting. One woman said:

> *"I usually pray first, but for minor problems I buy medicine from the store or even use some herbs that I have learnt to make for treatment." (Respondent # 012)*

Figure 19: First response of treatment when the respondent is sick



It was somewhat surprising to see that 15 percent of the women said they prayed when they fell sick, indicating that on some level faith is an important facet in the notion

[26] This was consistent with other studies.

of sickness (and other related problems), something that is often overlooked in biomedical health care provision and treatment. Therefore, when the women were ill, they reported that they sought self-medication first, rarely going straight to the hospital or other medical facilities.

The next line of questioning was to find out some of the reasons for seeking medical treatment outside the home or realm of self-treatment. As indicated in Table 12, 65 percent of the respondents sought treatment when self-medication/treatment failed to help the problem. When further questioned about the issue of self-medication, the perception of the women seemed to be that they would choose to self-medicate by purchasing drugs from the shop or chemists, and that they would only seek hospital (or other) care if they did not get better. As one woman said, "*When both prayer and self-medication fail, that's when I go to the hospital to seek help from a doctor.*" *(Respondent # 020)*

Table 12: Reasons for seeking medical treatment outside the home

Rationale	Frequency*	Percentage (%)
Main reasons		
When self-treatment fails	39	65
For the treatment of children	26	43
If the respondent is unwell	18	30
Other reasons		
When prayer fails	5	8
Serious problems that cannot be treated at home	2	3
Rest is not working/pain becomes unbearable	2	3
To find out what is wrong with her	1	2
When new complications arise	1	2

*Respondents were able to select more than one category

Another popular response was to take the children to hospital when they got sick. When asked what their role was in terms of protecting the health of their children, women said that their primary role was to monitor them carefully and/or take them to the hospital when they were ill. I was surprised to see that only one woman said she went to the hospital to find out what was wrong with her, indicating that curative health care options are the main reasons for people seeking medical care outside the home.

Prayer was an option for some women, and the majority of the women regarded prayer as a source of hope, saying that prayer was a way to relieve family problems and personal stress and worries. One woman said that she believed in prayer, yet she saw the benefit in other health care facilities:

> *"I am a strong believer in prayer, and it has always worked for me. I rarely go to any hospitals because health care is too expensive for me. Given the choice, however, I feel that private hospitals are better because their services are good, but government clinics are more efficient in matters that relate to family planning and birth control." (Respondent # 016)*

Such responses indicate that some women rely on prayer as a form of health care management within the sphere of their own households. At the same time it tells us that women seek treatment outside their homes for various reasons, and they choose certain health facilities over others based on certain perceived notions of what type of health care can better suit their specific needs. One woman provided an excellent summary of what may represent health care strategies for many women when she said,

> *"At a mission health care facility like St. Joseph's Dispensary, the medicine works. At a government clinic you can get treated so long as you pay for your own medication and syringes. At private clinics, medication is always available so long as you have the money to pay for the service. And spiritual healers are*

good for relieving stress and getting hope, but not for treatment of illness." (Respondent # 014)

Although these responses will need to be pursued further in another study, it is my impression that women in the community view it as inappropriate for themselves to seek medical treatment or consultation outside the home if a "problem" is perceived as "minor". It was common to hear declarations such as these:

"I have been having constant backaches and headaches for a while now, but since these are not serious problems and can be treated at home, I do not see the need to go to a hospital...." (Respondent # 020)

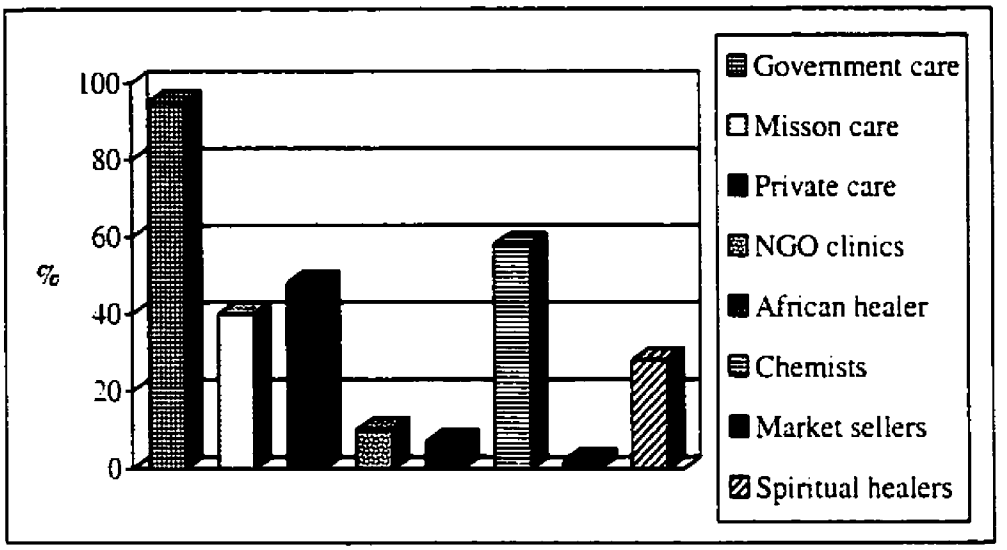
"These problems I have are not so serious, so self-medication is adequate for me..." (Respondent # 057)

When the women did seek medical treatment, I was interested in knowing which types of health care services the women had used or were currently using. Figure 20 represents the types of health care services the women had used in the last 10 years. Women were able to identify more than one health care option, multiple and varied strategies being common amongst almost all respondents.

Almost all the respondents (95 percent) had used some form of government health care (hospitals and clinics), followed by chemists serving as sources of information and treatment (58 percent), and then private hospitals and clinics (48 percent). Very few women relied on traditional African healers as a form of health care provision, but reliance on spiritual healers, mostly through the church, was a popular option for 17 (28 percent) women.

"I do not like to use (traditional healers) because they cannot be trusted. I know of women who have visited such people and have had bad experiences. One African healer took advantage of a woman and she barely escaped with her life...". (Respondent # 022)

Figure 20: Types of health care services used by the respondents in the past ten years

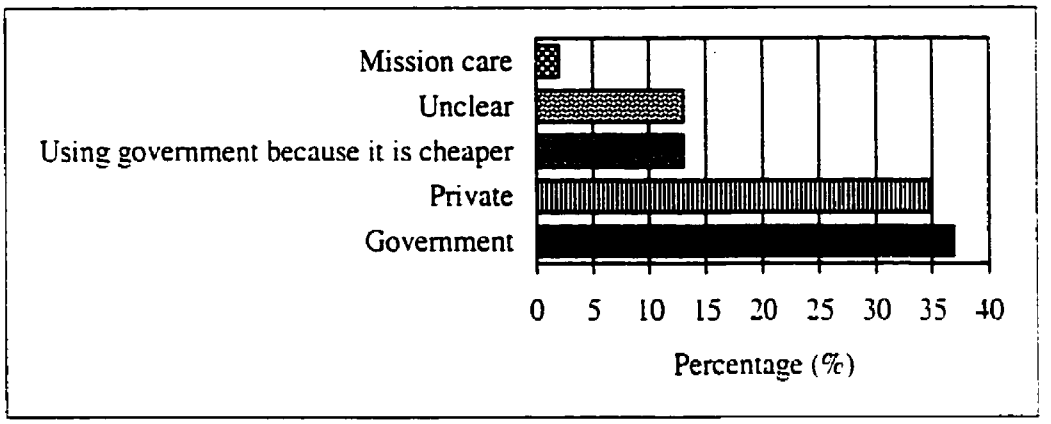


Over the course of the interviews, it became clear that the types of health care services the respondents were using were not necessarily their preferred health care option. As indicated in Figure 21, most women (37 percent) preferred some form of government health care option given the choice, followed closely by 35 percent who preferred private health care. Eight responses (13 percent) were unclear[27], and only 1 woman (2 percent) indicated that she preferred mission/church provided health care. Of the responses provided, 8 women (13 percent) indicated that they were only using

[27] These women indicated positive and negative features of several types of health care facilities, but based on their responses, it was not clear if they preferred one facility over the other.

government health care because it was cheaper, but did not explicitly indicate which option was their preference.

Figure 21: Respondents' preferred choice of health care service



In an attempt to understand the women's perception of the various health care services available to them, the respondents were asked to identify the advantages and disadvantages of the various medical and health care facilities that they had used. Table 13 represents the reasoning behind using certain health care facilities over others.

Most women were satisfied with the services provided at these facilities but said the cost and lack of drugs for treatment were the main criticisms. However, there seemed to be varying views among the women concerning the pros and cons of the different health facilities and options. Specifically, 30 percent said they found government facilities to be cheaper and more affordable. Of the respondents, 13 percent said they found government care to have qualified/trustworthy doctors, and 13 percent said that at a government hospital it was possible to receive treatment without payment. Overall,

government run facilities tended to be cheaper, more accessible, and good for treatment of children and other specific problems and services.

Table 13: Reasoning behind respondents' health care option and strategy

Medical facility	Advantages	Disadvantages
Government	Cheaper/more affordable Qualified/trustworthy doctors Free treatment Good for children's problems^ Treatment works/good services Good for some aliments* Easily accessible Other@	Diagnosis alone: need to buy medication No medicine/drugs Improper/poor medication Long waits Rude to customers Nurses want bribes Expensive services
Private	Good treatment/services Better/adequate medication Fee includes medication Less waiting time	Expensive fees Incomplete diagnosis Need to pay for medication
Mission	Reasonable fees Easier payment options Has faith medicine works Provide information/advice Children's treatment is free	Not enough medical equipment Usually referred to a hospital
Other	Spiritual healers for relieving stress/worries/family problems Occasionally uses herbal medicine Traditional healing works for her Prayer works for her NGO# for family planning/breast-feeding information $	Chemists are very expensive Does not trust traditional healers Chemists should not give out medication w/o a prescription

^ Children under 5 years of age are treated for free.
* Family planning, birth control, teeth problems, more serious/complicated health problems.
@ Bigger/better facilities, free vaccinations, and good follow-up checkups.
# At BIG (Breastfeeding Information Group in Kangemi).

However, a few women (13 percent) did say that at the government run medical facilities, the consulting fee included only medical diagnosis and no medication, which was seen as an unfair practice considering that the consultation fees were so high. Other common issues with government run hospitals and clinics in Kenya include the fact that often these facilities were poorly or inadequately stocked with medication, there were longer waits, and customers were treated badly. As one woman pointed out, *"(private hospitals) run like a business, and therefore they have to ensure that their customers are treated well so they can return and give them more business" (Respondent # 059).*

With regard to private medical facilities, the general consensus was that they provided good treatment, medication and services, even though they were somewhat more expensive. However, as indicated by one respondent, " *government hospitals have begun to increase their fees to such high rates that you are better off going to a private hospital where at least they have adequate medication and there are fewer waits" (Respondent # 032).* Among negative perceptions, 13 percent of the women said that they found private care to be overly expensive.

Through discussions with a community health care worker, it is accurate that the fees at church-based clinics are somewhat cheaper and reasonable, and most community members who are registered with the St. Joseph Dispensary, for example, have access to more flexible fee payments than other medical facilities[28]. However, since they are run on a small scale, particularly St. Joseph (the Worker) Dispensary, only a limited number

[28] An interview with community health care nurse from St. Joseph Medical Dispensary (Kangemi) on September 7, 1999.

of individuals can be treated, and facilities and services provided, although they can only cater towards specific problems. Often, patients are referred to larger, better-equipped government hospitals because the church operates on a much smaller and limited scale of potential delivery. It is my belief that such health care provision is certainly beneficial to slum communities like Kangemi, but a lack of funding and staff remain the greatest hindrance to this option in the long term.

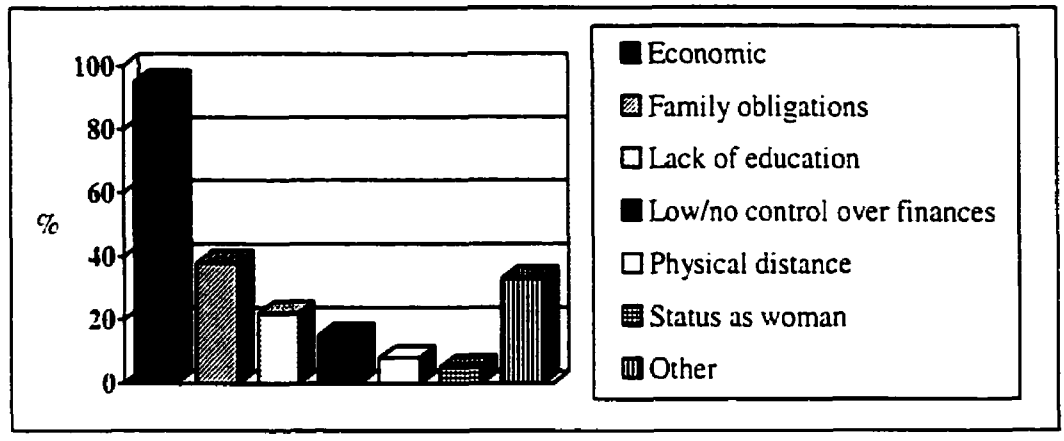
6. 5.2. Perceptions of health and well-being

When the respondents were asked if they were satisfied with their present health status, the majority of women (67 percent) said they were NOT satisfied. Over the course of the interview, however, it became clear that the women's perceptions and definitions of health and well-being were very different from my perceptions. When the women were asked to specifically identify health or well-being problems and illnesses that they had at present, many women claimed to suffer from problems related to headaches, backaches, and poor nutrition. However, these women often stated their health status was "good" simply because these "problems" were "minor inconveniencies" that did not interfere with their everyday functioning. Sadly enough, many women did not see the need for concern with their own health when faced with "minor" problems, even though these problems could have bigger, more serious repercussions that may have a larger impact at a later point in their lives.

Related to personal health dissatisfaction, this study attempted to identify those things that the women perceived to be barriers for them to achieve better health status.

From Figure 22, when the women were asked the question, "what is in the way for you to obtain better health?" they provided a variety of responses.

Figure 22: Perceived barriers to women achieving better health



Most women identified economic reasons as the main issue (e.g. lack of money). Family obligations was another category that was identified by 38 percent of the women as being in the way to them achieving better health ("my children get treated first", or "too many mouths to feed"). Only 5 percent identified their gender as an obstacle to achieving better health ("men are always favoured in society"). The "Other" category included: stress/worries, lack of food, abusive husband, and over-crowding.

Economic insecurity is once again an issue that the women themselves have identified as being a barrier to them achieving a better health status. It is obvious that the government is doing very little for the women, and being a somewhat separate and closed community from the rest of the city, I was interested in finding out what the community was doing to help the women with their health as well as the health of their families.

Table 14 represents the views shared by the women when they were asked what the community they lived in was doing to help them and their families with the provision of health care. The key informants also echoed many of their opinions. As seen in the table, 30 percent of the respondents said that the community was not doing anything to help them or their families in terms of health care provision.

Table 14: Community initiatives to help respondent with her and her family's health

	Direct/indirect support	Frequency	%
Monetary	Help raise money to pay for hospital bill	16	27
	Children/orphans' treatment is free‡■	3	5
	Women's groups collect funds⊘	1	2
	Church dispensary provided medication at low cost■	1	2
Educational	Sharing ideas/information on health issues	12	20
	Community health care workers educated people	3	5
	Seminars provided by St. Joseph‡■	1	2
Other	Community helps cleanup the villages◄	14	23
	Help take a sick child/person to the hospital	9	15
	Neighbours give food/clothes for a sick person	7	12
	Women look after children if respondent is sick	3	5
The community is not doing anything		18	30

‡ Interview with a Catholic Sister working for a mission clinic.
■ Interview with a local community health nurse working at a mission clinic.
⊘ Interview with the director of a CBO in Kangemi.
◄ Interview with a locally trained community health care worker.

The most popular responses for community-based informal programs included monetary aid, i.e., the community initiative of getting together to raise money to pay for hospital bills, and educational aid, which had a less direct impact, and involved sharing of ideas and information on health issues, particularly common amongst the women who

share advice and knowledge on treatment options. The "Other" community initiative involved clean-up campaigns that rid the villages of garbage, stagnant water, digging drainage canals, and disinfecting hazardous pest-infected sites.

