HOW HEALTH BUDGETS AFFECT THE HEALTH SEEKING BEHAVIOUR AMONG SLUM DWELLERS OF MUKURU FUATA NYAYO, MAKADARA DIVISION OF NAIROBI.

BY

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REG. NUMBER: I57/9139/00

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF PUBLIC HEALTH AND EPIDEMIOLOGY OF KENYATTA UNIVERSITY

APRIL 2004

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How health budgets affect the health
DECLARATION

This thesis is my original work and has not been presented for a degree in any other university or any other award.

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To my mother and father whose silent prayer and loud encouragement have brought me this far.
ACKNOWLEDGMENT

I am indebted to my supervisors Prof. R.O. Okelo and Prof. E. Wafula for their assistance, encouragement and patience during the entire course of the study. I wish to thank the academic staff, Department of Zoology Kenyatta University for their cooperation.

I would very much wish to thank the group leaders of Mukuru Fuata Nyayo slum, in particular Sarah Kanini for assisting me to recruit research assistants during the data collection process. Special thanks go to the household heads that agreed to participate in this study and for their kind gestures of welcome as we approached their houses.

Last but not least I wish to thank my husband Isaac for his love, patience, moral and financial support without which the entire course would not have come to pass. Our children Stephen, Samuel, Elijah, Elizabeth and David for their patience, prayers and some degree of understanding when this work diverted my attention from their company.
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<td>Government of Kenya.</td>
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<td>HIV</td>
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<td>-</td>
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ABSTRACT

In Kenya most of the urban poor who live in the slums informal settlements contribute to the high indices of poor health in the urban areas. Most studies done on health seeking practices have focused on the general population, yet the urban poor have not been studied as a group.

This descriptive cross sectional study aimed to focus on the health seeking practices of individual families living in Mukuru Nyayo slum in Nairobi in relation to the amount of money spent on health care per month. Sampling was done in stages. First, (Mukuru Nyayo) was divided into five administrative sub-locations. Each of the five sub-locations was regarded as a cluster. Systematic sampling was carried out within each cluster to identify the households that were studied. Questionnaires were used to determine households’ incomes, amount spent on health care, food and rent and where they sought for health care services. 400 respondents were interviewed, and 49% sought health care from a catholic mission health facility nearby. There was a significant statistical association between the cost of health care (45% spent less than 100 shillings) and the health facility where they went when sick. \( \chi^2 = 282.01; P < 0.05; df = 6 \). Respondents who earned between 1000 – 5000 shillings were 45%, a significant association was found between health care facilities sought and household incomes \( \chi^2 = 38.52; p < 0.001; df = 6 \).
Of the slum residents interviewed who earned more than 5000 shillings, 42.3% spent more than 1000 shillings on medical care as compared to 72% who earned nothing and spent less than 100 shillings on health services ($\chi^2 = 70.05; p < 0.05; df = 9$).

As a recommendation, the people who build houses (landlords) in Mukuru Fuata Nyayo, should be prevailed upon to build toilets before renting them out to tenants. Lack of toilets contributed to unhygienic standards in the area and was attributed by 14.5% of the respondents as a cause to poor health.

Privately owned health care facilities should be routinely inspected by the Ministry of Health to ensure that the services they offer are professional and not harmful to the residents. This information will assist health planners provide and implement health packages, which are accessible and affordable for urban slum dwellers.
CHAPTER 1

1.0 INTRODUCTION AND LITERATURE REVIEW

1.1 INTRODUCTION

Health seeking behavior is largely dependent on the affordability of the health services provided. People in the lower socio-economic class have limited resources, therefore, they have to weigh the choice of treating an illness episode and a particular type of health care against the purchase of goods and services (Levin et al., 2001).

Health status and income affect the demand for health care that individuals express by allocating budgets for the purchase of this commodity. This may be because most people perceive health care as an occasional need, while food, clothing and housing are daily needs. Thus health care expenditures may be postponed until the need arises, while the cost of other daily necessities must be borne on a continuing basis.

Factors that are important in making health care choices include quality of service provided, the distance to the health facility, and the waiting time. Men are more concerned about waiting time, while women are interested in the facilities and range of equipment available (Bery, 1996). A study carried out in Mbeere District of the Eastern Province of Kenya on utilization of antenatal and maternity services revealed that women’s use of health services is greatly influenced by their expectations of those services and whether those services are met (Mwaniki et al., 2002). Some people also consider the provider’s gender when making health care choices.
About 60% of households seek curative care from both Public and Private health services in equal proportions (Gallacchi et al., 1998). Due to rapid urban population growth, the Government is increasingly unable to provide basic social services due to an overstretched infrastructure such as hospitals, schools, housing and others. Few or absence of Government services in an area, is likely to negate access to health services for about one third of the population (Wang’ombe et al., 1998). Despite the fact that 77% of Government run health facilities are in urban areas, slum areas which have the majority of the urban poor have not been adequately catered for (Gakuru and Kamigwi, 2000). There is a widespread concern that increasing user fees is unaffordable and this is denying the vulnerable groups from seeking appropriate health care services at public facilities (Owino and Were, 1998). Availability of drugs in a medical facility is positively related to medical care use (Ainsworth and Shaw, 1996).

Once the decision to seek health care has been taken, the choice of the primary provider could be the traditional practitioner, the private doctor, the health center, the hospital or self-medication. Self-medication is self-treatment with medicines kept in the house, which were bought before illness developed or with leftover medicines that had been previously prescribed. Purchasing and taking medicines without consulting health care professionals in the event of illness is another common form of self-medication. Formal and informal community based health delivery services are important sources of care and these include kiosks and community pharmacies (Hanson and Berman, 2000)
A study by Mwaniki et al., (2002) reveals that the major constraints experienced by mothers as they sought for health services, included lack of transport, money for transport and lack of hospital fee. Delay in admission to the health facility once mothers report in labour was among the major constraints. While user-fees is a factor that decreases user demand, the choices people make may not always be well advised or effective, but they nevertheless represent consumer decision-making based on cost considerations (Newbrander et al., 2001).

1.2 LITERATURE REVIEW

1.2.1 Government Health Care

Since independence in 1963, KANU the then ruling party pledged to give free health care and education to all Kenyans. Starting in the early 1980s, economic slow down, inflation and increasing population growth made Government funding of the health sector commitment difficult (Stover, 2001). After adjustments due to inflation, the Ministry of Health recurrent expenditures fell by over 20 percent, which translates into an even larger fall in per capita terms, taking into account that there was a 50 percent increase in population (Collins et al., 1996). It is expected that per capita spending will fall when there is a high population growth coupled with low economic growth (Jowett, 1999). With the prevailing socio-economic crises and the over stretched tax system, the current level of Ministry of Health (MOH) annual per capita spending alone, would not be sufficient to fully finance the essential health package for every Kenyan (Gakuru and Kamigwi, 2000).
Government sources are not sufficient enough to enlarge health systems to meet the increased demand or to expand access to health services for the poor (Newbrander et al., 2001). Given that only 20 percent of Kenya is effectively covered by the Government health services (Oranga, 2000), there is a need for a new financial strategy to be able to cover the remaining 80 percent of the population.

In Ghana, the public health system effectively reaches only 65% of the population (Turner, 1995). Another reason for the seemingly low utilization of modern care appears to lie with the deteriorating quality and effectiveness of public health services, often due in part of the inadequate finance. Maintenance of public health facilities continues to be an immense burden for the Ministry of Health’s recurrent budget with a resultant deterioration of physical facilities and their basic equipment (WHO/Kenya 1996).

1.2.2 Cost Sharing

The cost-sharing programme, also called the Facility Improvement Fund (FIF), was introduced in 1989 to supplement Government resources allocated to the health sector. At its inception, patients paid some fees on registration. Then the policy was suspended one year later allegedly because it denied a large proportion of the population access to medical care (Collins et al., 1996). In 1992, fees were carefully reintroduced in phases, and they remain in place today. User fees is meant to improve the quality of health services in gazetted participating institutions, health centers, sub-district hospitals, district hospitals, and provincial general hospitals (ROK, financial report 2000-2001).
In a poverty survey by UNICEF and Overseas Development Agency (ODA) in 1995/96, it was found that user fees in Kenya reduced demand of health services by a large proportion (Owino and Were, 1998). Despite the introduction of exemptions as a policy to ensure equal access to health services, many patients and community members interviewed did not know that they might be eligible for exemptions, (Newbrander et al., 2001). Such people usually delay seeking health care for lack of money and in the process the illness becomes worse.

Without any source of health care financing, a trivial illness without treatment can finally develop into a fatal disease. Majority of patients who present with perforated ulcer in the developing world, present late due to treatment delays, ignorance, or transport difficulties (Hill, 2001). This has impacted negatively on their health status, which in turn has made them less productive and poorer (Newbrander et al., 2001).

Cost sharing collections continue to increase, in the financial report of 2000-2001 there was a 32% (173 million shillings) increase of the previous year’s collections, while the total waivers and exemptions in the same period amounted to Ksh. 32 million (3.23 % of the total revenue collected) (ROK financial report, 2000 - 2001). Given the extent of poverty in Kenya, it would raise concerns as to whether the poor were not indeed missing care.
1.2.3 Poor Families

Inequality is the leading cause of poverty in Kenya that is determined by among others human assets, which are labour, opportunities, skills and good health (Wagacha, 2001). Equity can be defined as access to basic, good quality health care, based on a need for those services. Widespread trends in health policy such as increased user fees and an increased role for private health care providers have resulted in a greater financial burden for those who use health services (Bennet, 1998). The burden is felt much more by the poor who are not able to access the services due to lack of funds. The lowest social groups present weaknesses as a consequent of their economical conditions that are additional to be faced when they need to use the health services (Santana, 2002).

Demand for health care services has increased, not only due to population growth, but also due to the spread of the AIDS epidemic, refugee problems associated with political instability, re-emergent and increasing episodes of infections such as malaria, typhoid and tuberculosis (Collins et al., 1996). Unemployment, low income and bad living conditions make people nervous and malnourished. Without any source of health care financing, a trivial illness with no treatment can finally develop into a fatal illness. This happens more frequently when the services they need are preventive or more specialized (Santana, 2002).
Discontinuing medical care due to obstacles such as high cost of prescribed medication or high costs of medical examinations supposed to determine the next course of action is another obstacle (Xiao-ming et al., 2002) All these factors directly push up the demand for medical care among the poor population.

Economically, Government health institutions cannot cope with the increased demand for health care services, therefore, the family bears the burden and this has reduced the people’s ability to access quality health care. Incomes of poor households strongly influence the choice of the health care service provider. A number of studies have shown that the poor are relatively more sensitive to price changes than the rich (Owino and Were, 1998). The poor are willing to take treatment in “street hospitals” as long as they provide low-cost services (Levin et al., 2001). A study by Mbugua et al. (1998), found that even with the fee waiver and exemptions in place, the poor households including the young children were not protected from adverse effects of user fees.

When the poor get ill or uncomfortable, they often just endure it, especially when they get a cold or a headache, they do not think of it as a disease and take no medical treatment. From a study carried out in China, statistics showed that 18% neither saw a doctor nor took medicine when they became ill for economic reasons and 31.3% bought medicine themselves (Xiao-ming et al., 2002). In Latin America, a large number of people have no access to the medicines that have been prescribed for them due to their lack of purchasing power (Zerda et al., 2002).
1.2.4 Health-Seeking Behaviour

Evidence reveals that Government facilities rank low in household’s choice of health care service provider, even though they account for about 60 percent of health facilities and employ 70 percent of the professional medical staff (Wasunna, 1997). Only one third of sick individuals seek treatment from Government facilities in rural areas, while only a quarter in urban areas (WHO/Kenya, 1996).

Inefficiency in Kenya’s health service delivery system has led people to seek alternative forms of health care. A study on health seeking behaviour revealed that some of the attributes in health clinics that have discouraged use were lack of drugs (Narayan and Nyamwaya, 1995). In Mombasa/Kwale 3% of households explicitly stated that they utilize traditional healers and herbalists (Wang’ombe et al., 1998). In Ghana, a study on cost, quality and accessibility in utilization of health care revealed poor and inequality of access. The review further raised concerns about the quality of health care in the public sector characterized by inadequately trained staff, uneven geographical distribution of clinical personnel, widespread shortage of drugs and inadequate and improper use of equipment (World Bank 1999) (Levy and Germain, 1999).

The private sectors (which include NGOs quality health centers, private hospitals, clinics as well as ‘quacks’), provide 50% to 90% of services from the patient’s pocket (WHO, 2000). This means that buying drugs dominates household spending for health among low-income earners.
Distance to the health facility or availability of funds is another consideration made when making a choice of the health provider. Both distance and user fees reduce the demand for health care, but men are less constrained by distance and user fees than are women (Mwabu et al., 1996). Perceptions of the effectiveness of health care providers also influence the utilization of services. Indicators of the quality of care include: the supply of drugs and equipment, the number and type of health care providers, the attitude and friendliness of medical staff, the type of treatment provided, and the amount of medicine prescribed (Ainsworth and Shaw, 1996). According to a study in Lusaka, Zambia, obstacles to the use of formal health care were listed as: (i) Shortage of drugs (ii) lack of privacy (iii) long queues (iv) examination by the opposite sex (v) high fees (vi) poor attitudes of staff (vii) bringing partner before treatment in cases of sexually transmitted disease (MOH Mozambique, 2000).

It is important to identify and implement alternative realistic policies and mechanisms for allowing the largest possible section of the Kenyan population access to health services. The Government should consider financing minimum packages that should be made available to the section of that community which will not be in a position to pay for them (Wang’ombe et al., 1998).

1.2.5 National Health Insurance Fund (NHIF)

The NHIF is another form of health financing in Kenya. At inception, NHIF was meant to assist Government employees and their families to gain access to higher quality private hospitals, thereby relieving congestion in the free public hospitals. Economic activities of
the majority of poor households (casual day to day labour and small businesses) tend to have low and fluctuating incomes, making it difficult for the majority of Kenyans to participate in the health insurance market. The low incomes cannot pay monthly insurance premiums. Studies show that NHIF has a coverage of only 25 percent of the Kenyan population (Gakuru and Kamigwi, 2000 and Kraushaar et al., 1995). Without access to such insurance, many people are unable to obtain treatment or must incur debts to pay hospital bills (Griffin and Shaw, 2002).

The government is in the process of working out a Social Health Insurance policy which aims to provide health care for all Kenyans irrespective of their economic or social class. By pooling financial contributions from many people, insurance plans can cover the hospital expenses of those experiencing catastrophic events, such as near-fatal illness or injury (Griffin and Shaw, 2002).

1.3 RATIONALE OF THE STUDY

1.3.1 Statement of the Problem

The introduction of user-fees in 1989 had an effect on the demand for Government health services in Kenya. Cases of declines in the average utilization rates of health services was recorded especially in low-income areas, and, in those facilities characterized by misuse and mismanagement of the additional user-fee revenue (Owino, 1998).

The present economic status in the country has led to rapid urbanization because people are looking for some form of livelihood. If there is a large-scale of influx into the cities of
people who are competing for jobs at the lower range of the wage scale, overcrowding, poverty and depressed living conditions are likely to ensue (Mitchell, 1987).

One of the key features of the city of Nairobi is that a large proportion of its population, estimated to be between 50 to 70 percent live in informal settlements where environmental and health conditions are very poor (World Bank 1999)

basic commodities such as food exacerbated by Structural Adjustment Policies (SAP), the cost of basic services such as health and education has placed an additional burden on families (UNICEF, 2001). In addition, the chronic under funding of health services has had an effect on the quality of services, maintenance of facilities being neglected and low staff morale due to delays in salaries and lack of equipment (Thompson et al., 2000).

Demand for public health services has fallen and people have resorted to cheaper alternative sources of health care.