From the above category of responses, most community initiatives have the potential to impact women's health status in a less direct way, but the emphasis of a support network is sometimes more beneficial to the women than actual monetary contributions. For example, looking after a sick child when the respondent is sick is extremely advantageous if the woman lacks an extended family network that can provide childcare, especially if she has to continue with her income generating activities.

The women were then asked to identify those strategies that could be incorporated at the community level that could help improve women's health status. Table 15 highlights the women's responses. The responses varied from individual or personal initiatives, community initiatives, government initiatives, ideas at the level of health care provision, to informational initiatives. The most commonly cited initiative was related to economics:

> *"If women had the money, they would stand a better chance of having better health because they will be able to look for medical help when they need it and they would also have good nutrition, hence better health." (Respondent # 045)*

> *"If I had more money [from a better job or business], I can seek better treatment, more frequent treatment, and be able to prevent diseases from starting or getting worse." (Respondent # 021)*

Table 15: What can be done to improve health care in your community?

Initiatives	Respondents' proposals	Frequency	%
Personal	If respondent had a better job/stable/more income	26	43
	Better personal hygiene/cleanliness	14	23
	Taking better care/communication of the children	13	22
	Eating nutritious food	10	17
	Less stress/worries/laboured work	3	5
	Prayer	2	3
	Using clean water	1	2
	Other†	3	5
Community	Need to share ideas/information/advice	9	15
	Community clean-up efforts for cleaner environment	9	15
	Less overcrowded rooms, houses	4	7
	Landlords need to become responsible for their property	3	5
	Other‡	2	3
Government	Need for more health care workers to educate people	29	48
	Looking into waste management and sanitation	6	10
	Need to resume spraying pesticides in the villages	2	3
Health care	Need for right/appropriate medication	3	5
	Need for affordable (private) health care	2	3
	Provision of medical schemes/insurance	1	2
	Need for free treatment/medication for poor people	1	2
Information	Need to actively participate in health seminars (target men and youth)	6	10
	Women's groups should share/distribute health info.	5	8
	Information can be distributed at service/other points	4	7
	Doctors/nurses need to visit people in their homes	4	7
	Attending chiefs *barazas* as they have frequent contact with the people	3	5
	Increasing health care information in schools	1	2
	Other∫	3	5
Does not know what can be done		**1**	**2**

† Getting a good education, avoiding promiscuous behaviour, and seeking medical assistant when you fall sick.

‡ Less overcrowded classes to reduce spread of diseases, joining a women's group (money and advice).

∫ Changing negative attitudes towards community health care workers, increase usage of radio and posters, and targeting people who live deep in the villages.

Many women expressed the desire to have their own business so that they could have more money, more choice, and thus improve their health. It was common to hear the women say that money was the main hindrance to their situation, and having more monetary freedom would allow them to move to a better residence, access better and more frequent health facilities, provide better nutrition for the children, and cause them less stress and worries about providing for themselves and the future of their households. One woman in particular was concerned about the fact that her lack of income, and subsequent dependence on her husband, was a major problem for her:

> *"If I had a job, I could become more independent and not have to wait for my husband to make decisions, especially when the children get sick, I cannot take them to the hospital right away without him providing me with some money." (Respondent # 006)*

In Kangemi, therefore, it appears that women seek both monetary securities in terms of better, well paying jobs or businesses, as well as monetary independence, especially in autonomous decision-making that concerns themselves and their households.

Most women felt that the dirty and neglected environment in the slum area was a health hazard, particularly the issue of neglected houses and surrounding areas. One woman said,

> *"Stagnant water from burst drainage pipes is posing a health hazard to us. There is a lot of dirty water lying around, and many children and women use this water without realizing that it is filthy. Furthermore, the water causes the paths to get so muddy, they become inaccessible for us, leave alone any car trying to come into the villages." (Respondent # 009)*

While many women attempted to clean up their personal homes and surrounding compounds, it was clearly stated that the landlords needed to take more responsibility for their own property. It was common to hear declarations such as this by one respondent,

> *"(The) landlords do not take responsibility for their tenant's compounds, especially when they need renovations and when new residents move into the houses. [This is a problem because] when new tenants move in they can catch a disease if the houses have not been cleaned." (Respondent # 048)*

Eighty percent of the women expressed the desire to see government health care workers (or other health care workers) come into the villages and educate the women and their families about how to live healthier lives. As one woman said,

> *"Health care workers need to resume their projects of coming into the villages whereby they visit the people in their homes and bring the necessary information to them." (Respondent # 053)*

Some women expressed the desire to see more personal and innovate approaches to disperse health related information to the women at various service points:

> *"Health information needs to be dissipated in institutions such as this [Dolly Craft[29]] and through door-to-door provision of information. Events that can bring people from the villages together (such as the chiefs baraza[30]) can be used to give out information, as well as during free medical check-ups and at schools during meetings for parents." (Respondent # 047)*

In addition to these more personal and service point delivery mechanisms, the women seemed to seek out information and advice from more informal sources such as neighbours, friends, women's groups, and health seminars organized by groups such as St. Joseph, the Worker. Personal approaches to giving out information related to health care appear relevant in this context where the women have not received adequate and

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[29] A church-organized establishment that employed women in Kangemi to make dolls and sell them to countries overseas.

[30] A meeting organized in an informal gathering, usually called by the local chief.

current education/information on topics such as alternative methods of treatment and prevention for various diseases and aliments. It is plausible that provision of limited knowledge on how to better care for oneself could impact one's level of health care coping strategies. The women appear to be aware that they need more advice and information, and are clearly seeking avenues that they are most comfortable with.

The kinds of options the women seek at the health care provision level highlight their economic vulnerability. In particular the women desire more affordable (or free) health care and access to health insurance. For most people in Kenya, health care insurance is a luxury that many citizens cannot afford (*Daily Nation*, July 30, 1999), yet accessing health care is a fundamental right for the nation. Since health care costs have increased drastically, the average Kenyan struggles to pay for health related care, one that overtly requires curative services. Preventative measures are rarely the reasons for people to visit health facilities[31]. If women had access to a medical scheme or insurance, it is likely that they would seek out preventative measures that could improve their health in the long run. One such preventative measure could be accessing health clinics for anti-malarial pills or other vaccines, as well as health care counselling, primarily related to reproductive health.

6. 5.3. Fertility and related issues

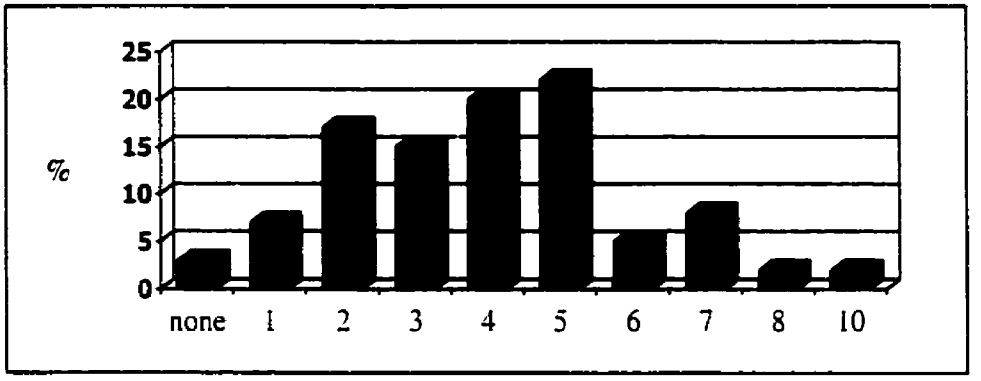
A. Fertility rates

Of the 60 respondents, only 2 had no children and they were both single women

[31] Interview with a local community nurse, September 7, 1999.

under 20 years of age. As indicated in Figure 23, on average, each woman had 4 children, although the mode was 5 children per household. A large percentage of the women with three children or less were under the age of 30, indicating a high probability that these women will continue having children throughout their reproductive life.

Figure 23: The number of children born to each respondent

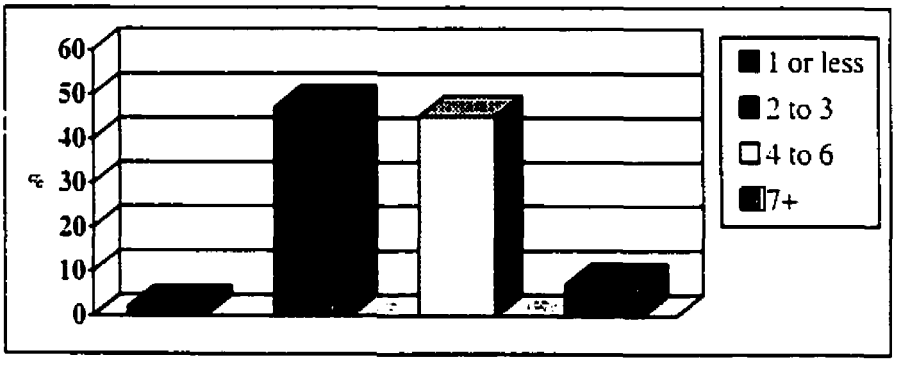


Quite clearly, women are still having larger families: 8 percent (n=5) of the women interviewed had 7 children. As previously mentioned, this sample size is too small from which to draw conclusive patterns, but when compared to the overall country fertility rate of 3.66, a rate that is supposedly lower in urban areas, (July 2000, CIA World Factbook estimate), it is possible to assume that intra-urban fertility rates can vary considerably. The cruel cycle of poverty combined with low status and lack of legal safeguards puts women in slum areas at a disadvantage, and for whatever reason, these women continue to have larger families. This goes against my assumption that poor women cannot afford to have many children, but my perceptions of childbearing and economic "rationality" are certainly not the same convictions that these women share.

This fact becomes more apparent in Figure 24 whereby the respondents were asked that given the choice, what was the ideal number of children they would have liked to have. Most women said they would have liked between 2 and 3 children, but the percentage that indicated this is not much more than those who indicated they would have liked between 4 and 6 children. Once again, this is clearly depicted in Figure 25, which may indicate that women still desire larger families. One woman said,

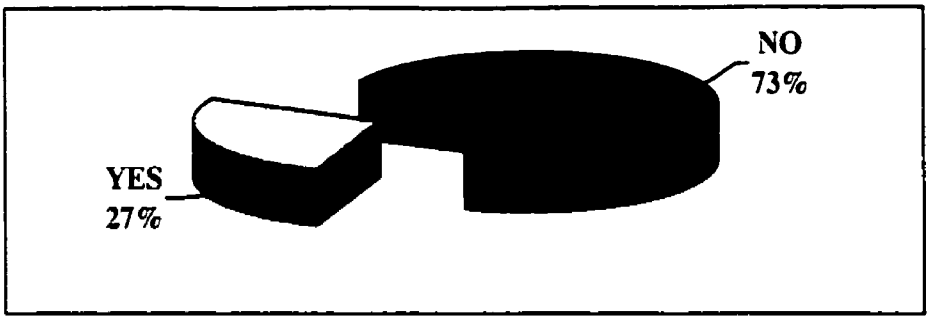
> *"I have had no desire to practice family planning because I want more children. My mother had 15 children and so my ideal number of children of 6 is not too many for me!" (Respondent # 008)*

Figure 24: Ideal number of children the respondents would have liked to have, given the choice in hindsight



I found that most women gave me a range of desired number, and few explicitly stated an exact number. Figure 25, therefore, represents the results of the data from Figures 23 and 24 by combining the results from the actual number of children the respondent had and the desired number of children.

Figure 25: Respondent's desire for fewer children



The results show that only 16 out of 60 women (27 percent) expressed the desire to have fewer children, proving that given the option the women would still choose to have large families. For many women, children are seen as a source of wealth, and security for them in their old age. This may be an important reason why women have large families because more children translate into more resources (security) in old age, affording the women some degree of leverage and power.

> *"My children are my wealth and security, and when I get older and cannot look for work, they will look after me and provide for me. I am well respected among my family because I have good children who are willing to take care of me." (Respondent # 057)*

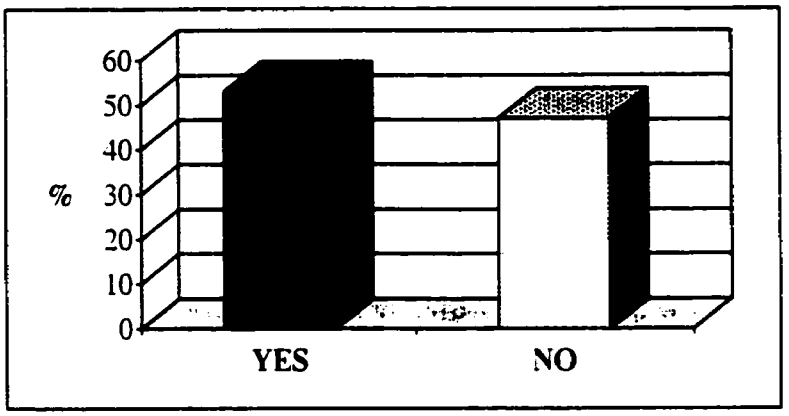
> *"I have 5 children and I would still like more. In my situation, I see children as an advantage because whether you have one child or 10 children, your problems are the same." (Respondent #023)*

B. Contraceptive prevalence

Desire for a certain number of children and actual fertility in terms of number of children born to each woman are not necessarily the same as indicated from the results above. Therefore, the possible related issue was whether or not the women who desired to have smaller families were using any method of contraception. As indicated in Figure

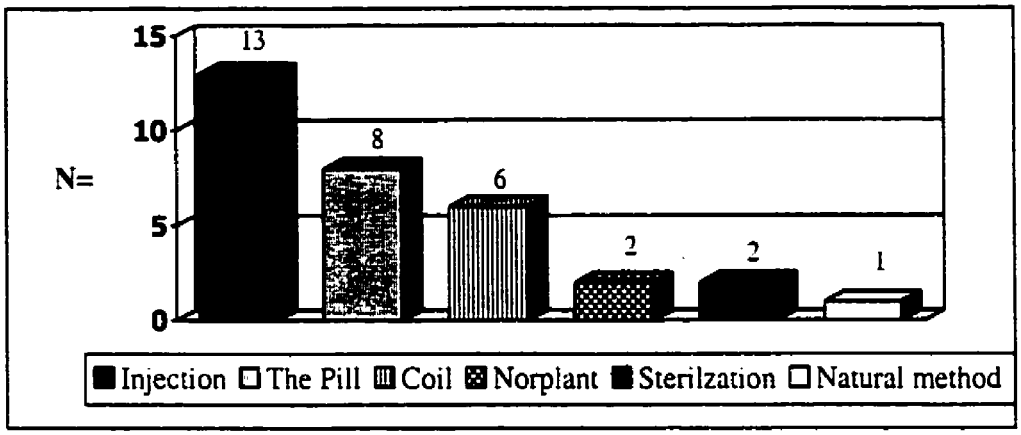
26, of the respondents, 32 women (53 percent) said they were either currently using a method, or had used a contraceptive method during the last month prior to the interview.

Figure 26: Respondent's using contraception (artificial and natural)



In terms of the type of contraceptive being used, Figure 27 reveals that the most common form of contraception is the Injection, which 13 women (22 percent) were using or had used. This is a hormonal contraceptive (Depo-Provera) that is a progestin compound administered via injection every 3 months. Eight (13 percent) women were on the Pill (several different types were available to the women), 6 women (10 percent) were using the Coil (an Intrauterine Device, or IUD, that is inserted in the uterus), 2 (3 percent) were using Norplant (hormonal contraceptive that consists of 6 silicone rubber capsules that are inserted in the arm and which release progestin at a slow and steady rate for up to 5 years), and 2 (3 percent) women were sterilized. Only one woman said she was using the 'natural method' as a form of contraception. Regrettably, none of the 60 women were using the condom as a form of contraception, which indicates that women are using only one method at a time to contracept.

Figure 27: Contraceptive method used (n=32)

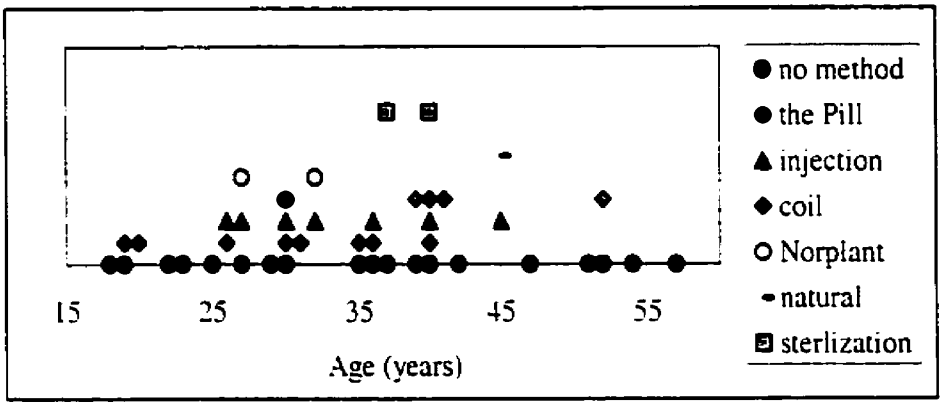


Of these contraceptive non-users, there are more or less equal numbers of women desiring fewer children as well as women claiming to want larger families. Clearly, the desire for fewer children can potentially affect a woman's decision to contracept, but this is not very apparent in this study. These preliminary results do indicate that fertility preferences and contraceptive usage do not necessarily fit together when women make decisions about their reproductive health.

Figure 28 attempts to look at contraceptive users and non-users in terms of their age, and it is evident from the sample that many women between the ages of 18 to 57 are not practicing contraception. Once again, none of the respondents said they used the condom as a form of contraception. As expected, more permanent methods like sterilization appear among women from their mid-30s to early 40s, indicating they do not want to bear any more children. Norplant, a more long-term solution, is viewed as a option amongst women aged 27 to 32, indicating that they are attempting to delay childbearing for the time being, but may opt to have children later on. The Pill appears to be popular among young women and women under 40 years of age. This is a preferred

option for those women who want to limit childbearing for an unspecified period of time, but it is the one method that requires the most commitment for effective use. The injection was popular among women between the ages of 26 to 45. While these results are far from conclusive, they may help us understand women's life phase choices, and whether they are making sound and effective decisions regarding contraceptive methods used.

Figure 28: Respondent's age and use of contraceptive method



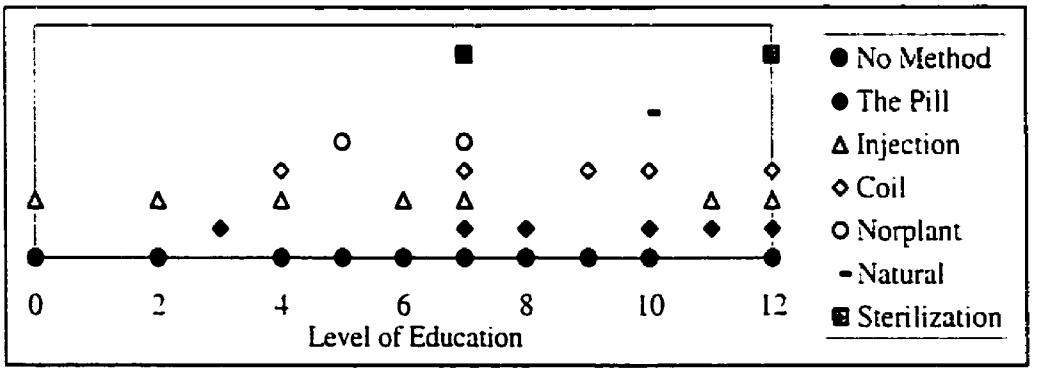
It is alarming to discover that many contraceptive non-users (●) are young and sexually experienced women. Other studies done on adolescent reproductive health (Blanc and Way, 1997, 31) indicate that younger women in Kangemi would be more likely to use a traditional contraceptive method than a modern method[32]. However, the use of traditional contraceptive method was not explicit at all in this particular study. One reason for non-use of contraceptives among young sexually active adolescents is that contraceptive service delivery to young people is a sensitive and controversial issue in

[32] Interview with a community health nurse, September 7, 1999.

Kenya. According to the Family Planning Association of Kenya (FPAK) there is no actual legislation prohibiting the distribution of contraceptives to young people, however, the political climate is not conducive. Service providers fear closure of services if they are known to be giving out contraceptives to young people. Religious groups such as the Catholic Church and the pro-life movement, as well as government opposition to the provision of contraceptives to young people, have all created a climate where service providers are afraid to take any innovative steps to help the Kenyan youth. However, the results of this study show that religion (Catholicism) was not a strong factor that influenced respondents' decisions not to use contraception.

Figure 29 below represents an attempt to determine if a woman's level of education has affected her choice of contraceptive use or non-use and it is clear that women with all educational backgrounds have made the decision not to use a method.

Figure 29: Contraceptive method and level of education



While the sample size is too small from which to generate prediction models or generalizations, this study found that broadly speaking, women using the Pill had some level of education. I believe the Pill appeals to some women because this method

requires women to be educated and counselled regarding taking pills and being somewhat aware of their menstrual cycles. This is not to say that women with no or low levels of education cannot use the Pill as a method, but it remains as a more viable option for some women, and education may play a role.

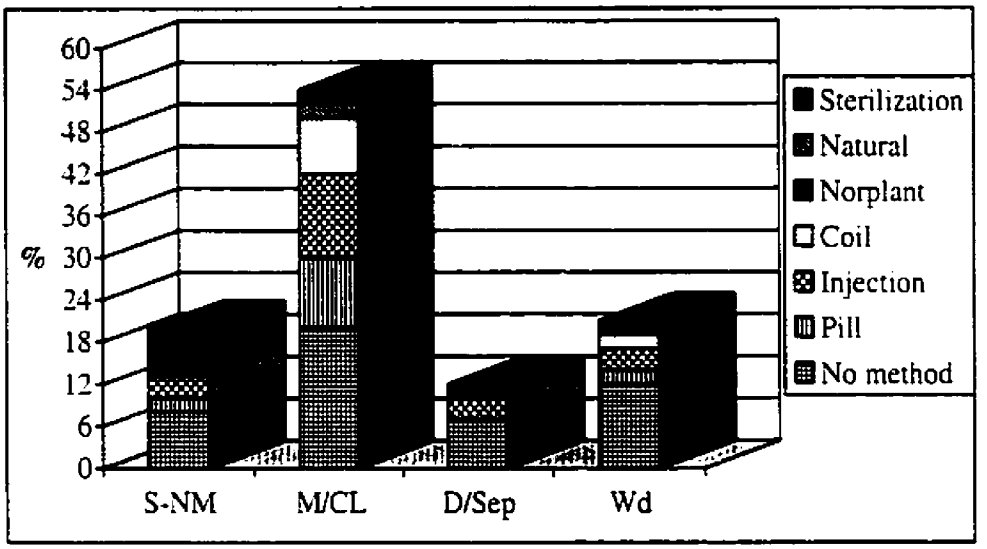
The level of education of women who were using the Injection ranged from no education to a grade 12 education, which may indicate that injectables are much easier and require less commitment than the Pill, hence, an appealing option for many women. The Coil follows a similar pattern to the Injection. Once again, this may indicate a method preference for women of all ages and educational levels. However, these results are far from being irrefutable, but serve to bring light to the issue of contraceptive use, non-use, or even disuse in this study.

Figure 30 below is an attempt to determine if marital status has an impact on women's choice to use contraception. As indicated, women from all marital categories have never used a contraceptive method. The injection is a popular method used by all classes of women categorized by their marital status with the majority in the married/common law category. The women who had been sterilized were in the "married" and "widowed" category, indicating that they had achieved the number of children they desired.

The only woman who used the natural method (which we understood as being the rhythm method) was married, indicating that this may prove to be a viable and practical option with women in more stable unions. While further studies are required to observe more patterns, this figure may indicate that sterilization may not be a popular option of

contraception, especially for single, never married and divorced/separated women because they may desire children at a later stage in their lives, or may choose other, less permanent methods of contraception.

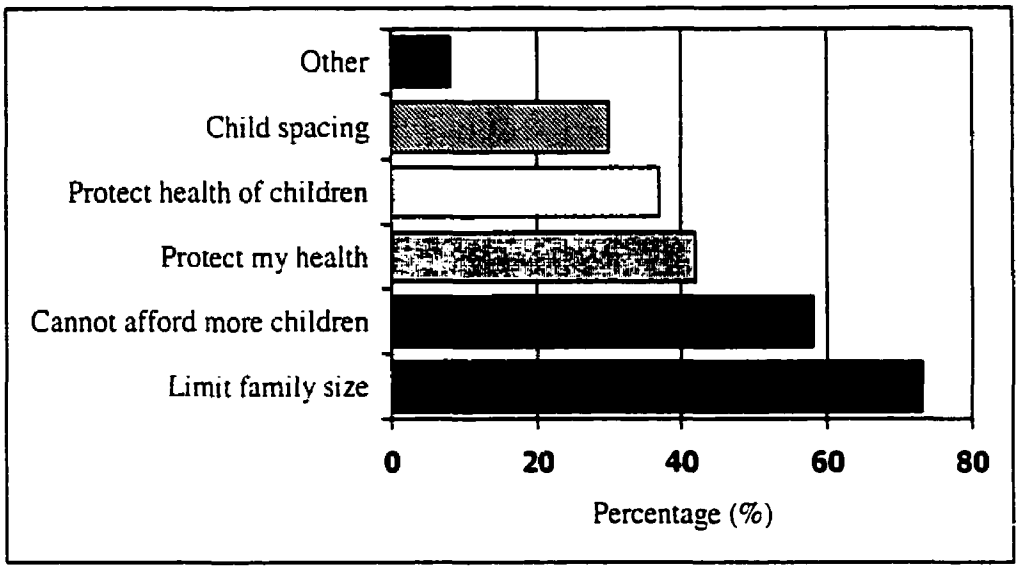
Figure 30: Contraceptive use and non-use categorized by method and martial status



S-NM: single, never married. M/CL: married/common law. D/Sep: Divorced/separated. Wd: Widowed

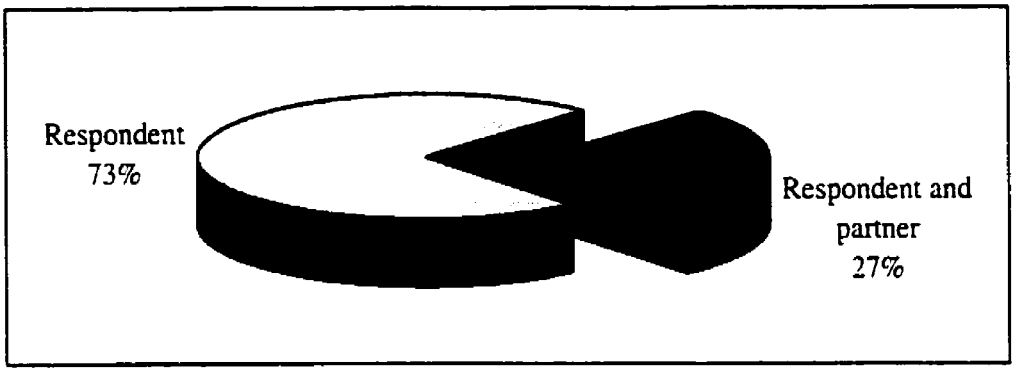
The respondents were asked their motivations were for using contraception, currently, in the past, or later in the future. As noted in Figure 31, most women (72 percent) answered that the purpose of a contraceptive method was to limit their family size and because they could not afford any more children (58 percent). While most family planning clinics in Africa push for the idea of child spacing, only 30 percent of the women stated this as a reason of choice. Forty-two percent perceived a contraceptive method as an opportunity to protect one's health, but the nature of actual "protection" (for example from STDs and HIV/AIDS, as well as other risks associated with frequent childbearing) was not specified by the women.

Figure 31: Reasons for using a contraceptive method (currently, in the past, and in the future)



A major facet of contraception use, non-use, or disuse relates to the primary decision maker in the household on the use of contraceptive methods. From Figure 32, irrespective of whether or not the respondent used a contraceptive method, most of the women (73 percent) made the decision on their own, usually without their partner's approval or in secrecy. The remaining 27 percent said the decision was made both by the respondent as well as her partner, and most of these women were married. This could indicate that for most women, joint decision-making about contraceptive use/non-use is a reality for women in more stable unions. On the other hand, it is the married women that doubt their partner's fidelity, and these are the men who do not think it necessary to use contraception to protect themselves and their wives.

Figure 32: Primary decision maker on the use of contraception

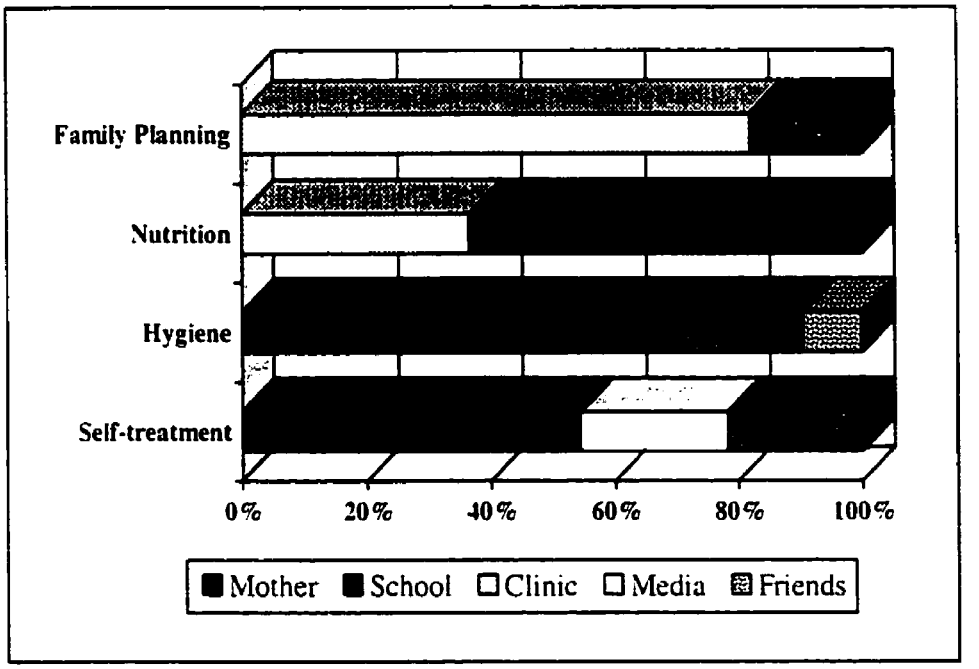


During the course of the interviews, I came to realize that there was some controversy regarding the relationship between "general" health and contraceptive knowledge and actual behaviour as a "result" of that knowledge. As such I sought to find out where the women had obtained information on specific issues that impacted their health and well-being. Figure 33 below is a visual representation of the respondents' top 3 answers, ranked from the most common response, calculated as an average for all 60 respondents. For example, most women (81 percent) said they learned about family planning from a medical clinic (usually a prenatal government clinic). The remaining 12 percent and 7 percent obtained their information from school and their mothers, respectively. In a similar way, most women learned about nutrition from a clinic, about hygiene from their mothers, and about self-treatment from their mothers as well.

Evidently, what a woman is taught in childhood for example can be a strong influence later on in her adult life. Of specific importance in this culture, parents rarely discuss issues regarding family planning, womanhood, puberty, fertility preferences, and the whole concept of sexuality. If they are discussed, they are confined to the parameters

of childbearing responsibilities. In Kenya, as elsewhere, it is culturally unacceptable for older people to give young people advice and information on sex. Finally, considering that women had such a limited understanding of family planning (and other reproductive-related issues) it was my understanding that there exists a lack of counselling by educational or counselling services within the community from which the women can build a more solid understanding of family planning and be able to make intelligent choices.