People who are poor also have a high incidence of illness (Zschock, 1998). Poverty limits one’s ability to purchase even basic necessities, such as food and health care. Delaying to seek health care results in the illness becoming more serious and eventually more expensive to treat (Newbrander et al., 2001). Because of poverty, majority of patients who present with a perforated duodenal ulcer in the developing world, present late due to treatment delays ignorance or transport difficulties (Hill, 2001). Untreated people are unproductive for long periods and this usually has a negative effect on family incomes. Patients or their relatives may sacrifice other immediate basic needs such as food, to pay for health care.
Where health costs are high, patients who are not initially poor may become poor by being forced to borrow or sacrifice savings or by selling other assets like land, or using up money meant for school fees. Lack of medical treatment for poor families, keeps them in the poverty trap and they cannot improve and raise their own living conditions, because what they gain has to be used for disease treatment (Xiaoming et al., 2002).

1.3.2 Research Questions

1. What is the amount of money earned by a household in Mukuru Fuata Nyayo in a period of four weeks?

2. Where do the residents of Mukuru Fuata Nyayo go for health care, given the amount of money they are able to pay for the health services?

3. What is the amount of money spent on food, water and rent every month in comparison to the amount of money spent on purchasing health care?

1.3.3 Justification of the Study

Government Health Services are mainly utilized for their curative care.

In many slum areas, public health services are not sufficient to cater for the population and this is likely to negate access to these services. Studies on the actions taken by household in response to illness episodes that occurred over a period of one year, demonstrate a low rate of visits to clinics and hospitals in areas where such facilities are not conveniently accessible (Nyamwaya et al., 1998). There are 20 health facilities per 100,000 urban residents which translates to one facility for 5,000 people (Gakuru and Kamigwi, 2000).
Cash payment is the predominant mode of procuring health care services by the majority of the population as insurance and community financing only caters for people in permanent employment or those who can organize for a fund raising. Health related expenditures have a negative impact on the households with the lowest budgets. In general, there is lack of data on the health care seeking practices of slum dwellers and the actual amount of money allocated to these services.

This study was aimed at identifying the health seeking practices and their associated budgetary allocations among households in slum areas. With this information, health policy makers will be able to plan health packages and interventions for slum dwellers in Nairobi to ensure that all individuals have access to effective public and personal health care and to reduce or eliminate the possibility that an individual will be unable to pay for such care, or will be impoverished as a result of trying to do so.

1.4 NULL HYPOTHESES

1. Health seeking practice among low-income earners is not influenced by the cost of health care sought.

2. Government health facilities are available in urban slum areas and so the people do not seek private health care services.

3. Food and rent is considered as important as health care thus the amount of money allocated to both is equal.
1.5 OBJECTIVE OF THE STUDY

1.5.1 General objective

To identify the health-seeking practices and their associated budgetary allocations among families living in Mukuru Nyayo slum.

1.5.2 Specific objectives

1. To determine the amount of money earned by a household in the slum as income, over a period of a month.

2. To determine the circumstances that lead to failure of seeking health care and the type of health services a household in the slum area sought for its members in the past four weeks.

3. To determine the amount of money spent by the household on health services, food and rent within a month.
CHAPTER 2

2.0 MATERIALS AND METHODS

2.1 Study design
This study was a cross-sectional survey on the health seeking practices of slum residents in relation to budgets allocated to health care. Qualitative and quantitative data were collected using structured questionnaires (Appendix I) and focus group discussion (Appendix II). The questionnaire was interviewer-administered to household heads.

2.2 Study area
The study was carried out in Mukuru Nyayo slum, which is in the Makadara Division of Nairobi. The division is divided into five locations namely: Makongeni, Makadara, Maringo, Viwandani, and Mukuru Nyayo.

2.3 Study population
The population of Mukuru Nyayo is estimated to be 36,235 people, with approximately 10,224 households as per the 1999 census (Central Bureau of Statistics).
In Mukuru Fuata Nyayo, the dominant ethnic groups are Kikuyu, Luhya, Luo and Kamba in that order. Compared to their relative proportion in Nairobi as a whole, the Luo and the Luhya are over-represented while the Kikuyu are under-represented.
2.3.1 Social Amenities

Generally, like most other slums, Fuata Nyayo residents distinctively lack basic amenities such as electricity, drinking water, and proper sanitation. Some houses have electricity, but compared to the neighbouring estates like River Bank or Golden Gate, the percentage of houses with electricity in Mukuru is very low. Water in Mukuru is purchased on a regular basis for domestic use because the households do not have piped water. Fees for water on a daily basis is an added expenditure to the slum dwellers and is thus a burden.

There is very poor sanitation and drainage in Mukuru, most toilets are filthy because they are shared by a large number of households. There is open sewer drainage from neighbouring estates on top of which rental toilets have been constructed. People pay to use these toilets, which is an additional expense. Garbage is littered all over the place, and there is no system for proper waste disposal. The garbage and the dirty drainage water including the open sewer passing through this slum, make Mukuru a very unhygienic environment.

Nearly all the houses in Mukuru Fuata Nyayo are made of corrugated iron sheets, both the roof and the walls. Majority of the houses comprise of single rooms. Radios are the main source of entertainment in the slum, although some households own television sets.

Some people in Mukuru Nyayo engage in small businesses such as: selling vegetables and second hand clothes, keeping food kiosks, operating posho-mills, butcheries, and hair salons which are mainly run by women. Majority of those employed earn low salaries of approximately two thousand Kenya shillings. The rest of the population is jobless and some engage in selling illicit brews commonly known as ‘kumi-kumi’.
2.4 Inclusion criteria

1. Slum dwellers who had lived in Mukuru Nyayo for more than six months.
2. All household heads whose houses were sampled were included in the study.
3. Households where the leaders were willing to give information.

2.5 Exclusion criteria

1. Households whose household heads were not willing to give information.
2. Slum dwellers that did not reside in Mukuru Nyayo slums of Nairobi South B.
3. All people who were not household heads.

2.6 Sampling method and sample size determination

2.6.1 Sampling size Determination

The formula as used by Fisher *et al.* (1998) was used to calculate sample size as follows.

\[
N = \frac{z^2pqD}{d^2}
\]

- **N** = Desired sample size, (>10,000)
- **p** = Proportion of the target population estimated to have a particular prevalence of low income (0.50).
- **q** = 1 - 0.50 = 0.50
- **d** = Degree of accuracy desired (0.050).
- **z** = The standard normal deviated (1.96) which corresponds to the 95% confidence level.

So \[ z^2 = (1.96)^2 = 3.8416 \]

So \[ d^2 = (0.05)^2 = 0.0025 \]
D = 1

\[ N = \frac{3.8416 \times 0.5 \times 0.5}{0.0025} = 384 \]

Minimum sample size was rounded to 400 households.

Since there are five clusters, each cluster had \( \frac{400}{5} \), which is 80 households selected for the study.

2.6.1 Sampling method

Multistage sampling was adopted. In the first stage, cluster sampling was done where each sub-location was regarded as a cluster. In the second stage, systematic sampling was done using the 1999 census numbering of households to identify the number of households to be studied. Since the sample size was 400, and there were five clusters, so 80 households were taken from each cluster. \( \frac{400}{80} = 5 \) every fifth household was sampled for interviewing.

2.7 Research instruments

Under the guidance of a village health committee leader, the investigator assisted by other community members and research assistants, visited, sampled households and interviewed household heads. Research assistants were form four leavers from within the community. They were recruited and trained to interview household heads. The investigator followed each of the research assistants to make sure that the questionnaire was being administered appropriately.
2.7.1 Questionnaires

Using questionnaires, information was collected on the amount of income received, amount of money spent on health care, the type of health care sought and the amount of money spent on food and rent. The questionnaires were pre-tested in Quarry Pipeline slum, which is in Embakasi Division of Nairobi. Quarry Pipeline slum is about five Kilometers away from the study area. There after, the questionnaires were revised appropriately and used in the main study. The sample population size of 400 was achieved after collecting information for a period of one calendar month.

2.7.2 Focus Group Discussion

Focus group discussions were held with location leaders. Each sub-location was represented in the focus group discussion. Questions asked, as referred in Appendix ii, were to reinforce information obtained from questionnaires.