Figure 33: Acquisition of knowledge on specific issues



C. Contraceptive non-use and discontinuation

Reasons for not using a contraceptive method varied from responses such as *"it never occurred to me to use a method" (Respondent # 049)* to *"I have reacted to [the*

Pill] so I have not tried another method since" (Respondent # 012). Several women also said that they had not achieved the number of children they wanted so did not use any method:

> *"Even though I am a widow now, while my husband was alive I did not consider a (contraceptive) method as I did not feel it was necessary. It never occurred to me that it would be necessary to plan for my family." (Respondent # 018)*

It is important to examine the reasons for which women discontinue using a method because it can provide some clues about the adequacy of service delivery, particularly for groups who may require improved counselling, information, and follow-up care. Many of the responses also point to problems of inadequate supply and dissatisfaction with methods.

While only two women explicitly stated that discontinuation of a method was due to contraceptive failure, one could not overlook the obvious implication for unwanted pregnancies (and children) as a result of this. Among the respondents who had children, many had begun childbearing in their teens, suggesting that as adolescents, younger women may have more limited access to contraceptive services than older adult women. One woman said, *"I know now that during my younger years I lacked the awareness and knowledge about contraceptive measures and how to protect myself from sexually transmitted diseases." (Respondent # 022)*

Blanc and Way (1997) identified 3 reasons for discontinuation of contraceptives, which are parallel to what this study found:

1. Failure, defined as a method that was ended because the respondent says she got pregnant using it;

2. Switching, defined as those women who used a different method in a period between 2 to 3 months; and
3. Abandoning, defined as those women who have discontinued a method such that there is non-use of any method (pp. 33-36)

In relation to abandoning a method, two separate categories were recognized in this study: (1) abandoning a method, but remaining in need of contraception, and (2) abandoning, but not in need of contraception. In the first distinction, women discontinued a method due to side effects, husband's disapproval, health concerns, access/availability issues, desire for a more effective method, inconvenience of use, fatalistic attitude, and 'I don't know' responses. As one woman said, "*I have stopped taking the Pill because I reacted badly with serious stomach cramps and heavy bleeding.*" *(Respondent # 024)* Another woman said, "*Since I kept giving birth to girls, my husband threatened to leave me unless I bore a son, and that is why I could never go back to using a contraceptive method until I gave birth to a son.*" *(Respondent # 016)* One woman, in particular, was able to provide an example of her vulnerable situation when she had this to say:

> "*My husband is an irresponsible man who is not willing to consider any form of family planning, but is neither willing to help me look after and provide for the children. I desperately need a way to stop having children without him knowing, because I cannot afford to have any more children...*" *(Respondent # 012)*

In the second distinction, women ended a method of contraception because of reasons such as a desire to get pregnant, infrequent sex, menopause/infecundity, and marital dissolution. Overall, although most women had had some experience with

contraception, current levels remain low amongst women of all ages. In most cases, the women are likely to try only one method or a traditional (less effective) contraceptive method. While almost all women knew of at least one contraceptive method, almost all women were less knowledgeable about extensive family planning methods and tended to know fewer methods overall.

D. Perceptions about HIV/AIDS and STDs

All the respondents had heard about HIV/AIDS, and almost all the women (n=57) were able to say something with regard to the disease, as indicated in Table 16. The general responses were divided into 4 categories: general knowledge of the disease, how the disease spreads, how the disease can be prevented, and other AIDS related issues. While no one actually indicated they knew about actual disease pathology (for example, if it is a virus, bacteria, or other related medical terminology associated with a pandemic virus like HIV), most of the responses were related to how the disease spreads, and general notions such as 'it kills' or 'anyone can get AIDS'.

Most of the respondents were quick to identify that AIDS was a killer disease and the disease could infect anyone. This answer is consistent with the kind of images seen in the media that bring about a sense of fear and finality about the disease. The women know that AIDS is not exclusively a homosexual disease, or a disease associated only with prostitutes, and both rich and poor people can get infected through various sources. The point of emphasis, however, is that many women (slightly over 40 percent) have been exposed to AIDS victims, and in this way they are able to put a face to the disease, making the reality of the pandemic even more harsh and real.

"The main concern with AIDS is that anyone can get the disease, especially because it is an invisible disease. You never know who has AIDS, and so you can get infected from your (partner) as well as other sources like needles. (Respondent # 023)

Table 16: Respondents' responses about what they knew about AIDS in general

	General responses about the disease	Percentage (%)
General	It kills	33
	It has no cure	8
	Anyone can get the disease	37
	Has seen someone die of AIDS	25
	Description of outward symptoms	8
How the Disease Spreads	Spreads via sexual contact with infected people	73
	Spreads via blood transfusion	42
	Sharing sharp objects (razor blades, needles)	45
	Exposure to open wounds	5
	Sharing toilets and toothbrushes	8
Prevention	Avoiding many sexual partners/promiscuous behavior	38
	Need to be faithful to your partner	35
	Individual responsibility/maintaining high standards of personal hygiene	30
	Using condoms	20
	Abstaining from sex	10
	Communicating with your partner about the disease	7
	Avoiding contact with infected people	5
	Health centers need to maintain high standards of hygiene	7
	Doctors (nurses) need to act more responsibly (proper disposal of needles, screening blood, etc.)	10
Other issues	It is an "invisible" disease: not sure who has it or lying	12
	Children become orphans	2
	AIDS is a problem in Kangemi	2
	Need to educate people on caring for AIDS victims	2
	Cannot assume that a person suffering from TB has AIDS	2
	Need to sensitize people about the risks of alcohol abuse and acting irresponsibly under its influence	2
	Not sure of the effectiveness of the condom	2
	Does not know much about the disease	3

The issue of orphaned children as a direct and indirect result of the AIDS pandemic is of concern in Kangemi. Data from a UNAIDs and WHO survey (1997) showed that by the year 2000, there would be 850,000 orphans living in Kenya as a result of AIDS (*Daily Nation*, July 30, 1999). In this report, poverty and the resulting lack of health services, education, and AIDS treatment play a crucial role. But the biggest factor identified, however, is women's lack of control over their sexual relationships and, hence, over other aspects of their health.

Other key issues that emerge from the study indicate that there is a need to educate society to accept and care for people living with AIDS. Many people living with AIDS are at risk of being neglected or infecting their partners because of the stigma associated with the disease. This stigma discourages the infected and affected - people with HIV and their families - from seeking counselling. Furthermore, as indicated by one respondent,

> *"People in the villages need to be educated on AIDS so that they can learn to support and care for AIDS victims by showing love and compassion. I know of a work colleague who had AIDS and her own family refused to care and support her...Therefore, a Sister at the [St. Joseph] dispensary and myself helped her out." (Respondent # 009)*

Eliminating the stigma associated with AIDS is about breaking the silence, and breaking the silence means breaking the secrecy, not confidentiality, about AIDS. Community health care workers agree that this stigma can only be tackled by spreading knowledge about the disease and overcoming myths associated with AIDS.

On the issue of vulnerability, women said that alcohol abuse was a common feature in their communities. It was indicated by several women that alcohol (and drugs)

put the women at greater risk because they could not refuse sexual advances of their intoxicated partners. Partners under the influence of alcohol (or drugs) are less likely to practice safe sex, or communicate with their partners about consensual sex.

E. Perceptions of HIV/AIDS risk

As far as the risk of AIDS was concerned, the women were asked if anyone in their household was at risk of HIV/AIDS infection, as well as if they felt they themselves were at risk. Most women generally responded positively to the question, "Do you feel that someone in your household is at risk of getting HIV/AIDS?" Table 17 represents the various members of the household who are perceived to be at risk, as well as the

Table 17: Are you worried that other family members are prone to HIV/AIDS infection?

Individual(s)	Reasoning	Frequency	%
YES, worried:			
Male partner	Not certain about husband/partners fidelity	12	20
	Husband/partner drinks excessively and irresponsibly	5	8
	Married boyfriend may have other sexual partners	1	2
Other females	Worried about her grown up daughters	14	23
	Worried about younger daughters	5	8
	Others	5	8
Other males	Unmarried sons who have grown up	13	22
Other issues	Cannot restrict children's movements	5	8
	Difficult to talk about sex to children	3	5
	Friends can have a negative influence on children	2	3
NO, not worried:			
	Children are too young to be worried about	18	30
	Trusts her husband/partner has not other sexual partners	12	20
	She trusts her children[⌂]	7	12
	She is alone and has no sexual partners	2	3
	She's never seen her roommate sexually active	1	2

⌂ Children are "good", she talks to them, living in the rural area, her son has been "saved".

reasoning for the cause for concern. Overall, 35 women (approximately 58 percent) were worried about certain members within their household, while the remaining 25 women did not feel a need to be concerned about any household member.

As indicated, women were concerned for their partners as well as their grown up children. A critical problem posed here is that the level of HIV/AIDS related education in Kenyan schools is insufficient. This became clear when the women told me about what they knew regarding sexually transmitted diseases, as well as their own perceptions of sexuality and fertility related behaviour and knowledge. HIV/AIDS educators continue to shy away from dealing with basic issues of adolescent sexuality. This introversion continues even when the women become older, and is evident in similar attitudes by health care providers and educators in their communities. When these educators broach the subject, they appear content with presenting abstract themes and principles, and many educators only provide an authoritarian list of do's and don'ts (*Daily Nation*, October 16, 1999). In the process, these educators are unaware that there is a lack of much-needed clear and open communication with the young people. This translates into younger people, particularly, being less knowledgeable about the dangers of high-risk situations. One woman said,

> *"Yes, I am worried for my children. They are growing up and as a parent who cannot talk to them about the evils of the world, I feel helpless because I cannot restrict their movements. This is the reality for me...My 19 year old daughter has a 1 year old child, and I would not like my other children to follow in her footsteps." (Respondent # 023)*

Many women said they found it difficult and uncomfortable to talk about sexuality with their children. Peers have often constituted a reference group for

transmitting information about sex and other related behaviours, which, as perceived by the women, may have a negative influence on the children. Specifically, what concerned these women most was that their children might be associating themselves with the "wrong" type of friends. One woman said,

> *"I am worried about my children as a parent, especially because it is difficult to talk to them about sexual matters. Furthermore, children can be easily influenced by their friends and end up learning bad habits and wrong things that put them at added risk." (Respondent # 011)*

The economic vicissitudes of the 1980s in Kenya have contributed to an environment in which the need to survive is a driving force behind the sexual decisions of some women in Kangemi. Considerable attention has been focused in the literature on the "sugar-daddy", whereby young girls initiate sexual relations with older wealthy men who can assist them with school-related costs or the purchase of material goods. Many young girls and women are requested by males in positions of authority to provide sexual favours as a condition of employment or economic survival. One woman said that this was a serious issue of concern among the women in her neighbourhood:

> *"There is a problem of young girls attaching themselves to older men so that they can get some money. I feel this is a serious issue that needs to be looked at as well as discouraged here in Kangemi." (Respondent # 049)*

Because many vulnerable women find it difficult to separate economic survival from sex and childbearing, they are particularly susceptible to sexual coercion. It is conceivable that, as part of economic dependency, many women have little leverage to oppose male partners who argue that there is no risk involved in having sexual relations or in participating in unsafe sexual practices. Limited bargaining power on the part of

these women is likely to translate into a limited capacity to protect themselves against unwanted sexual advances, and sexually transmitted infections. This suggests that both the women, as well as other female members of the household, can fall prey to these circumstances.

Taking into consideration that a large percentage of women felt concerned about a household member being infected with HIV/AIDS, it was encouraging to hear that 56 women (93 percent) would encourage education on safer sexual practices to their household members. Table 18 corresponds with reasons given by the women as to why they felt it was necessary, or not necessary, to educate their household on safe sexual practices.

Table 18: Would you encourage safe sex education in your household? Why?

Answer	Reasoning	Frequency	%
YES	So they can make responsible/intelligent decisions and be able to look after themselves	30	50
	As they becoming adults, they need to be less ignorant of the dangers in the world	17	28
	They do not catch a disease (HIV/AIDS, STDs)	15	25
	To protect themselves from unwanted pregnancies	10	17
	She'd like them to be educated by another person$^{\Delta}$	8	13
	Also feels she is capable of talking to her children	4	7
	Husbands and sons, in particular, should be educated	4	7
	Seen other family members dies of AIDS and does not want her children to have the same fate	3	5
NO	Children are too young to be exposed to these issues	2	3
	It encourages immoral behaviour	1	2
	She can talk to her children herself	1	2

Δ Specifically, teachers, good role models, seminars

Broadly speaking, most women said they'd like to see their family members educated about safer sexual practices so that they could make intelligent decisions about how to protect themselves (50 percent); 28 percent felt that such an education would discourage ignorance and naivety about the harsh realities of the world, and that children could then protect themselves from sexually transmitted diseases (25 percent) and unwanted pregnancies (17 percent).

Once again, the culturally sensitive issue of sexuality in African society becomes acknowledged in this illustration. One woman said that, *"I would like my sons, in particular, to learn about safe sex in schools and seminars. I feel that I am capable of talking to my (younger) daughters on these matters." (Respondent # 020).* This may indicate that for some women, it is harder to talk to a male child about sexuality than a female child, so that the degree of cultural sensitivity regarding parental advice may be further stratified by gender and age of the child.

From discussions with the women, it appeared that utilization of contraception among their adolescent children was generally quite low[33], even though none of the women actually knew for certain if their sexually active children were practising safe sex. What is of concern is that the women (as parents) do not actively encourage discussions of sexuality, despite a relatively high level of awareness that unprotected sex can lead to pregnancy, HIV/AIDS, and other STDs.

Seventeen percent of the women stated that they would like their daughters (or

[33] Several women had unmarried daughters who had children, and most of these young mothers got pregnant at a very young age.

children) to learn about safer sexual practices so that they can protect themselves from unwanted pregnancies. From the perspective of communities and governments, teenage pregnancy and childbearing have a strong and unwelcome association with low levels of educational achievement for the young mother, which in turn will have a negative impact on the position of these women and their contribution to society (*Daily Nation*, July 13, 1999). From the perspective of the young mother and her family, the consequences range from disappointment because of failure to complete secondary school, a loss of opportunities, and financial difficulties that are likely to result in her dependency on her family for support.

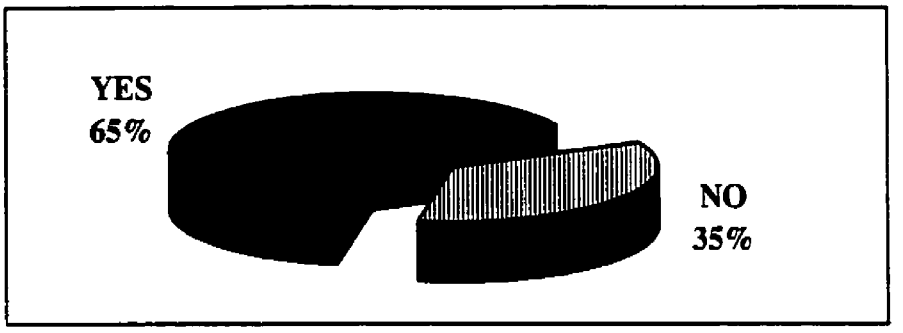
When asked about personal perceptions of risk, as indicated in Figure 34, 65 percent of the women said they felt at risk of contracting HIV/AIDS and Table 19 indicates the respondents' perceptions of the sources of risk that place them in this position. Most of these women indicated irresponsible behaviours (cohabiting with another women, alcoholism on the part of her partner) and unfaithful partners as being the primary source of concern for them. Some of the responses were as follows:

> *"My husband would never agree to wearing a condom, nor would he like to be questioned about his faithfulness to me, just as he would never admit to being unfaithful." (Respondent # 014)*

> *'Although I am faithful to my husband, I cannot be 100 percent sure of him. (Like most African men), he is seldom faithful to (his wife), and can never agree to a blood test. Since my husband refuses to wear a condom, my future is certainly uncertain on the issue of AIDS, and questioning him about the disease can lead to him being abusive towards me." (Respondent # 012)*

> *"Nobody can be entirely sure what their partner is doing outside the home. I have seen innocent people die from the disease, so anyone can get AIDS" (Respondent # 017)*

Figure 34: Respondents' perception that she may be at risk of HIV/AIDS infection



It is obvious from Table 19 below that these women have identified both sex and non-sex related risk factors that put them in danger of contracting HIV/AIDS. One woman admitted to being a commercial sex worker in the past, and she was concerned because she was not sure whether or not she had contracted the disease. In this case, it appeared that she was second-guessing herself, but unless she felt an "outward" symptom of the disease it is unlikely that she would have a blood test, probably because of the stigma attached to HIV/AIDS.