2.8 Data management and analysis

Data collected was cleaned, coded, edited, and entered into the computer using the excel package after which the statistical package for social sciences was used for analysis. A variety of statistical tools were used depending on type of data and the variable to be analyzed. The chi-square test was used to test for associations of independent and dependent variables.
CHAPTER 3

3.0 RESULTS

3.1 Characteristic of study population

The main characteristics that were likely to affect the health seeking practices of the study population were, among others their earning capacity and their economic engagement. Majority, 45%, earned between 1000 – 5000 shillings and 84 (21%) were casual labourers while 79 (19.8%) were unemployed. Housewives who just stayed in the houses without any income generating activity were 17%.

3.1.1 Age of respondents

There were 176 (44%) male respondents in the study area and 224 (56%) female respondents (Fig 1). This could be attributed to the fact that most households had female respondents as the men had gone for some income generating activity. The association between the age of the male and that of female respondents is not significant. ($\chi^2 = 4.932; \text{df} = 4; P = 0.294$)

3.1.2 Age and Marital status

Majority of the respondents 130 (32.5%) fell in the age group of between 26-35 years, while 111 (27.8%) were in age group 18-25 years (Fig 1). Only 9 people were below 18 years of age, which is a mere 2.3% of the total number of respondents. The age group of 36-45 years had 96 (24%) respondents while the oldest age group of above 45 years had 54 (13.5%) respondents.
Fig 3.

AGE BY SEX

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 18</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>18-26</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>27-35</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>36-44</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Above 44</td>
<td>20</td>
<td>30</td>
</tr>
</tbody>
</table>
3.1.3 Marital status

Two hundred and twelve (53%) of the study population were married, while 127 (31.8%) were single. Those from the study group who were separated or divorced, were (33) 8.3%. Widowed respondents were, 28 (7%) of the total population studied (Table 2)

3.1.4 Number of children

Most households had between one to three children 195 (48.8%). Those households that did not have children were 90 (22.5%). This maybe attributed to the fact that there are a number of young people living in the slum areas. Those who had four to six children were 63 (15.3%), while those who had more than six children were 52 (13%) (Table 3).

Table 1: Age by sex

<table>
<thead>
<tr>
<th>Age of respondent</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Below 18</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>18-26</td>
<td>48</td>
<td>12.0</td>
</tr>
<tr>
<td>27-35</td>
<td>50</td>
<td>12.5</td>
</tr>
<tr>
<td>36-44</td>
<td>51</td>
<td>12.8</td>
</tr>
<tr>
<td>Above 44</td>
<td>23</td>
<td>5.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>176</td>
<td>44</td>
</tr>
</tbody>
</table>

$\chi^2 = 4.932 \text{ df} = 4 \quad p > 0.05$
### Table2: Marital status

<table>
<thead>
<tr>
<th>MARITAL STATUS</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>127</td>
<td>31.8</td>
</tr>
<tr>
<td>Married</td>
<td>212</td>
<td>53</td>
</tr>
<tr>
<td>Separated/Divorced</td>
<td>33</td>
<td>8.3</td>
</tr>
<tr>
<td>Widowed</td>
<td>28</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>400</td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

### Table3: Number of children

<table>
<thead>
<tr>
<th>NUMBER OF CHILDREN</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>90</td>
<td>22.5</td>
</tr>
<tr>
<td>1 - 3</td>
<td>195</td>
<td>48.8</td>
</tr>
<tr>
<td>4 - 6</td>
<td>63</td>
<td>15.8</td>
</tr>
<tr>
<td>More than 6</td>
<td>52</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>400</td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
3.1.5 Number of children who live in the households (Table: 4)

Most people, 190 (47.5%), lived with 1 – 3 of their children, while 116 (29%) respondents did not live with any children. Fifty five (13.8%) respondents lived with four to six of their children in the households studied. Those who lived with more than six of their own children were 39 (9.8%). This follows a pattern that most people live with their children in slum areas as shown in Fig 4.

**Table 4: Number of children who live in the household**

<table>
<thead>
<tr>
<th>NUMBER OF CHILDREN</th>
<th>Number of Respondent</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>116</td>
<td>29</td>
</tr>
<tr>
<td>1-3</td>
<td>190</td>
<td>47.5</td>
</tr>
<tr>
<td>4-6</td>
<td>55</td>
<td>13.8</td>
</tr>
<tr>
<td>Above 6</td>
<td>39</td>
<td>9.8</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

3.1.6 Education level of respondents

Fig 3 shows that most slum dwellers that participated in the study, 117 (29.3%), had completed secondary school, but 80 (20%) had not completed secondary school education. Primary school education was completed by 21.5% (86), while those who did not complete primary school were 43 (10.8%) in number. Twenty eight (7%) had not had any formal education, while 29 (7.3%) had been to some college and had not completed and only 4.3% (17) had completed their college experience.
Fig 4: Comparison of the number of children that respondents have and the number that live with them.
Fig 5: Education level of respondents

![Pie chart showing education level of respondents]

- 30% None
- 21% Primary not completed
- 20% Secondary completed
- 7% Secondary not completed
- 4% College or University completed
- 7% College or University not completed
3.1.7 Religious affiliation

Most respondents were Christians with 165 (41.3%) being Protestants, and (160) 40% of the households interviewed belonging to the catholic faith. Muslims comprised of 37 (9.3%) of the population studied. Twenty two (5.5%) people confessed to have no religion while 16 people (4%) belonged to traditional religions that believe in spirits for supernatural powers (Table 5).

Table 5: Religious affiliation

<table>
<thead>
<tr>
<th>RELIGION</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protestant</td>
<td>165</td>
<td>41.3</td>
</tr>
<tr>
<td>Catholic</td>
<td>160</td>
<td>40</td>
</tr>
<tr>
<td>Muslim</td>
<td>37</td>
<td>9.3</td>
</tr>
<tr>
<td>Traditional</td>
<td>16</td>
<td>4.0</td>
</tr>
<tr>
<td>No Religion</td>
<td>22</td>
<td>5.5</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

3.1.8 Occupation of the respondents

As shown in Fig.4, 85 (21.3%) of the respondents were occupied with small-scale entrepreneurship, which is some form of business. Twenty one percent or 84 of the respondents did casual jobs on a day-to-day basis. Casual workers are not permanently employed, and so they were paid per day, a situation of uncertainty for future planning. Quite a significant number 79 (19.8%) were unemployed household heads, and 68 (17%) were housewives who were not engaged in any form of income generating activity. Skilled artisans were 38 (9.5%), they had trained in their various skills and were earning
a living from giving their services. Only 34 (8.5%) respondents out of the 400 interviewed were employed. Households headed by students were 12 (2%), most of this population re still dependants. In bivariate analysis there was a significant association between occupation and education level with more of those who completed secondary education 40% having some business compared to 65.1% unemployed and had only primary education. ($\chi^2 = 166.58; p< 0.05; df = 7$).

3.1.9 Length of stay in slum area.

Most people 217 (54.3%) from the population interviewed had lived in Mukuru Fuata Nyayo slum for between five to ten years. One hundred and fifty one (37.8%) had lived there for between one to five years. A small number of 12 (3%) respondents were new in the slum as they had lived there below one year. Twenty (5%) of the total respondents had lived in Fuata Nyayo for more than ten years (Table 6). This is an indication that informal settlements are rapidly growing, and that Mukuru fuata nyayo is approximately 10 years old.

3.1.10 Size of house/room in which respondents live.

Nearly all households of Mukuru Fuata Nyayo live in single rooms and majority of the rooms of the respondents 229 (57.3%) measure 10 by 10 feet. Ninety three (23.3%) of those interviewed, lived in slightly bigger rooms, which were 12 by 12 feet in size. Most houses in the informal settlements are temporary structures and therefore are single rooms.
Fig 6: Occupation of the respondents

![Occupation of the respondents](chart.png)
Table 6: Length of stay in Fuata Nyayo slum.