For those women who felt at risk of contracting the disease, two women highlighted their vulnerability:

> *"Yes I feel I am at risk...my friend helps me out, and I do not know if he has AIDS or not." (Respondent # 028)*

> *"I cannot question my husband (about his fidelity) or ask him to wear a condom because he can accuse me of being promiscuous. I am really concerned for myself, but all I can do is pray. If it is my destiny to die of AIDS, I cannot change or fight it." (Respondent # 010)*

Table 19: Respondent's concern that she may be prone/at risk of HIV/AIDS infection

Answer	Perception of source(s) of risk	Frequency	%
YES, at risk:			
Respondent suspects husband/partner is unfaithful•		23	38
Can get infected from other sources□		14	23
Respondent can befriend an infected person w/o knowing it•		8	13
If she is irresponsible■		5	8
Problematic because it is an "invisible" disease■		3	5
Men do not wear condoms so she cannot protect herself•		1	2
Fears she may already have the disease because she used to be a commercial sex worker•		1	2
Respondent fears being raped•		1	2
NOT at risk:			
Respondent has only one sexual partner (not promiscuous)•		11	18
She trusts her husband/partner has no other sexual partners•		10	17
Respondent is responsible and well informed about the disease□		6	10
Respondent has NO sexual partners (celibate)•		5	8
She trusts the medical facilities that she goes to□		2	3
She communicates with her partner■		1	2
She believes that prayer will protect her		1	2

• Sex-related risk/non-risk.
□ Non-sex related risk/non-risk.
■ Both sex-related and non-related risk/non-risk.

Of those women who felt they were not at risk of contracting HIV/AIDS (35 percent), most women said they had only one sexual partner and that they trusted their partner was faithful to them. As indicated in Table 20, the women's decisions to engage in unprotected sexual activity may be based on their judgements about their personal risks and the risks of their partners in specific situations.

One woman said, " *I am no longer concerned about my husbands' faithfulness because he no longer has a job, so it is very unlikely that he would be seeing another*

woman." (Respondent # 037) However, as indicated in Figure 20, distorted perceptions of risk could lead to faulty decision-making about sexual activity and consequently about contraceptive use. For example, one respondent believed,

> *"Prayer and trust in God that he will help and guide me to act responsibly is the measure that I take to protect myself from the disease".(Respondent # 038)*

Table 20: Measures taken by the respondent to protect herself from getting infected with HIV/AIDS and other STDs

Measures being taken to protect herself	Frequency (n=60)
Having one sexual partner that she can trust	25
Keeping herself informed about the disease(s)	14
Avoiding potentially risky behaviour■	13
Temporary/permanent abstinence	13
Prayer	11
Communicating with your partner about the disease	9
Having blood tests and blood screening	6
Commitment to better personal hygiene	4
Visiting medical facilities that have high standards of hygiene	1
Using condoms	1
Respondent does not know what to do/has no control over her partner	12

■ Being less promiscuous, avoiding prostitution, infected needles, contact with infected people

As indicated, in the era of AIDS and other STDs, the findings that a majority of the women are sexually active and not using a barrier method to protect them must be viewed with concern. Only one woman admitted using the condom as a form of protection against HIV/AIDS infection. Periodic abstinence is a traditional method of contraception used by many women in developing countries (Blanc and Way, 1997, 18).

Distorted perceptions of risk may arise if women engage in infrequent and unprotected sex but do not get infected, and if they assume such behaviours occur with

similar outcomes among their peers. In addition, perceptions of risk may be distorted if the woman believes that she is too old to get infected.

Although the decision to have unprotected sex incorporates both individual decisions and mutual decisions with their partners, little was known from the study about how the women actually negotiated sexual activity and contraceptive use. Most women, however, agreed that good communication with thier partners would be helpful[34] to influence their sexual behaviour in that they may listen to the women. But once again, despite communication, it is not clear as to how effective this is in negotiating contraceptive use and/or safer sexual practices.

> *"No body can take care of their husbands and tell them how to behave, and even if we wanted to, they do not listen to their wives. He does whatever he likes and when he comes home and demands sex from me, I cannot refuse him, even though I suspect he is not faithful to me. I cannot consider leaving him because he owns the house I live in, and where would I go if I left him?" (Respondent # 009)*

The women's vulnerability is revealed in such responses whereby they have no control over their partners and do not know how they can protect themselves in their situation. As mentioned earlier, economic survival forces women to engage in risky sexual practices, as well as the fact that these women lack the power to negotiate safe sex, and this gives women little or no authority to protect themselves. While the exact nature of power dynamics in relationships is not clear, it is my belief that through the process of early childhood socialization and traditional norms of gender roles, women often learn that they are subordinate to men and must respect their wishes. Underlying all this,

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[34] Some women seemed to favor open-communication whereby they would talk to their partners about their relationship and future, usually approaching the topic of sex in a round-about way (non-confrontational).

women have fewer legal rights to safeguard themselves, and even if some laws protected them, very few women are aware of this. As one woman said,

> *"I know that my husband is cohabiting with another woman, and even though she is out of town at present, I am not sure if he is seeing another woman or not. Even though I am his wife, I cannot control his behaviour... I suspect he may already be infected and there is nothing I can do about it. When he come to me I cannot refuse to have sex with him, but I cannot protect myself. All I can do is pray for him..." (Respondent # 009)*

Irrespective of their vulnerable situation and multiple roles, many women were making a conscious effort to try to improve their situation through various coping strategies. Relationships between production, reproduction, and community management in Kangemi are founded not only on the roles of women as mothers and wives, but also on socially and culturally defined roles (Ahawo and Mukras, 1990, 14). These issues include rules and conduct of marriage, sexual norms, gender identity, systems of kinship and household economics, and the structure of the family unit. This study has shown that family structure and stability, as well as socio-cultural beliefs and norms constitute an important barrier to women's participation in reproduction and production. As indicated in Table 11 (household coping strategies) and Figure 22 (barriers to achieving better health), economic insecurity is the major barrier to women's overall well-being. Their role in the informal economy is often downplayed by the existence of many barriers that impede their full participation in the economic sector. Table 21 below represents the women's hopes and desires for their future as well as for the future of the household.

Table 21: Respondents' hopes for her future and for her household

Hopes for respondent and household	Frequency	(%)
To better the children's lives: see them educated, self-reliant, etc.	44	73
To make more money/have own business/better or more secure job	39	65
To have a good life: trouble-, stress-, poverty-, struggle-free life	21	35
To buy a plot of land and settle there	13	22
To buy/own a house of her own so she does not have to pay rent	12	20
To have good health for herself and her children	8	13
To provide for other members of her extended family	4	7
To live long to see her grandchildren and children married	4	7
To move to a better residence	3	5
Respondent would like to have a bank account and save money	2	3
Wishes that her husband/spouse finds a job and helps her out	2	3
Wants to remain single and not remarry	2	3

Evidently, the women's main aspirations are to better their children's lives and gain some economic security/stability in their income generating activities. One woman said,

> *"I am appealing to any organization or individual to help the women become self-reliant and raise their children without having to depend on their husband's because they frustrate the women most of the time, taking no responsibility for their children." (Respondent # 010)*

Some other barriers these women face include a lack of necessary support resources, a lack of formal access to credit and investment facilities, and a lack of legal safeguards, especially when compared to men in Kangemi. For example, many women traders faced barriers such as the lack of necessary capital outlay needed to trade on a large scale, and as a result they are forced to engage in petty trading activities. For women with younger children, the removal of childbearing support of the extended family means inability to venture into other more "modern" forms of employment or long-distance trading, and inability to engage in gainful employment. Because of such

impediments, women's contribution to productive activities is minimal. This could help explain why many women said they preferred to have their own businesses at some point in their lives because of the idea of more freedom and control in their activities.

While these factors directly influence household economics and spending capacity, they do have direct effects on women's health and well-being. For example, if a woman has less money, she is likely to eat less nutritious food (if at all), not seek medical treatment, and engage in potentially harmful employment activities to supplement her income. One woman said, "*Because I am a single mum, I need to become financially secure. I cannot depend on a man anymore because I may get infected with AIDS and die young, which would mean that no one would support my children.*" *(Respondent # 054)* Clearly, many women face the reality of having to live with a man for economic security, even though they are aware of the potential risks of such unions. While they fear for their own health, they always seem to worry more for their children, indicating that women as mothers continue to put their children before themselves. The women have high levels of responsibilities for their families, yet, as one woman indicated, "*Officials need to help the women because they have the most responsibilities in their household, and are the most oppressed in society.*" *(Respondent # 009)*

Thirty-five percent of women said that they would like a stress-free or trouble-free life, whereby they did not have to live a hand-to-mouth existence and always struggle for money. Like many women in other slum communities, women bear a greater burden of illness and responsibility because of gender related roles. If the woman is

living with a spouse who neglects providing for the children, it is the woman who takes on this responsibility, and is usually the sole provider for her children irrespective of whether or not she has a spouse/partner.

In most instances, women pay for their children's health care needs, school fees, and other miscellaneous expenses. As indicated in various responses in previous figures, these are the same women whose daily lives are difficult, burdened by unwanted and dangerous childbearing. They lack proper nutrition, have long working days, seeking medical treatment belatedly, and often cannot take time off work to properly recuperate after an illness. Clearly, then, some of their hopes for their future are somewhat modest in comparison to their situation in the slums. All they ask for is for some degree of self-reliance that they may provide for their children, engage in more stable forms of employment, and eventually own some assets such as a home or a piece of land. For most women in this study, they are dealing with the consequences of poverty in their own ways which involve incorporating various coping strategies at both the individual and community level. For them their lives are a hand-to-mouth existence, with little or no planning (or saving) for their future because life in the slums is about immediate strategies for survival.

CHAPTER 7: Discussion Section

7. 1. Discussion of Findings

The review of available evidence regarding women's health and vulnerability in Kenya, in addition to the data collected from this study, suggests that women are limited in their achievement of better health and well-being as a result of their lack of access to health care. This study is primarily concerned with the health of poor urban women who live in difficult circumstances and the activities they perform in maintaining and improving their health. While most of the findings in the study affirm what is already in the literature, some "unique" observations indicate that women are changing their roles and preferences in their attempts to survive. This study is also unique in that it is the first study that specifically looks solely at women's needs in Kangemi[35].

For this study, women of various age groups and backgrounds were interviewed. While most respondents were married (with a partner present), much could be said about marital stability and household dynamics. Many of the women interviewed were young widows, single mothers, migrants from rural towns and villages, and almost half of the women could be considered household heads. As indicated by Tabibzadeh et. al. (1989, 110), the increasing numbers of urban women living in poverty is revealed by the growing share of households headed by women, which ties into the linkages between gender and poverty on the one hand, and the situation of households headed by women on the other. And although most women in the study had at least a primary level of

[35] The study done by KWEC (1995) looked at both male and female criteria and was more general in its scope and data collected.

education, high dropout rates indicated that many women were unable to complete higher levels of schooling, this further contributing to the poverty situation.

While most women were employed, it was evident that the majority of them relied on the informal economy for subsistence. Buvinic and Lycette (1988) note that poor urban women are forced into the informal economy thereby increasing their workload and providing them with jobs that afforded no security /stability or possibility of advancement. Most women in this study were barely able to survive, as many of their jobs were low paying and temporary. In a single day, women divided their time between working outside the home and at domestic chores as diverse as food processing, hauling water and gathering firewood (or cooking fuel), looking for casual work to supplement income, taking children to health clinics, and preparing family meals. For these urban women, the need for independent sources of income remained the main fact of life, and as such they continued doing casual labour and performing multiple tasks in order to survive (*Daily Nation*, September 1999).

According to Stein (1997, 23), women are disproportionately represented among the poor and are disproportionately responsible for family survival, particularly that of younger children. This study found that during times of economic hardship, it was the women who increased their working hours to ensure family survival. For vulnerable women, systems of male domination further exacerbated their problems because on the one hand they were denied or had limited access to economic resources and political participation, and on the other hand, imposed sexual divisions of labour allocated them

the most onerous, labour-intensive, poorly rewarded tasks inside and outside the home, as well as the longest hours of work[36].

As pointed out by Berger (1999, 55), regardless of their marginalized situation, women have struggled both individually and collectively against poverty. While their vulnerability was illustrated by the items that they cut back on in times of financial distress, this study is unique in that it documents women's coping strategies in their own words, proving that they will become creative and innovative in their attempt to endure. Drawing parallels to Stein (1997, 23), women in Kangemi also undertook more community work, such as communal waste management and communal household sharing of items. Women as workers and managers of human welfare were central to the ability of households and communities to tackle the current economic crisis in Kenya. Even as resources to strengthen women's economic opportunities were shrinking and they were forced to stretch their unpaid labour, women have begun to mobilize themselves both individually and collectively. This is where the strength of this study lies because it highlights the key role women play in maintaining their households under such economic constraints.

As predicted by Good (1987, 62), women's perceptions about health and their access to health care options and strategies indicate that the women in Kangemi use a variety of health options in their quest for healing, regardless of their financial restrictions. Awareness of health and ill health varied amongst the women, but clearly women's perceptions of a problem dictated who received treatment (usually children had

[36] These findings are similar to other studies, and therefore, not unique to my study.

first preference), the frequency of treatment, and whether or not treatment outside the household was necessary. Many of the tasks that women performed as homemakers and mothers were critical for the prevention and treatment of childhood diseases and malnutrition. It was the women, particularly in their roles as mothers, who bore the responsibility of family health by treating common diseases and injuries, and taking the sick children to health centres.

With regard to types of health facilities used, the women used all three basic spheres as indicated in Figure 5 (Good, 1987, 61): the traditional, non-biomedical range of options, the biomedical realm, and the popular culture sector which represented self-treatment and home remedies. Unlike the study done by Good (1987), this study did not find that the traditional medical sector, with the exception of spiritual healers, occupied a major position in the women's lives. The popular culture sector, where illness is first perceived and acted upon, was the first form of action for most women. Most women in Kangemi relied on government care of some sort, usually because these types of clinics were more easily accessible and affordable. Irrespective of the reasons behind choice of health care facility, the study found that women relied on a variety of options, from modern biomedical facilities to more alternative options such as herbs, prayer, and spiritual healing. Chemists were also seen as an important option as they gave advice about illness and prescribed and sold medication.

Most women in Kangemi indicated that they were not satisfied with their health status and the main barrier to their achieving better health was related to economic adversity. Tied into this is Stein's point (1997) that women are disadvantaged in terms of

income, nutrition, living conditions, the physical and psychological demands placed on them, as well as their share of power and status needed to reduce their exposure to, and risk from, many diseases. Many women in Kangemi suffered greatly from disabilities, diseases, and illnesses that were preventable or whose severity could have been mitigated. For example, women did not eat enough calories to support the energy they expended, and as such suffered from malnutrition and other nutritional deficiencies. While such problems were clearly a major concern for the women, they were also able to identify those measures they felt could help alleviate this problem, as well as the measures taken by others in the community to assist women in achieving better health for themselves and their families.

The findings from this study suggest that urbanization has had important effects on attitudes towards family structure, reproduction, and sexual behaviour. Some of the emerging patterns indicate that there is a weakening of social norms, traditional notions of the family and of premarital sex and sexuality. These factors, combined with less family supervision and great possibilities for interaction between men and women in crowded neighbourhoods, tend to increase women's risk of early sexual maturity and related effects. The concern here is that women enter into relationships of potentially high risk because they do not know enough about their own bodies and how to protect themselves from sexually transmitted diseases such as HIV/AIDS. Furthermore, they lack the power and conviction to negotiate safer sex, putting them at additional risk. But evidently, the vulnerability of these women is clearly within the context of an

impoverished and economically deficient environment that significantly worsens all these problems.