<table>
<thead>
<tr>
<th>LENGTH OF STAY</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>1-5</td>
<td>151</td>
<td>37.8</td>
</tr>
<tr>
<td>6-10</td>
<td>217</td>
<td>54.3</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

3.1.11 Household incomes

As indicated in Fig 7, most slum dwellers in this study 180 (45%) earned between 1000 - 5000 shillings in four weeks. Those that earned less than one thousand shillings were 81 (20.3%) and this money cannot sustain a household for a month unless there was another source of income. Sixty five (16.3%) of the respondents had no financial income mainly due to unemployment. Respondents who earned above 5000 shillings in a month were 74 (18.5%) and most of these respondents had some regular form of employment. There was a significant association between household incomes and the type of health care sought ($x^2 = 38.52; p < 0.05$)
Fig 7: household income per month
3.2 HEALTH SEEKING PRACTICES

Health seeking practice is dependant on many variables. The results showed that health seeking practices of the respondents had a relationship with the cost allocated to the health care. One hundred and ninety six (49%) respondents sought health care from the mission facility where the cost was less than 100 shillings ($\chi^2=282.01; p < 0.0001; \text{df}=6$)

3.2.1 Type of health care sought.

Majority of household heads who participated in this study, 196 (49%) sought health care from a missionary health facility which is across the road from the slum area. One hundred and twenty two (30.5%) had gone for government health care, and 69 (17.3%) had sought health care from private facilities. Those who went to the witch doctors (mganga) and for herbal medicine (mitishamba) were 2 (0.5%) and 11 (2.8%) respectively (Table 7). A chi-square test for association showed a significant statistical association between the place where health care was sought and the amount paid for the care ($\chi^2=282.01; p <0.0001; \text{df}=6$)

3.2.2 Amount of money spent on health care

In Mukuru Fuata Nyayo slum, most respondents 182 (45.5%) paid less than 100 shillings for health services (Table 8). Almost a similar percentage (17.8%) or 71 respondents and 17.3% or 69 respondents paid between 100 – 500 shillings and 600 – 1000 shillings respectively. Respondents who paid the highest amount (more than one thousand shillings) for health care were 78 (19.5%). There is a significant relationship between
household incomes and amount of money spent on health services ($x^2=70.05; \ p <0.001; \ df = 9$).

### 3.2.3 Amount spent on transport

Fig. 6 shows that walking was the most common form of transport to the health facility where 252 (63%) of the respondents walked therefore spent no money. 68 (21.5%) spent less than 100 shillings and only 62 (15.5%) spent between 100 – 200 shillings to the health care facility.

<table>
<thead>
<tr>
<th>TYPE OF HEALTH CARE</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private health facility</td>
<td>69</td>
<td>17.3</td>
</tr>
<tr>
<td>Mission health facility</td>
<td>196</td>
<td>49</td>
</tr>
<tr>
<td>Government health facility</td>
<td>122</td>
<td>30.5</td>
</tr>
<tr>
<td>Herbal medicine (mitishamba)</td>
<td>11</td>
<td>2.8</td>
</tr>
<tr>
<td>Witch doctor (mganga)</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>400</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Table 8: Amount spent on health care

<table>
<thead>
<tr>
<th>AMOUNT SPENT ON HEALTH CARE</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100 shillings</td>
<td>182</td>
<td>45.5</td>
</tr>
<tr>
<td>Between 100 - 500</td>
<td>71</td>
<td>17.8</td>
</tr>
<tr>
<td>Between 500 – 1000</td>
<td>69</td>
<td>17.3</td>
</tr>
<tr>
<td>More than 1000 shillings</td>
<td>78</td>
<td>19.5</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>
Fig 8: Pie chart showing amount spent on transport to the health facility

<table>
<thead>
<tr>
<th>Amount spent on transport</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None I walk</td>
<td>16%</td>
</tr>
<tr>
<td>Less than 100</td>
<td>22%</td>
</tr>
<tr>
<td>100 - 200</td>
<td>62%</td>
</tr>
</tbody>
</table>
3.3 FACTORS ASSOCIATED WITH HEALTH SEEKING BEHAVIOUR

3.3.1 Reasons for going to the health facility

Most respondents 222 (55.5%) sought health care in the particular health facilities because of affordability as shown by Table 9. Ninety four (23.5%) of the respondents went to the health facility because it was near where they lived, therefore no transport was required. The attitude of the health workers was a factor that made 64 (16%) of the respondents seek health care to the health facility. There being nowhere else to go, 20 (5%) went to the particular health facility. The attitude of the health workers had a role to play in determining the type of health care sought as 64 (16%) of the respondents gave that as a reason for going to the health facility.

3.3.2 Reason for not seeking health care when sick

Table 10 shows that majority of the respondents 293 (73.3%) did not seek health care when sick because of lack of money, 92 (23%) stayed at home while sick and gave the reason that they could not afford to pay for any referral treatment or tests requested to determine the next course of treatment for their conditions. It was when the health facility could not deal with the respondents' illness that 15 (3.8%) of them did not seek medical care.
Table 9: Reasons for seeking health care in the particular health facility

<table>
<thead>
<tr>
<th>REASONS</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is near where I stay</td>
<td>94</td>
<td>23.5</td>
</tr>
<tr>
<td>The health workers are kind</td>
<td>64</td>
<td>16</td>
</tr>
<tr>
<td>It is affordable</td>
<td>222</td>
<td>55.5</td>
</tr>
<tr>
<td>I have nowhere else to go</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>400</td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Table 10: Reasons for not seeking health care when sick

<table>
<thead>
<tr>
<th>REASONS</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money not enough</td>
<td>293</td>
<td>73.3</td>
</tr>
<tr>
<td>Health facility cannot treat my illness</td>
<td>15</td>
<td>3.8</td>
</tr>
<tr>
<td>Cannot afford referral and/or tests</td>
<td>92</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

3.3.3 Where children are taken for immunization

Of the interviewees who responded to this question (n=330), 167 (50.6%) took their children to a city council clinic for immunization, while 114 (34.5%) took their children where they sought health care (Table 11). Respondents who did not take their children anywhere were 49 (14.8%), this was a large number given the importance of immunization to the lives of the children.
### Table 11: Where children were taken for immunization

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where parents go for health care</td>
<td>114</td>
<td>34.5</td>
</tr>
<tr>
<td>Not taken anywhere</td>
<td>49</td>
<td>14.8</td>
</tr>
<tr>
<td>To the City council clinic</td>
<td>167</td>
<td>50.6</td>
</tr>
<tr>
<td>Total</td>
<td>330</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 12: Source of Health care Financing

<table>
<thead>
<tr>
<th>SOURCE OF FINANCING HEALTH CARE</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrow a loan from place of work</td>
<td>26</td>
<td>6.5</td>
</tr>
<tr>
<td>Borrow money from friends</td>
<td>125</td>
<td>31.3</td>
</tr>
<tr>
<td>Sell some property</td>
<td>151</td>
<td>37.8</td>
</tr>
<tr>
<td>Organize for a fund raising</td>
<td>98</td>
<td>24.5</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>
3.4 HEALTH CARE FINANCING

Health care financing was assessed by how they paid for hospital fees for hospitalized members of the family. For those employed, it was determined if the employer had any kind of medical scheme for the employees. Contribution to the National Health Insurance Fund (NHIF) was as a means to health care financing was also determined as indicated in (Table13).

3.4.1 How hospital fees were paid

Selling of property was sighted as the main source for financing health care and had 151 (37.8%) respondents who were the majority. Borrowing from friends constituted 125 (31.3%) of the respondents. The other two sources were from organizing a fund raising 98 (24.5%) and from getting a loan from place of work 26 (6.5%) (Table 12).

3.4.2 Medical scheme by employer

For those who responded to this question (n=295), 260 (88.1%) had no medical scheme arrangement with the employer, while only 35 (11.9%) answered affirmatively (Table 13).