Nairobi, like other urban centres in the developing world, faces a major crisis in the new millennium. Its high population growth rate, deteriorating economic conditions, and worsening urban environment all interact to create a new urban ecology that could create conditions for new health risks which may reach levels that will be difficult to manage unless appropriate policy strategies are put into place now.

As suggested by McElmurry, et. al. (1993), there are clearly more factors involved in understanding women's situation, their status, and health than could possibly be measured in any single study, mainly because the relationship between women and their health is multi-leveled. And even though the connections between environment, health and poverty are poorly understood, knowledge that environmental factors directly influence human health is a well-known and accepted correlation (WHO, 1999; Ayako and Katumanga, 1997). As indicated in this study, environmental conditions are one of the main hazards of the lifestyles of poor urban residents, although other aspects such as reproductive ill health, diet, and alcohol abuse must also be emphasized. The concept of *marginality* (Harpham and Stephens, 1991, 62) can be used to describe the poor slum residents of Kangemi. The women, most of them migrants into Nairobi, can be termed "spatially marginal" because they live in informal settlements on the periphery of the city. They are also "socially marginal" as their financial constraints limit their full access to the modern aspects of an urban city. Finally, they can also be called "occupationally

marginal" because a high proportion of them are illiterate and unskilled workers who cannot find secure employment.

The women are key players in identifying both overt and inherent factors that affect their health and well being, and this study has shown that women find their own ways of coping with various situations which can help them survive their daily hardships. It is not easy for program sponsors to change their thinking from a top-down decision-making capacity to adapt a reverse approach of giving control to women at the "bottom". However, some organizations like the Kangemi Women's Empowerment Centre (KWEC) attest to the possibility of giving women back some control over their lives. Funding organizations can help provide technical assistance, start-up financing, leadership training, and relevant supplies to empowerment projects and networks. In addition, they can also provide opportunities for sharing information about the successes and failures of these strategies.

With regard to women's reproductive health status, the findings of this research portray women living in a society where "good" women know little and say nothing about sexual matters, multiplicity of sexual partners for males is inherently overlooked, and condoms are considered appropriate only for illicit sex. Many women appeared to lack adequate knowledge about their reproductive systems, and many failed to recognize the symptoms of sexually transmitted diseases. Due to traditional gender roles, most women are subject to their partners' control in sexual interactions. Drawing parallels from reports by the WHO (1999), since few women receive comprehensive medical care

and fewer lab tests are done, poor women in slum areas are also often unaware of diseases from which they suffer.

Given that severely economically and socially disadvantaged women characterize those communities as predominant with HIV and STD infection, this study reinforces the notion that views the heterosexual transmission of HIV as a direct reflection of gender inequality. Many women have limited bargaining power in their sexual relationships (UNAIDS Report, 2000); they feel unable to question their husbands, much less non-marital sexual partners, about other sexual encounters they may have had or are currently having. Many women see condom use as unappealing because it connotes a lack of trust, particularly on the part of the man. For these women, condoms are associated with having sex with "the other", not with the stable partner.

Results from the study also clearly indicate that women's ability to successfully initiate condom use or ensure fidelity in partnership depends on the consent of men, because socio-cultural norms give priority to male pleasure and control in sexual interactions[37]. Condoning multiple partner relationships for men is another social norm that increases women's vulnerability to STD/HIV infection. For example, over 30 percent of the women interviewed admitted feeling at risk of contracting HIV because of their partners' infidelity. From this study, the women believed that a variety of sexual partners is appropriate (or at least an acceptable norm) for men but not for women. And although many women expressed concern over the infidelities of their partners, they were

[37] Community health nurse, September 1999.

resigned to their lack of control over the situation. One woman reported that raising the issue of her partner's infidelity could jeopardize her physical safety and family stability.

AIDS, more than any other epidemic, has illuminated the fatal consequences of women's powerlessness for all of society. The fatality of AIDS provides the undeniable moral and economic imperative to make the structural changes that are necessary to empower women (Gupta and Weiss, 1996). Results from the KWEC report indicate that research is a productive mechanism for beginning the process of community mobilization around the AIDS issue. Experience indicates that change is most readily accepted with action research, whose findings are translated into program intervention and participatory research that involves members of the community in the research process (KWEC Annual Report, 1998). For example, awareness of HIV/AIDS, STDs and family planning has been raised through committee training, with members creating awareness in schools and at the village level (KWEC Annual Report, 1998). Experiences from such work demonstrates the utility in drawing the community into a project as a means of winning local cooperation for research on sensitive topics, guaranteeing community ownership of results, and ensuring sustained participation.

While the study was able to identify individual health needs and strategies of coping, all women were confronted by gender discrimination, economic deprivation, and social disorganization. Thus, they and their families often have a similar set of needs that include food, income, housing, education, health care, child care, support and companionship, protection from violence, and power in some or all spheres in which they carry out their activities.

There are a variety of organizations in Kangemi that have attempted to address these needs, including St. Joseph (the Worker) and its subsidiary branches of Dolly Craft, the Upendo Unit, and the Training School, Kangemi Women's Empowerment Centre (KWEC), the Breast Feeding Information Group (BIG), Legal Resources Foundation-Kenya (LRF), and other formal and informal organizations that provide some form of support and help for the women and their families. These include income generation, micro-credit, legal aid and referral, provision of formal and non-formal education, job training, consciousness raising, violence reduction, the meeting of basic needs such as food, health, or education for the women and/or their children, environmental management, and advocacy and awareness of women's rights. Often explicitly included in the goals of such organizations is the empowerment of the women who belong to them.

While the scope of such initiatives is limited in terms of membership and outreach, their activities and mandates are empowering for the women who participate in their programs. At the individual level, participation can lead to positive changes in values and attitudes, including increased sense of control, competence, confidence, and greater self-esteem. With those changes come greater flexibility and more options, accompanied by a more optimistic view of the future and increased personal and community responsibility.

At the group level, group participation can lead to successful group processes[38]. For example, the group can become strengthened and improve internal and external relations. The members may achieve a level of respect they had previously not been

accorded, and as the group becomes better organized and more visible, allies may be enlisted from other organizations, from people in political positions, and from others working on similar issues. All this can work to increase the power of groups and their members, and may take on community-wide health (and other) education responsibilities. Government or NGO programs may even seek out such organizations to help implement additional health-related programs.

Drawing parallels to Moser's ideals about empowerment (1989, 1815), women's organizations can be seen as the key to empowerment strategies because they have the potential to increase women's self-reliance and internal strength. Women need to determine their choices in life and to be able to influence the direction of change through their ability to control material and nonmaterial resources. Similar to Moser, this study recognizes women's multiple roles (reproduction, production, and community work) and believes in the importance of women organizing by and for themselves.

As a final note, research about health and the methodology used to investigate the topic has provided researchers and policy makers with an agenda for the future to explore the concepts of health, well-being, and empowerment with groups of women in different locations who have different cultural, political, social, and economic experiences. A 1994 informal report by the World Bank Office on Population and Nutrition provides an effective summary of where we need to go from this point with regard to understanding [women's] health.

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[38] Not explicitly found in the study, but a realist suggestion indicated by several women and individuals such as CBO workers and Community Health Nurses.

"We know WHAT needs to be done. But we need to understand the HOW: how people 'produce' health; how to ensure technical efficiency of health care systems; how to corporate culture in bureaucracies dealing with health; how to adapt health policy making to the momentous changes that are sweeping the globe. We need to develop our understanding of the determinants of health because health is broader than health care. Yet, we find ourselves confined to discussing only health care reform. We agree that people, not health services, produce health. But beyond that statement the mystery remains: how do people's interactions within the household and the community, with service providers, and with their physical, biological, cultural, economic and political environment determine their health? We have yet to develop a common language that would allow us to analyze and act upon micro, meso, and macro determinants of health." (*Daily Nation*, September, 1999).

CHAPTER 8: Recommendations and Conclusions

8. 1. Summary and recommendations

Given that the lifestyles of the urban poor are complex and dominated by poverty, establishing simplistic causal links between urban health and the urban environment may not paint a true picture. Physical conditions (as measured by housing, sanitation, water) and social conditions (as measured by poverty, education, women's status) combine to determine the status of urban women's health. As suggested by Lamba (1994, 24), it is very clear that the environment of the slums, in particular, is hazardous to health, and so it makes sense that the most important and effective health intervention would be to improve the infrastructure and services in the slums, especially basic necessities such as water and sanitation. Since Kenya's post-independence zeal and mismanagement have been detrimental to the development of basic infrastructure in urban areas, there is a need to strengthen the infrastructure and improve access to basic services. The government needs to enact laws making basic needs, such as health and education, mandatory human rights, and at the same time expand public health funding, and clean water and sanitation to slum communities within the country.

There needs to be an enhanced investment in women's education and promotion of their access to productive resources. The government needs to prioritize women's access to credit, job training, paid employment and property rights through equal rights legislation. The reality is that irrespective of such changes, unless women are empowered economically, they will remain in the vicious cycle of poverty and

marginalization. As indicated in this study, women make financially sound decisions and have the intelligence to comprehend the business environment and adapt accordingly.

In light of women's reproductive health needs, what impoverished women need in order to keep from being infected by HIV and other STDs is a solid factual understanding of the diseases, their modes of transmission, access to relevant services (for example, testing, counselling), and the confidence and social power to initiate and sustain behavioural change. For STD's, but particularly for HIV infection for which there is no effective cure, prevention programs are essential. Successful preventative efforts must be based on accurate information, not only about sexual practices, but also about motivation to avoid risky behaviours, motivations that in the past have had little or nothing to do with health concerns. One recommendation of this study, therefore, is to encourage research on female sexuality, because this is a key area where important contributions can be made to improving health programs for women.

With regard to the lack of use of condoms, there needs to be widespread educational campaigns that de-stigmatize the condom and weaken its association with illicit sex. Opportunities to talk are critical to helping women overcome social norms that define a "good" woman as one who is ignorant about sex and passive in sexual interactions, as well as those that prohibit inter-partner communication on sex, particularly when initiated by the woman. Such norms and beliefs make negotiating the use of a condom very difficult. At the same time, educating men and boys on the consequences of multiple partnerships and high-risk sexual behaviour is essential to reducing both their own risk of STD/HIV infection and that of their female partners.

In addition to STD/HIV education, condom distribution, and infection diagnosis and treatment, the Baseline Survey from the Kangemi Women's Empowerment Centre (KWEC Annual Report, 1998, 8) highlights the need for services which include support networks, income generation, and shelters for women who are victims of domestic violence in order to facilitate individual behaviour change by women. KWEC and St. Joseph The Worker are examples of such organizations that provide services and address the micro- and macro-level socio-economic factors that affect women's sexual behaviour through collective action by fighting legal, economic, and social discrimination. Although such groups are present, more resources are needed to strengthen existing community-based organizations to improve and expand the provision of services to all members of the community.

However, the reality of the situation is that even if women can be provided with these kinds of services, information, technologies, and control within their sexual relationships, they will still continue to face economic and social conditions that undermine the adoption of STD/HIV preventive behaviours. Ultimately, efforts to curb sexual transmission of STD/HIV must address socio-economic concerns. Studies from across the developing world indicate that poverty is overwhelmingly the root cause of women entering into multiple or temporary partnerships or bartering sex for economic gain or survival (Gupta and Weiss, 1996, 9). Such women are unlikely to be swayed by educational campaigns promoting monogamy. Therefore, there is a need to improve women's economic status through such measures as enhanced access to credit, skills training, employment, and most importantly, access to primary and secondary education.

Finally, there is a need to ensure that interventions are relevant to the community: local program practitioners in the research must solicit collaboration with other organizations, such as the state, NGOs, and CBO's. For example, the KWEC collaborates with the Family Planning Association of Kenya, FIDA Kenya, and Maendeleo Ya Wanawake, but as indicated from the KWEC Annual Report (1998/1999), other organizations do not fully cooperate. While St. Joseph's Dispensary cannot provide artificial contraception, for example, it would be more fruitful for KWEC to either provide the necessary contraception or at least information sessions about contraceptive use in collaboration with St. Joseph The Worker. Such collaboration can be relevant to the immediate needs of the women such that they can be used to develop interventions. Moreover, because each organization is doing what it does best, their respective strengths are maximized and scarce resources need not be allocated to training in additional skills.

8. 2. Conclusion

This study developed a framework for the study of women in a slum region which combined qualitative and quantitative data. These methods helped enrich the accuracy and relevance of the study by increasing our understanding of the creation of specific data, as well as the extent of adherence of respondents to concepts and definitions used in the questionnaire.

By restricting my framework to women, this study answers those questions that develop from the observation of women, and which are relevant to women's needs. While men too live in poverty, the study has shown that some of the constraints to the

women's overall well-being are related to particular forms of gender discrimination, as in the case of the heterosexual transmission of AIDS and other STDs. In terms of women's health, this thesis has shown that women bear a greater burden of illness because of gender related roles; they seek treatment belatedly, often putting their children before themselves, and habitually do not take time off from work to properly recuperate.

By advocating a feminist perspective within the Interpretive Social Science (ISS) framework, this study has provided an analysis of socially meaningful action through the direct observation of slum women in a natural setting in order to arrive at understandings and interpretations of how they create and maintain their social worlds. A feminist methodology was important because research strategies have emerged out of, and reflect, women's ways of knowing and action within a particular context, for example, structures of patriarchy and uneven power.

Research conducted in Kangemi has produced a rich source of information on slum women's situation in the context of economic hardships in Kenya. Of specific importance are the topics of sexuality and sexually transmitted diseases, as well as valuable substantive data on women's lives and the factors that appear to affect their risk of HIV/STD infection. The study yields knowledge of the critical importance of gender-role issues in HIV/STD prevention and breaking down barriers to women's access to health and well being coping strategies. It is my desire to see that the recommendations be used to pave the way towards progress in understanding the women's situation and eradicating AIDS/STDs both locally and at a national level.

Bibliography

Achanfuo-Yeboah, D. J. (1988): *Contraceptive Use in Africa.* Research Discussion Paper Number 54. Department of Sociology, University of Alberta, Edmonton.

Adepoju, A. (1993): *The Impact of Structural Adjustment on the Population of Africa* (Ed). The United Nations Population Fund (UNFPA). Villiers Publications, UK.

Ahawo, D. O & Mukras, M. S. (1990). *Kenyan Women in Socio-Economic Development.* University of Nairobi and Women's Bureau.

Ajayi, A & Kekovele, J. (1998). 'Kenya's Population Policy: from Apathy to Effectiveness', in A. Jain (Ed) *Do Population Policies Matter? Fertility and Politics in Egypt, India, Kenya, and Mexico.* Population Council, New York.

AMREF (African Medical and research Foundation). Annual Report. 1998.

AMREF - GOK (Government of Kenya). 1997. *Participatory Poverty Assessment Study Report.*

AMREF. (1992): *Mid-term Evaluation of the Urban Child Survival Project.* AMREF. Nairobi.

Anker, R., & Knowles, J. C. (1980): *Fertility Determinants in Developing Counties: A case study of Kenya.* Population and Employment Working Paper. Number 56. Geneva. ILO.

Ashford, L. S. (1995): *New Perspectives on Population: Lessons from Cairo.* Population Bulletin. Volume 50, number 1. Population Reference Bureau, Inc. Washington, D.C.

Ayako, A. B., & Katumanga, M. (1997): *Review of Poverty in Kenya.* Institute of Policy and Research. IPAR Special Report Series. The Regal Press Kenya Ltd. Nairobi, Kenya.

Ayako, A. B. & Odada, J. E. O. (1988): *The Impact of Structural Adjustment Polices on the Well-being of the Vulnerable Groups in Kenya.* UNICEF. Nairobi.

Balassa, B. (1982): 'Structural Adjustment Polices in Developing Economies' in *World Development; Adjustment Policies in Developing Countries: A Reassessment.* Volume 10. Number 1. World bank, Washington.