3.4.3 Contribution to NHIF

Respondents who participated in this question were 347, and 15.9% (55) of them contributed to the National health insurance fund. The majority of the respondents 292 (84.1%) did not contribute to the government’s medical insurance fund (Table 13).
3.5 AMOUNT OF MONEY ALLOCATED TO FOOD WATER AND RENT

3.5.1 Amount of money spent on food and rent

Most of the respondents 301 (75.3%) spent more than 1000 shillings on food and rent (1000 shillings is not a lot of money as these people must pay for their houses and also buy food like the rest of non-slum dwellers), while the least number 17 (4.3%) of them, spent less than 100 shillings on the same. Those who spent between 500 – 1000 shillings were 12% (48), and the number of respondents that spent between 100 – 500 shillings on food and rent was 34 (8.5%) (Table14).

<table>
<thead>
<tr>
<th>Table13: Health care financing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical scheme by employer</td>
</tr>
<tr>
<td>n</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

| Contribution to NHIF          | (n = 347)                 |
| n                             | %                         |
| Yes                           | 55                        | 15.9          |
| No                            | 292                       | 84.1          |
3.5.2 Source of water and amount spent on it.

Most respondents, 395 (98.8%), in Mukuru Fuata Nyayo buy water (Table 16) and 318 (79.5%) of the 400 who participated in this study, paid between 100 – 200 shillings for the water per month. Only 1% (4) of the respondents had water provided for by the City Council. Those who spent less than 100 shillings were 36 (9%), and those who spent between 200 – 500 shillings on water were 11.5% (46) (Table 16). Fetching water from a nearby estate was not common as only one (.3%) respondent fetched water from the nearby estate.

Table 14: Money spent on food and rent

<table>
<thead>
<tr>
<th>AMOUNT OF MONEY SPENT</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100 shillings</td>
<td>17</td>
<td>4.3</td>
</tr>
<tr>
<td>Between 100 – 500</td>
<td>34</td>
<td>8.5</td>
</tr>
<tr>
<td>Between 500 – 1000</td>
<td>48</td>
<td>12</td>
</tr>
<tr>
<td>More than 1000 shillings</td>
<td>301</td>
<td>75.3</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 15: Source of water

<table>
<thead>
<tr>
<th>WATER SOURCE</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying</td>
<td>395</td>
<td>98.8</td>
</tr>
<tr>
<td>Provided for by the City Council</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Fetch from nearby estate</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 16: Amount spent on water

<table>
<thead>
<tr>
<th>AMOUNT SPENT</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100 shillings</td>
<td>36</td>
<td>9</td>
</tr>
<tr>
<td>Between 100 – 200</td>
<td>316</td>
<td>79.5</td>
</tr>
<tr>
<td>Between 300 – 500</td>
<td>46</td>
<td>11.5</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>
3.6 HEALTH STATUS

Health status was assessed through the presence of any sick member of the household either hospitalized or needing medical care at the time of the interview (Table 18).

3.6.1 Admission to hospital

Only 6.5% (26) of the 400 respondents had family members admitted to hospital at the time of interview. Majority 374 (93.5%) did not have any member hospitalized at the time of the study.

3.6.2 Need for medical attention

Household members who were sick and in need of medical attention were 21% (86) of the respondents in the study. The higher percentage 79% (316) of the households had no member needing medical care at the time of the study.

Table 17: Sick member of the household

<table>
<thead>
<tr>
<th>Hospitalized</th>
<th>(N = 400)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Yes</td>
<td>26</td>
</tr>
<tr>
<td>No</td>
<td>374</td>
</tr>
<tr>
<td>Needing medical care</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>84</td>
</tr>
<tr>
<td>No</td>
<td>316</td>
</tr>
</tbody>
</table>
3.6.3 Hospitals where members were hospitalized

From Table 18, twenty five (71.4%) were hospitalized at Kenyatta National Hospital (KNH), while those who were admitted to private hospitals constituted 7 (20%) of the hospitalized members of the households that participated in the study. Three (8.6%) patients were hospitalized in rural hospitals.

3.6.4 Opinion on quality of hospital services

From those respondents (n =35) who had hospitalized members, 18 (51.4%) felt that the hospital where their relatives were admitted offered good care. Almost half the number of respondents 17 (48.6%) felt that the hospitals with their members as in-patients were not offering good medical services (Table 19).

3.6.5 Factors contributing to poor health

Majority of the respondents 49% (196) said that the major factor contributing to poor health was unaffordable health services. Ninety seven (24.3%) thought that poor health was due to lack of health facilities in their residence. Poor services by quacks, was thought of as a factor by 93 (23%) of the respondents. Fourteen (3.5%) of the respondents gave the act of buying drugs without a prescription as a factor contributing to poor health (Table 20).
3.6.6 Constraints to good health

The same question rephrased on their opinion to factors contributing to poor health, had 48% (192) of the respondents who said that it was due to poverty. Those who thought that all reasons contributed to poor health were 31.8% (127), while 57 (14.3%) emphasized that poor health was as a result of unhygienic living conditions, and 2.3% (9) said that it was due to inability to afford some essential foods. This particular question had 3.8% (15) of the respondents associate poor health to inability to afford medical care (Table 21).

Table 18: Hospitals where household members were admitted

<table>
<thead>
<tr>
<th>HOSPITAL</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNH</td>
<td>25</td>
<td>71.4</td>
</tr>
<tr>
<td>Private</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>Rural</td>
<td>3</td>
<td>8.6</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 19: Quality of hospital services

<table>
<thead>
<tr>
<th>QUALITY OF SERVICE</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>206</td>
<td>51.5</td>
</tr>
<tr>
<td>Poor</td>
<td>194</td>
<td>48.5</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 20: Quality of poor health

<table>
<thead>
<tr>
<th>REASON</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of health facilities</td>
<td>97</td>
<td>24.3</td>
</tr>
<tr>
<td>Unaffordable health care facilities</td>
<td>196</td>
<td>49</td>
</tr>
<tr>
<td>Poor health services by quacks</td>
<td>93</td>
<td>23.3</td>
</tr>
<tr>
<td>Buying drugs without a prescription</td>
<td>14</td>
<td>3.5</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 21: Constraints to good health

<table>
<thead>
<tr>
<th>REASON FOR CONSTRAINT TO GOOD HEALTH</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability to afford health care</td>
<td>15</td>
<td>3.8</td>
</tr>
<tr>
<td>Lack of some essential foods</td>
<td>9</td>
<td>2.3</td>
</tr>
<tr>
<td>Unhygienic living standards</td>
<td>57</td>
<td>14.3</td>
</tr>
<tr>
<td>Poverty</td>
<td>192</td>
<td>48</td>
</tr>
<tr>
<td>All of the above reasons</td>
<td>127</td>
<td>31.8</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>100</td>
</tr>
</tbody>
</table>
CHAPTER 4

4.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

4.1 DISCUSSION

Nairobi, like most other Kenyan towns is experiencing a very rapid and unplanned urbanization. New households created by the migration of individuals from the rural areas to the towns and cities, are inflating the population and demanding for additional services. Health care is among the services needed in these informal settlements. This study’s results show that people living in Mukuru Fuata Nyayo went for the cheapest health care (not necessarily the care that was required for their health condition) in a mission health facility near where they live.

The World Health Organization Report (2000) states that a health system where individuals have to pay out of their own pockets for a substantial part of the cost of health services at the moment of seeking treatment, clearly restricts access to only those who can afford it, and is likely to exclude the poorest members of society. Forty eight percent of the respondents thought that poor health conditions were as a result of poverty. Rae (2001) in his study has pointed out that the core consequence of poverty is the steep and continuous deterioration of health and the inability of the prevailing system to cope with the rapid changes.

4.1.1 DEMOGRAPHIC CHARACTERISTICS

Majority of the households (56%) were headed by females and males headed 44% households. This is contrary to a study by Wangombe et al. (1998), which found out that
most African households are headed by males. According to the National Census of 1999 (Central Bureau of Statistics, 2001), the ratio of male to female in Kenya was 52:48, implying a general predominance of females. In this study, 53% of the respondents were married, so it is assumed that most of the males had gone for some income generating activity at the time of interview. Households that were headed by single respondents were 31.8%. This could be attributed to the fact that most females had gained some education and could earn a living from doing menial jobs for a wage and therefore they did not need to be dependent on men for survival.

Family size greatly determines the lifestyle of households particularly in informal settlements like the slums. The bigger the family the more money is needed for sustenance, but if the money is not adequate, then the basic social needs are not met including health care. In this study, most of the respondents (48.8%) had between one to three children, most of the households interviewed had young household heads. Most young families are practicing family planning and this helps to keep families smaller in Kenya, unlike previously when Africans got many children for the purpose of providing labour. Interviewed households that had no children were 22.5%. This could be attributed to the high number of single respondents (31.8%). Many people are starting families at a later stage in life due to economic hardships, which may be the reason for their staying in the slum. 28.8% of the respondents had four children and above. These are the older generation (37.5%) of 36 and above years, who still believed in having large families and probably still had responsibilities to the extended family.
With such immense responsibility, stress and other psychosomatic illnesses such as abdominal ulcers and depression will ensue causing the person to need health care that requires payment and this creates a vicious circle. It was found out that greater levels of psychological distress was found among men and women from lower social classes (Power et al., 2002).

Two hundred and twenty nine respondents (57.3%) who were the majority lived in single rooms measuring 10 by 10 feet. The rest lived in bigger rooms but they all live in one room without any other utilities such as toilet and bathroom. From the discussion held with the focus group, several houses did not even have outside toilets. The residents in such households pay some money to use toilets and bathrooms that are managed by people who make a living from renting out bathrooms and toilets. A study carried out by Link and Phelan (1995), found out that there was a strong association between housing and sanitation of poor people and their poor health status. The rate of mortality is sensitive to absolute poverty and raising their living standard would improve their health status (Laporte, 2002).

Most respondents 59.3% had education below secondary school. The poorly and/or lowly educated are much more likely to experience unemployment and the health effects are profound during economically stressful times. Unemployed people with low levels of education are put in double jeopardy when the opportunities for employment are limited (Ross and Mirowsky, 1995). The earnings from employment increased household income and reduced economic hardships including difficulty paying for needed medicines and
treatment. In Mukuru Fuata Nyayo slum, 73.3% of the residents did not seek health care when feeling unwell due to lack of enough money to pay for the services.

Education has become an important factor of consideration for even a job like that of house-help. Parents with jobs that take them away from home for long periods of time, prefer to leave their children in the care of someone who can help them do their homework among other activities, thus preference of one who has knowledge to read and write. Unemployed respondents were 19.8%. Studies have demonstrated that areas with high rates of unemployment are more likely to be characterized by general poverty, poor housing conditions and a higher incidence of events that may exacerbate the effects of job loss (Ross and Mirowsky, 1995)

4.1.2 HEALTH SEEKING PRACTICE

A significant proportion of the respondents (49%) sought health care from a nearby mission health facility. This is in line with the sentiments of the focus group discussion that the mission facility is cheap and the only one that residents could afford. Users have a choice of providers, although their preferences vary according to the type of services available and at a cost they can afford (Griffin and Shaw, 2000). Respondents who went to Government health facilities were 30.5%. Some of the facilities (example Rhodes Avenue Dispensary) that were regarded as Government health facilities were run by the City Council. According to the focus group discussion members, the Government health facilities were at a distance and so could not serve in emergency situations. Each provider offers an expected improvement in health for a price (Ching, 1995).
From this study, those who went for herbal medicine were only 2.8% of the respondents. A study carried out in Rwanda shows that, they prefer using herbalists because of the high cost of medical treatment and drugs (Kraushaar et al., 1995).

Most of these people were of a certain ethnic community who still strongly believed in herbal medicine. Going for medical care to the witch doctor was represented by 0.5% of the respondents. This low number could be attributed to religious affiliation, as most respondents (81.3%) were Christians of the Catholic and the Protestant denominations. The Christian faith discourages people from witchcraft.

Most respondents, 182 (45.5%), paid less than one hundred shillings for health care. This is an indication that most people from the lower economic class would seek cheaper services. A study by Owino, (1998), shows that price affects utilization in poverty-stricken areas. In the same study he found out that a fall in the price of health services would induce more people to seek health care on the basis of increasing ability to pay. Price issues are the principal factors influencing households’ choice of source of health care. In this study, 222 (55.5%), respondents gave the reason of affordability as being the reason they went to the particular health facility. This is in line with a study which showed that the first reason stated by households for seeking health care from Government of Kenya facilities was relatively lower fees (Wango’mbe et al., 1998).

When asked how much they paid for transport to the health facility, 63% of the respondents paid nothing because they walked to the health facility. Distance is an important factor in determining the kind of health care sought. Lack of money for
transport to the health facility was a further constraint to seeking health care. A study carried out by Mwaniki et al. (2002) on the utilization of antenatal and maternity services by mothers in Mbeere District, revealed that one of the major constraints included lack of transport, and lack of money for transport. Those who paid less than 100 shillings for transport to the health facility were 21.5%.

In urban areas, people prefer to use other forms of transport other than walk, even if the same distance could be covered on foot in the rural area. Only a small number (62) of the respondents used between 100 – 200 shillings on transport to the health facility. This could be attributed to the fact that those who earn more are able to afford transport to a better health care facility. Kulmala et al. (2002) in their study expressed that walking was the means of transportation for most people in the rural area, therefore travelling five kilometers takes approximately one hour, and this restricts access to modern care. Distance is a predominant factor in the decision not to seek quality health care because, apart from the cost, one has to consider the non-monetary access costs such as travel and waiting time (Ching, 1995).

4.1.3 HEALTH CARE FINANCING
The Government of Kenya is not able to finance the health sector so that all Kenyans receive equitable health care. Currently, households are contributing over 50 percent of the total health sector expenditure, the bulk of which is out-of-pocket payments for medical care and over the counter payment for drugs (Gakuru and Kamigwi, 2000). Fifty two per cent of Kenyans are now considered to be living below the poverty line and are
hence unable to meet their basic needs including paying for basic health needs (World Health Report, 2000). In the study, health financing was assessed by asking how the respondents paid for hospital fee whenever their household member was admitted. Those who sold some property to get money to pay for hospital fees were the majority (37.8%). This is an indication that the poor people in our society do not have any form of health system in place so they have to do everything in their power to obtain money for health care. Lack of medical treatment for poor families keeps them in the poverty trap because what they gain has to be used for disease treatment worsening their living conditions. Poor people's medical treatment deepens their poverty and worsens their living environment (Kutzin, 1999).

Borrowing from friends to finance health care was reported by 31.3% of the respondents. In the absence of any source to finance health care, people resort to borrowing from friends especially if the patient at the hospital has to be discharged and staying longer would mean incurring more expenses. Xiao-ming et al. (2002) in their study noted that after using up all their savings, the poor borrow money mainly from relatives or neighbours in some cases straining relationships between families and communities making it more and more difficult to borrow money for medical treatment. Relationships are likely to worsen if the money borrowed is not returned. When faced with the prospect of major health care expenditure, the poor households did not seek care, delayed care seeking, borrowed from relatives or neighbours, requested for credit from the health provider or sought alternative provisions. For the poor, any money obtained would be used to service the basic needs first before considering paying back what was borrowed.
As seen in this study, 75.3% of the respondents spent more than 1000 shillings on food and rent compared to 19.5% respondents who spent the same amount of money on health care. Food and shelter are basic needs that must be first allocated a budget as a priority over health care.

In Mukuru Fuata Nyayo, 24.5% of the respondents organized for a fund raising to meet the cost of hospital fees. One needs to have money to organize for a fund raising. Those who were able for such an arrangement were likely to be having some form of regular income. Many private facilities will not provide care without immediate payment and some of these ask for an admission fee, sometimes quite large. Facilities willing to provide services without immediate payment are experiencing rapid escalation of bad dept, resulting in less care for a given level of expenditure (Kraushaar et al., 1995). Because of the high fee levels, which often exceed an individual’s ability to pay, overall access to care has been reduced.