Barnum, H. & Kutzin, J. (1993): *Public Hospitals in Developing Countries: Resource Use, Cost, Financing.* John Hopkins University Press.

Berer M. 1993. "Population and family planning policies: Women-centred perspectives." In Reproductive Health Matters, Volume1, 4-12.

Better Health In Africa: Experiences and Lessons Learned. (1994). A World Bank Publication, Washington D.C.

Blanc, A. K., & Way, A. A. (1997): 'Contraceptive knowledge and use of sexual behaviour: a comparative study of adolescents in developing countries', in *Demographic and Health Surveys*, Macro International Inc. Maryland.

Blaxter, M. (1990): *Health and Lifestyles.* Tavistock/Routledge, London

Bleier, R. (1986): 'Introduction' in *Feminist Approaches to Science.* Bleier, R (ed). Pergamon Press, New York.

Bloomstrom, M., & Hettne, B. (1984): *Development Theory in Transition: The Dependency Debate and Beyond: Third World Responses.* Zed Books, London, UK.

Brass, W & Jolly, C. L. (1993): *Population Dynamics of Kenya.* National Academic Press, Washington, D. C.

Buvinic, M. & Lycette, M. A. (1988): 'Women, poverty, and development in the Third World.' In *Strengthening the Poor: What Have We Learned?* Lewis, J. P. (ed) Overseas Development Council, Washington, DC.

Chinemana, F., & Sanders, D. (1993) 'Health and Structural Adjustment in Zimbabwe', in Gibbon's *Social Change and Economic Reform in Africa (ed).* The Scandinavian Institute of African Studies. Hango, Finland.

Cook, T. D. (1983): 'Quasi-experimentation: its ontology, epistemology, and methodology.' In *Beyond Method: Strategies for Social Research.* Morgan, G. (ed). Sage Publication, Newbury Park, CA.

Development Solutions for Africa. (1992): *Strategic Health Plan for the Nairobi Area.* Development Solutions for Africa, Nairobi.

Feachem, R. G., & Jamison, D. T. (1991): *Disease and Mortality in Sub-Saharan Africa.* Oxford University Press. New York.

Fee, E. (1986): 'Critiques of modern science: the relationship of feminism to other radical epistemologies'. In *Feminist Approaches to Science*. Bleier, R. (ed). Pergamon Press, New York.

Ferguson, K. E. (1990): 'Women, feminism, and development.' In *Women, International Development, and Politics: The Bureaucratic Mire*. Staudt, K. (ed) Temple University Press, Philadelphia, PA.

Gage, A. J. (1997): *Sexual Activity and Contraceptive Use: The Components of the Decision Making Process*. Paper presented at the Workshop on Adolescent Sexuality and Reproductive Health in Developing Countries- Trends and Intervention. Washington D.C. March 24-25, 1997.

Gereffi, G. (1989): 'Rethinking Development Theory: insights from East Asia and Latin America. In *Sociology Forum*. Volume 4. Number 4.

Gibbon, P. (1993): *Social Change and Economic Reform in Africa (ed)*. The Scandinavian Institute of African Studies. Hango, Finland.

Goliber, Thomas J. (1997): 'Population and Reproductive Health in Sub-Saharan Africa', in *Population Bulletin*. Volume 52. Number 4. December 1997.

Gould, W. T. S. (1996): *Rising Childhood Mortality in Urban Africa: Policy Implications of Alternative Explanations*. Department of Geography, University of Liverpool. UK.

Gould, W. T. S. & Ayiemba, E. H. O. (1996): *African Mortality and the New 'Urban Penalty' & Demography, Health and Environment in Nairobi*. Department of Geography, University of Liverpool. UK.

Government of Kenya (GOK). 1994. *Social Dimensions of Development in Kenya: An Approach to Human-Central Development and Alleviation of Poverty: Conceptual Framework and Project Profiles*. Government Printer, Nairobi.

Government of Kenya (GOK). (1997). *Poverty in Kenya Report*. Government Printer, Nairobi.

Government of Kenya (GOK). (1993): *Economic Survey 1993*. Central Bureau of Statistics, Nairobi.

Government of Kenya (GOK). (1986): *Sessional Paper No. 1.: Economic Management for Renewed Growth*. Government Printer, Nairobi.

Government of Kenya (GOK), (1985): *Water Supply Design Manual.* Ministry of Water Development, Nairobi.

Grant, Miriam. (2000): Various discussions and lectures with professor.

Gupta, Geeta Rao, & Weiss, Ellen. (1996): *Women and AIDS: Developing a New Health Strategy.* The International Centre for Research on Women (ICRW), Washington, USA.

Gwatkin, D. R. (1991): *The Distributional Implications of Alternative Strategic Responses to the Demographic-Epidemiological Transition.* National Academy of Sciences Workshop on the Policy and Planning Implications of the Epidemiological Transition in LDCS. Washington, D.C.

Halliman, D. M & Morgan, W. T. W. (1967): *The City of Nairobi.* Oxford University Press, UK.

Harding, S. (1991): *Whose Science? Whose Knowledge? Thinking from Women's Lives.* Cornell University Press, Ithaca, NY.

Harpham, T & Stephens, C. (1991): *Urbanization and Health in Developing Countries.* World Health Quarterly Statistics. 44: 62-69.

Hawkins, K., & Ojakaa, D. (1998): *Youth Programme Review of the Family Planning Association of Kenya.* Article in The Standard, Nairobi Press, Kenya.

Hettne, B. (1990): *Development Theory and the Three Worlds.* Longman Scientific and Technical. Harlow, UK.

Hubbard, R. (1990): *The Politics of Women's Biology.* Rutgers University Press, New Brunswick, NJ.

Husain, I. (1993): *Poverty and Structural Adjustment: The African Case.* World Bank, Geneva.

Jones, S. (1995): *Urban Poverty in Kenya.* A Study commissioned by the British Development Division in East Africa. ODA, Nairobi.
Kangemi Women's Empowerment Centre (1999): *KWEC Annual Report.* Nairobi Press, Kenya.

Kangemi Women's Empowerment Centre (KWEC), (1998): *Annual Report and Accounts, 1998/1999.* Nairobi Press, Kenya.

Keller, E.F. (1985): *Reflections on Gender and Science.* Yale University Press, New Haven, CT.

Kenya Consumers Organization. (1992): *Economic Survey 1993.* Central Bureau of Statistics, Nairobi.

Kenya Government. (1994): *Demographic and Health Survey, 1993.* National Council for Population and development, Central Bureau of Statistics, Office of the Vice-President, & Ministry of Planning and National Development. Macro International.

Kenya Human Rights Commission. (1996): *Behind the Curtain: A Study on Squatters, Slums and Slum Dwellers.* A Kenyan Human Rights Commission Report. Land Rights Program. Government Press, Nairobi.

Kiamba, M. (1988): *A Reflection on the Strategies for Planning for Land Use and Development Since the 1960s.* Paper presented at the First International Conference on Urban Growth and Planning of Nairobi. December 1988.

Kirk, J., & Miller, M. L. (1986): *Reliability and Validity in Qualitative Research.* Volume 1. Qualitative Research Methods, Sage Publications, Newbury Park, CA.

Kunguru, J & Mwiraria, M. (1991). *NGO Support to Informal Settlements: A Case Study of Kibera, Nairobi.* Unpublished report.

Lamba, Davinder. (1994a): *Nairobi's Environment: A Review of Conditions and Issues.* Mazingira Institute, Nairobi.

Lamba, Davinder. (1994b): *The Forgotten Half: Environmental Health in Nairobi's Poverty Areas.* Mazingira Institute, Nairobi.

Lee-Smith, Diana. (1994): *Gender, Urbanization and Environment: A Research and Policy Agenda.* Mazingira Institute, Nairobi.

Lee-Smith, Diana. (1993): *Women and Shelter in Kenya.* Mazingira Institute, Nairobi.

Lee-Smith, D & Syagga, P. M. (1989): *Access by the Urban Poor to Basic Infrastructure Services.* Revised March 1990. Mazingira Institute, Nairobi.

Leslie, Joanne. (1992): *Women's Lives and Women's Health: Using Social Science to Promote Better Health for Women.* Paper presented for the Population Council. International Center for Research on Women (ICRW), Washington, USA.

Leys, C. (1996): *The Rise And Fall of Development Theory.* Indiana University Press, Bloomington.

Mairura, E. O. (1988): *Development of Water and Sanitation Infrastructure in Unplanned Low-Income Urban Settlements of Kitui, Kaniku and Kinyago.* MA (Planning) Thesis, University of Nairobi. University Press, Nairobi.

Mamdani, M., Gamer, P., Harpham, T. & Campbell, O. (1992) *Fertility and Contraceptive Use in Poor Urban Areas of Developing Countries.* London School of Hygiene and Tropical Medicine.

Mazrui, A. A. (1988): *The Africans: A Triple Heritage.* Little Brown Publications, Boston.

McElmurry, B. J., Norr, K. F., & Parker, R. S. (1993): *Women's Health and Development: A Global Challenge.* Jones & Bartlett, Boston.

Mkandawire, T. & Soludo, C. C. (1999): *Our Continent, Our Future: African Perspectives on Structural Adjustment.* Council for the Development of Social Science Research in Africa. International Development Research Centre. Africa World Press. Inc. New Jersey, USA.

Moser, C. O. (1989): *Gender planning in the Third World: Meeting the practical and strategic gender needs.* World Development. Volume 17. Number 11.

Mukui, J. T. (1994): *Kenya: Poverty Profiles, 1982 - 1992.* Consultant's Report prepared for the Office of the Vice-President and Ministry of Planning and National Development.

Mullei, Veronica. (1993): *Women and Reproduction in Africa.* Paper presented by AAWORD (Association of African Women for Research and Development). Conference held in Harare, Zimbabwe. Dec. 6-10 on "population Reconsidered: Empowerment, Health and Human Rights".

Musyoki, A., & Orodho, J. A. (1993): 'Urban Women Workers in the Informal Sector and Economic Change in Kenya in the 1980s', in Gibbon's *Social Change and Economic Reform in Africa (ed).* The Scandinavian Institute of African Studies. Hango, Finland.

Mwega, F. M. & Kabubo, J. W. (1993): 'Kenya' in Adepoju's *The Impact of Structurtal Adjustment on the Poluation of Africa.* Villiers Publications, UK

Narayan, D & Nyamwaya, D. (1996): *Learning from the Poor: A Participatory Poverty Assessment in Kenya.* World Bank, Washington, D. C.

Ndegwa, Francis. (1999): *Interview with Francis Ndegwa at St. Joseph Dispensary, Kangemi.* Date: Tuesday September 7th, 3pm-5pm.

Nuelson, J. M. (1990): 'Introduction' in *Feminist Research Methods: Exemplary Readings in the Social Sciences.* Nielson, J. M. (ed). Westview Press. Boulder, CO.

Obudho, R. A. & Mhlanga, C. C. (1988): *Slum and Squatter Settlements in Sub-Saharan Africa; Towards a Planning Strategy.* Praeger Publishers, New York.

Odada, J. E. O. & Odhiambo, L. O. (1989): *Report on the Proceedings of the Workshop on Cost-Sharing in Kenya.* Naivasha-Kenya.
Onimode, B. (1989): *A Political Economy of the African Crisis.* Zed Books, London, UK.

Owino, P. (1997): *Decentralization in Health Sector.* Institute for Policy Analysis and Research (IPAR) Working Paper.

Parpart, J. L., & Sticher, S. (1988): *Patriarchy and class : African women in the home and the workforce.* Westview Press, Boulder, CO.

Patton, M. Q. (1990): *Qualitative Evaluation and Research Methods.* Sage Publishing, Newbury Park, CA.

Rich, A. (1979): *On Lies, Secrets, and Silence: Selected Prose, 1966-1978.* Norton, New York.

Rukunga, D. D. (1992): *Critical Review of Pollution, Waste Management and Kiosk Sanitation in Mukuru and Soweto Slums in Nairobi.* AMREF, Nairobi.

Sagan, L. (1987): *The Health of Nations: True Causes of Sickness and Well-Being.* Basic Books, New York.

Sahn, D.E.; Dorosh, P.A.; & Younger, S.D. (1997): *Structural Adjustment Reconsidered; Economic Policy and Poverty in Africa.* Cambridge University Press, UK.

Schuurman, F. J. (1993): 'Introduction: Development Theory in the 1990s.' In *Beyond the Impasse: New Directions in Development Theory.* Schuurman, F. J. (ed) Zed Books, London, UK.

Sen, Gita. (1994): *Population Polices Reconsidered.* Harvard School of Public Health, Boston.

Sen, G. (1986): *Development, Crisis, and Alternative Visions: Third World Women's Perspectives.* Monthly Review Press, New York.

Stein, J. (1997): *Empowerment and Women's Health: Theory, Methods, and Practice.* Zed Books, London, UK.

Stren, R. E. (1992): *An Urban Problematique: The Challenge of Urbanization for Development Assistance.* Center for Urban and Community Studies, University of Toronto, Toronto.

Smyke, Patricia. (1991): *Women and Health.* Zed Books Ltd. London and New Jersey.

The Daily Nation. (1999). Selected articles from the newspaper from July – November 1999. Nairobi Press.

Turshen, Meredeth. (1991): *Women and Health in Africa.* (Ed). Africa World Press. Trenton, NJ.

UNAIDS Report. (2000): *Report on the Global HIV/AIDS Epidemic.* http://www.unaids.org/epidemic_update/report/Epi_report.htm

UNICEF. (1993): *World Population Prospects.* New York.

UNICEF International's State of the World's Children 2000 Report http://www.unicefusa.org/issues99/dec99/sowc3.html

UNICEF. 1998. UNICEF Statistical Tables (1990-1997). http://www.unicef.org/pon98/stat1.htm

United Nations. (1998): *World Population Projections to 2150.* Department of Economic and Social Affairs Population Division. United Nations, New York.

United Nations. (1996): *Levels and trends of Contraceptive Use as Assessed in 1994.* Department for Economic and Social Information and Policy Analysis Population Division. United Nations, New York.

United Nations. (1998): *Demographic Yearbook 1998.* New York.

Wallace, Laura (Ed): *Africa: Adjusting to the Challenges of Globalization.* Proceedings of a seminar held in Paris May 4-5, 1998. A Publication of the International Monetary Fund (IMF), Washington D.C.

Wijeyaratne, P.; Arsenault, L. J.; Roberts, J. H.; & Kitts, J. (1994): *Gender, Health, and Sustainable Development: An African Perspective.* (Eds.). Proceedings of a Workshop held in Nairobi, Kenya, October 5 - 8, 1993. International Development Research Centre, Ottawa.

World Bank. (1994): *Better Health in Africa: Experiences and Lessons Learned.* Development in Practice. World Bank, Washington, D. C.

World Bank. (1994): *The Many Faces of Poverty. Status Report on Poverty in Sub-Saharan Africa.* World Bank, Washington, D. C.

World Bank. (1997): *International Development Agency In Action. 1993 - 1996: The Pursuit of Sustained Poverty Reduction.* World Bank, Washington, D. C.

World Bank Policy Research Report (1994): *Adjustment in Africa: Reforms, Results, and the Road Ahead.* Oxford University Press, Oxford.

World Bank. (1984). *Controlling the Cost of Education in Eastern Africa.* A review of Data Issues and Polices. Staff Working Papers. World Bank, Washington.

World Bank-GOK. (1994): *First Participatory Poverty Assessment Study Report.* Government Press, Nairobi.

World Development Report 1993. *Investing in Health.* Oxford University Press. Available at http://www.worldbank.org/html/extpb/WDR93PA.html

WHO (1993): *The Work of WHO in the African Region. 1991-1992.* AFR/RC43/3. Biennial Repost of the Regional Director to the Regional Committee for Africa. Brazzaville.

World Health Statistics Quarterly. Volume 44. Number 4. 1991. World Health Organization, Geneva.

World Health Statistics Quarterly. Volume 49. Number 3. 1996. World Health Organization, Geneva.

World Health Statistics Quarterly. Volume 50. Number 1. 1997. World Bank Organization, Geneva.

World Health Statistics Quarterly. Volume 51. Number 1. 1998. World Health Organization, Geneva.

Appendix 1: Sample consent form used for the study

CONSENT FOR RESEARCH PARTICIPATION

I hereby agree to participate in the research investigation entitled "Access to primary health care for low-income women in urban Kenya", conducted by SELINA OMAR ALLU, under the supervision of Dr. Miriam Grant of the Department of Geography at the University of Calgary. This research is intended to explore and document the status of and constraint on women's health.

I understand that my participation is completely voluntary, and that I have the right to withdraw from the study at any time without penalty. I also understand the researcher's right to terminate my involvement at any time. I am aware that notes will be used in the research process. I understand that I may be required to be interviewed more than once, that the total amount of time required for the interview process will range anywhere from a total of two to four hours, and that there will be no monetary compensation for my participation.

I have been informed of the general nature of the study, including the kind of data recording procedures. I am aware of the fact that my identity will be kept strictly confidential. A number will be used to identify transcripts and written reports from my participation. The key listing my identity and the number attached to me will be kept separate from the data in a locked file cabinet accessible only to the researcher and the project supervisor. At the conclusion of the research, I am informed that all data regarding subject information will be destroyed. I am aware that, when the research is over, I can ask the researcher to read my interview notes to me so that I can change them if I so wish.

I understand that participation in the project will not directly benefit me, and that there is no foreseen possibility of harm coming to my family or me. I also understand that the results of this research may be published and/or reported to government, funding and/or scientific agencies, but my name will not be associated in any way with any published results.

I understand that if I have any questions, I can contact Dr. Miriam Grant, the project supervisor, at (403) 220-2241, or Ms. Karen McDermid, Office of the Vice-President (Research) at (403) 220-3381. I have received a copy of this consent form.

_____ _____

Date Signature of participant

_____

Signature of researcher

Appendix 2: Sample questionnaire used in the study

ACCESS TO PRIMARY HEALTH CARE FOR LOW-INCOME WOMEN IN URBAN KENYA
JULY - OCTOBER 1999:

Questionnaire final ID #: ___:___:___

KEY:

A= women contacted through community organization; B= other contact

a= women with partners; b= women without partners

Respondent's first name: _____

Respondent's ID #: _____

Interview conducted on date: ___/___/99

Researcher's notes:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

DEMOGRAPHIC DATA:

1. **What is your age?**_____
   KEY: 1= less than or equal to 19; 2= 20-29; 3= 30-39; 4= 40+

2. **What is your date of birth?** _____

3. **Were you born in this town? (YES) (NO)**
If No, did you come from a rural or an urban area?
   _____
   _____
   _____

4. **What is your marital status?** _____
   KEY: (a) single, never married
   (b) married, common law: (I) spouse present; (II) spouse absent
   (c) divorced/separated
   (d) widowed

4. **How many times have you been married?**
   (a) never married
   (b) married only once
   (c) married more than once *(specify number of times)* _____

5. **What is your ethnicity?**
   _____
   _____
   _____

6. **Do you belong to a church? (YES) (NO)**
   If yes, which religion?
   _____
   _____
   _____

7. **How far did you go in school?**
   _____
   _____
   _____

HOUSEHOLD INFORMATION:

1. **Who are the members of this household (consist of all persons- related family members and all unrelated persons- who occupy this housing unit, and have spent the last 7 nights here)?**

A. Household member	B. Gender	C. Relationship	D. Age	E. Status (*specify*)
1. Respondent				
2. .				
3. .				
4. .				
5. .				
6. .				
7. .				
8. .				
9. .				
10. .				
11. .				
12. .				

KEY:

B. Gender: 1= female; 2= male

C. Relationship: 1= spouse; 2= unmarried partner; 3= son/daughter; 4= parent; 5= grandchild; 6= brother/sister; 7= aunt/uncle; 8= cousin; 9= nephew/niece; 10= in-law; 11= foster child; 12=border/lodger; 13= other non-relative

E. Status: 1= wage employment; 2= self-employment; 3= unemployed; 4= at home; 5= school (nursery/primary/secondary); 6= college/adult training; 7= other

2. **Are your living quarters:**
   (a) owned or being bought by you or someone in your household?
   (b) rented for cash?
   (c) occupied without payment?

   _____

   (d) other (*specify*)?

3. **Can you identify come advantages of your housing location? (i.e., your neighborhood)**

_____
_____
_____

4. **What are some disadvantages of living in your particular location? (i.e., your neighborhood)**

_____
_____
_____

PERSONAL AND HOUSEHOLD INCOME:

1. **How much money did you make last month? KSH:_____**

2. **Respondent's sources of income (in KSH):**

Mode of Livelihood	Average per month	Seasonal (YES) (NO)

3. **Does the amount in (1) equal an average monthly income? (YES) (NO)**
If No, please explain: _____
_____
_____
_____
_____
_____

4. **Who else in the household generates an income, and how much money are they able to contribute, per month, to the household income?**

Household member	Source of Income	Monthly Income (KSH)
1.		
2		
3		
4		
5		
6		
7		
8		

5. **Do you receive any money from a person who is not part of your household? (YES) (NO)**
   If Yes, please explain: _____
   _____
   _____
   _____

6. **What was your <u>total</u> household income last month? KSH:**_____

7. **What are your monthly expenses (KSH)?**
   (a) rent _____
   (b) water/lighting _____
   (c) food _____
   (d) cooking fuel _____
   (e) household items _____
   (f) health care _____
   (g) school fees _____
   (h) transportation _____
   (i) loans/debt _____
   (j) other (*specify*) _____
   _____
   _____

8. **If you are short of money which of the above do you cut back on?**
   _____
   _____

9. **What are the economic coping strategies of your household?**

_____
_____
_____
_____
_____

HEALTH INFORMATION:

1. **How would you rate the health of yourself and of your household, as well as identify some health problems of your household?**

A. Household member	B. Health Status	C. Health Problems *(specify)*
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

KEY:
B. Health Status: 1= not satisfactory; 2= satisfactory; 3= good
C. Health Problems: 1= mild; 2= severe; 3= chronic; 4= fatal; 5= other

2. **What have been your health concerns/problems in the past? (give year)**

_____
_____
_____
_____

3. **Did you seek treatment/help? (YES) (NO)**
   Please explain:_____

4. **What are your present health problems?**
   _____

5. **Are you seeking treatment/help for your current health concerns? (YES) (NO)**
   Please explain:_____

6. **Are you currently on any medication? (YES) (NO)**
   If Yes, please explain: _____

7(a) **I am now going to ask you about when and why you have visited the following types of health care workers:**

	When (year)	Reason for visit
1. Hospitals		
2. Mission-based care		
3. Private clinics		
4. NGO clinics		
5. Chemists/pharmacies		
6. Other		

7(b) When and why you have visited the following types of health care personnel?

	When (year)	Reason for visit
1. African traditional healers		
2. Non-African healers		
3. Market sellers		
4. Spiritual healers		
5. Other		

8. If you are unwell, what is your first response of "treatment"? ***please explain***

_____
_____
_____
_____
_____
_____

9. What are the more common reasons for seeking medical assistance outside your home?

_____
_____
_____

10. Where did you acquire information on the following issues?

(a) treating minor health problems at home _____
(b) choice of self-treatment _____
(c) choice of treatment outside your home _____
(d) general well-being/hygiene _____
(e) family planning _____
(f) birth control _____
(g) protected/safe sexual practices _____
(h) detection of ill-health _____
(i) nutrition _____
(j) breast feeding _____

KEY: **A= female person; B= male person**
1= related household member; 2= family member not part of household;
3= non-relative; 4= friend; 5= church/mosque; 6= local *baraza*;
7= government health care worker; 8= non-government health care worker;
9= a women's organization; 10= other (*specify*)

(Question 11 omitted)

12. Explain your choice of health care strategies and options.

13. Who pays for the health care/treatment in the household?
    (a) for yourself?

    (b) for a household member?

14. What types of problems are in the way for you to have better health? (*specify*)
    (a) economic _____
    (b) cultural expectations _____
    (c) religious practices _____
    (d) physical distance _____
    (e) family obligations _____
    (f) status of women _____
    (g) low/no control over finances _____
    (h) lack of information/education _____
    (i) other _____

15. What do you think the community/neighborhood you live in is doing in terms of providing health care to you and your family?

16. **In your opinion, what could be done to improve your health and that of your household?**

17. **What can be done to improve access to health care information for your community?**

18. **Are your concerns about health and well-being issues shared by other women in your community? (YES) (NO)** ***please explain***

19. **Are the women in your community coming together to tackle issues concerning women's low income earning potential and women's health? (YES) (NO)**

20. **Are you aware of any female representation in local *baraza's*, or government? (YES) (NO)**
If Yes, is this representation helpful? (YES) (NO) (N/A)
Why?

21. **What is your ideal family size in terms of number of children?**
(a) one child or less
(b) 2 to 3 children
(c) 4 to 6 children
(d) 7 children, or more

22. **Are you practicing any form of family planning and/or birth control?**
(YES) (NO) ***please explain***

_____
_____
_____
_____
_____

23. **What would be some of the reasons for using contraceptive measures?**
(a) to limit my family size (my choice)
(b) to limit my family size (not my choice) ***(specify whose choice)***

_____
(c) to protect my health
(d) to protect the health of my children (born and unborn)
(e) to protect the health of my "spouse"
(f) child spacing
(g) cannot afford the cost of more children
(h) my "spouse" is demands it of me
(i) to fulfill demands by another family member ***(specify)***

_____
(j) other ***(specify)***

_____
_____
_____

24. **Who makes the decisions about family planning in your household?**
(a) yourself
(b) other ***(specify)*** _____
_____
_____
_____

25. **Are you worried that other members of your household are sexually active and are not practicing safe sex?**
(YES) (NO) ***please explain***

_____
_____
_____
_____
_____

26. Would you encourage anyone in your household to be educated in regards to safer sexual behavior, use of condoms, etc.?
(YES) (NO) ***please explain***

27. Are you aware of the AIDS epidemic in Kenya?
(YES) (NO)

28. What do you know about AIDS- who is at risk, how it spreads, prevention, etc.?

29. Are you concerned that you may be at risk, or prone to HIV/AIDS infection?
(YES) (NO) ***please explain***

30. What measures are you taking to protect yourself from getting infected with the AIDS virus, and/or other Sexually Transmitted Diseases (STD's)?

31. Through what means is your community making people aware of the AIDS epidemic and other health issues?

(a) radio/TV
(b) local *baraza's* or meetings
(c) health care workers
(d) church/mosque
(e) missionaries
(f) visits "doctors" or nurses
(g) posters/bill boards
(h) flyers/pamphlets
(i) plays/skits
(j) other *(specify)* _____
_____

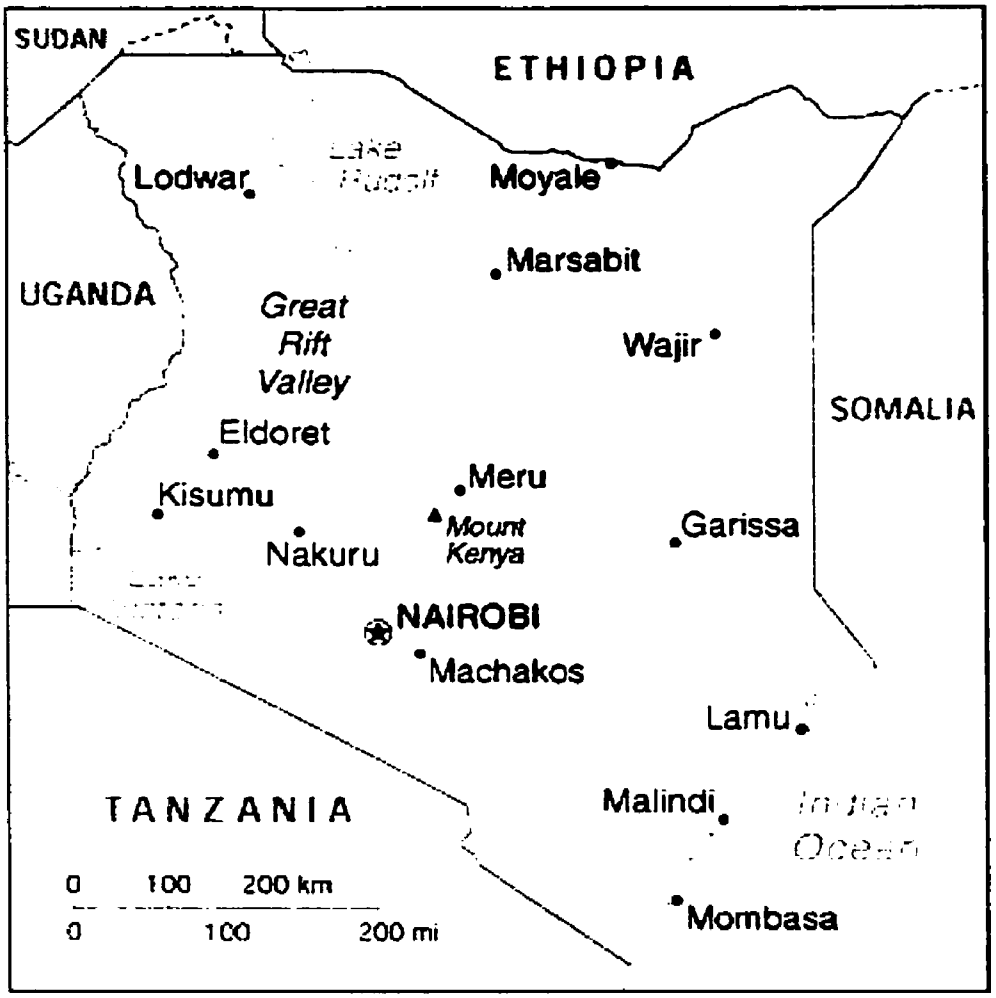
32. What are your hopes for your future and that of your household?

_____
_____
_____
_____
_____
_____
_____

33. Do you have any other comments you would like to make?

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

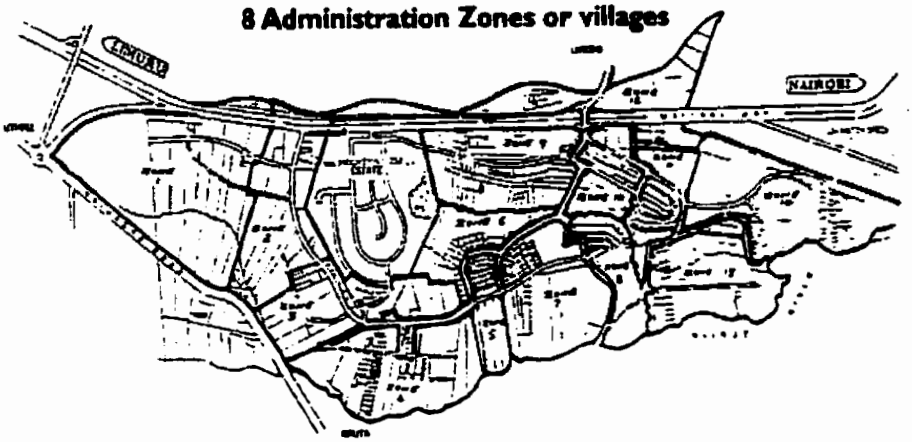
Appendix 3: Map of Kenya



Source: Modified from Lamba, 1994, 59.

Appendix 4: Map of Kangemi Slums (1997)

PAROKIA YA MTAKATIFU YOSEFU MFANYAKAZI.
KANGEMI - NAIROBI
8 Administration Zones or villages



a) Area in square meters
b) Population density

1. ZONE 1 NITD.
2. ZONE 2, 3, & 4 Thiongo & Thiboro Road.
3. ZONE 5 Gichagi Village.
4. ZONE 6 & 9 Marenga Road.
5. ZONE 7 & 10 Central
6. ZONE 8 Rift Valley Village.
7. ZONE 13 Kangora Village.
8. ZONE 11 & 14 Waruku Village

Source: KWEC. 1998. 3.