Respondents who borrowed loans from the place of work were 6.5% of the total study population. This is an indication that some households had a form of stable income from where they could borrow some money for the purpose of financing hospitalized health care needs. However, even when this “permanent” source is considered, the people of Mukuru Fuata Nyayo live in an environment, which does not support good health, and so chances of illness which require hospitalization are likely to occur often. This will soon exhaust the borrowing policy from the employer. It is estimated that informal settlements
in Nairobi hold approximately 80% of the urban population but occupy less than 10% of the urban land space. With such high concentration of populations in small and always non-allocated and non-serviced land spaces, the density, poor sanitary conditions, and lack of reliable water supply, there is a very strong negative impact on the health of these informal settlement inhabitants (Rae, 2001).

National Hospital Insurance Fund (NHIF) is the other source of health care finance. Studies show that NHIF has coverage of only 25% of the Kenyan population, and besides has not helped promote access to modem health services (Gakuruh and Kamigwi 2000). In this study, respondents who contributed to NHIF were 13.8% the remaining respondents were not able to contribute. One has to be earning a regular salary in an organization that has a system of remitting the deducted NHIF money every month to the fund. Majority of people living in slum areas are not in employment, or economic activities that can enable them to contribute to such a health insurance fund, or any other health financing arrangement on a monthly basis. In this study, 19.8%, 21% and 21.3% of the respondents were unemployed, casual day-to-day labours and operated small businesses respectively.

Employment correlates positively with health, the social causation hypothesis says that employment improves the health of men and women (Ross and Mirowsky, 1995). At the moment, the Government of Kenya has no arrangement of health insurance for the poor.
4.1.4 HEALTH STATUS

Health status was assessed by determining sick members of the households who were unwell and needed treatment at the time of interviewing respondents. Twenty one percent of the respondents had a sick member in need of medical attention. According to the selection hypothesis, men and women with pre-existing illness drift down the social scale and, conversely, those with better health tend to move up the scale (Allison, 2002).
4.2 CONCLUSIONS AND RECOMMENDATIONS

4.2.1 CONCLUSIONS

1. The study has shown that majority of people living in slum areas seek health care that is affordable and nearest to them.

2. Affordability is the most important factor considered by slum dwellers when seeking health care.

3. Most people living in slum areas have low levels of education and therefore experience unemployment and can only engage in low-income economic activities.

4. Food and rent receive a bigger share of the household budget as compared to health care because food and shelter are basic needs, which have to be met as a priority.

5. Slum residents live in dire housing and sanitation conditions, which are strong indicators of poverty and poor health.
4.2.2 RECOMMENDATIONS

1. Policy makers in the Government should formulate suitable health care packages for slum residents that will be accessible and affordable, by bringing free services closest to them, for example, MCH/FP services.

2. The Government should improve the infrastructure in slum areas to include housing, sanitation, roads and water. Since the Government has placed administrative personnel like chiefs in the area, they should be used to enforce certain basic standards set by the authority for constructing houses in the slum.

3. Employment should be created to empower the unemployed majority of who live in slums to earn money they can pay for needed treatment and any other basic needs.

4. Policies that can enable small businesses and low-income earners to be covered by health insurance should be formulated.

5. Privately owned health care facilities in the slums, should be inspected routinely to ensure that quality and professional services are offered to those that access them.
6. The people of Mukuru Fuata Nyayo should form residential groups and decide on specific places for disposing waste.

7. Similar studies should in future be carried out in middle level estates (such as Umoja) and in other cities and major towns in Kenya for comparison.
REFERENCE


Current Concerns: Division of Analysis, Research and Assessment. WHO. Geneva, Switzerland.


Volume 2: Nairobi, Kenya.


APPENDIX 1: QUESTIONNAIRE

This questionnaire was applied to household heads in Mukuru Nyayo slum of Makadara division Nairobi.

Introduction

The purpose of this study is to find out where you go for health care and the amount of money you pay for the health services.

The goal can be achieved if you contribute to it by giving the information asked, and also by giving honest answers.

The information you give will be kept confidential and will be used for the purpose of the study only. You do not have to write your name on this questionnaire.

Please tick the appropriate answer or fill in the blank spaces.

Demographic data.

No Questions and filters
Q01. Sex of respondent

<table>
<thead>
<tr>
<th>Coding category</th>
<th>1. Male</th>
<th>2. Female</th>
</tr>
</thead>
</table>

Q02. What is your age bracket?

| 1. Below 18 |
| 2. 18 - 26 |
| 3. 27 - 35 |
| 4. 36 - 44 |
| 5. Above 44 |

Q03. What is your marital status?

| 1. Single |
| 2. Married |
| 3. Separated/divorced |
| 4. Widowed |

Q04. How many children do you have?

No____

Q05. How many live with you here?

No____

Q06. How many other persons live with you besides your children?

No._______

Q07. What is your religion?

| 1. Protestant |
| 2. Catholic |
| 3. Muslim |
| 4. Traditional |
| 5. No religion |
Q08 What is the level of education completed?
1. None
2. Primary not completed
3. Primary completed
4. Secondary not completed
5. Secondary completed
6. College or university, not completed
7. College or university, completed

Q09 What is your occupation?
1. Unemployed
2. Housewife
3. Casual day to day basis
4. Skilled artisan
5. Business
6. Office
7. Student

Q10 How long have you lived in this household?
Years

Q11 How big is the house/room in which you live?
10 by 10
10 by 12
12 by 12

Q12 What was the income of the last four weeks in this household?
1. None
2. Less than 1000Ksh
3. 1000Ksh - 5000Ksh
4. Over 5000Ksh

Attitudes and Practices
Q13 When sick where do you go for health services?
1. Private health facility
2. Missionary health facility
3. Government health facility
4. Miti shamba (herbal medicine)
5. Witchdoctor (mganga)

Q14 How much money do you pay for the health services?
1. Less than 100Ksh
2. 100Ksh - 500Ksh
3. 500Ksh - 1000Ksh
4. Above 1000Ksh

Q15 How much money do you spend on transport to the health facility?
1. None I walk
2. Ksh

Q16 What reasons make you go to that health facility?
1. It is near where I stay
2. It is affordable
3. The health workers are kind
Q17 What reason do you have for buying medicine from the kiosks/shops?
1. The medicine is cheap
2. It cures minor discomforts like headaches quickly
3. The shop owners give medicine without many questions
4. I have nowhere else to go

Q18 What reasons do you have for not seeking health care when sick.
1. When I do not have enough money
2. When the health facility I go to cannot treat the illness I have
3. When I am referred and I cannot afford the amount required

Q19 If you are employed, do you have a medical scheme with your employer?
1. Yes
2. No

Q20 Do you contribute to NHIF the government insurance fund?
1. Yes
2. No

Q21 Where do you take your children for immunisation?
1. Where I go for health services
2. I do not take them anywhere
3. To the city council clinic

Q22 Do you have any member of the family admitted to hospital at the moment?
1. Yes
2. No

Q23 If YES in which hospital?
Hospital name___________

Q24 How do you usually pay for hospital fees when admitted
1. A loan from place of work
2. Borrow from friends
3. Sell some property
4. Organise a fund raising
5. We hope the hospital will waive

Q25 In your opinion do you think that the hospital offers good services?
1. Yes
2. No

Q26 Which health services are of priority if the government were to provide?
1. Dispensary
2. MCH
3. Hospital

Q27 What do you think is the major factor contributing to poor health in this slum?
1. Lack of health facilities
2. Unaffordable health services
3. Poor health services by quacks
4. Buying drugs without a prescription
Budgetary allocation to health care

Q28 How much money did you spend on food and rent in the last four weeks?
1. Less than 100 Ksh
2. 100 Ksh - 500Ksh
3. 500Ksh - 1000Ksh
Above 1000Ksh

Q29 How do you get your water?
1. We buy
2. It is provided for by the council
3. We get from the near-by river
4. We fetch from the estate near us

Q30 If you buy, how much do you spend per four weeks?
Ksh.____

Q31 In your view, what is the major factor contributing to poor health?
1. Inability to afford medical care
2. Inability to afford some food
3. Unhygienic living standards
4. Poverty
5. All of the above

Q32 Is there any member of your household who is sick and needs medical care?
1. Yes
2. No

Thank you for participating in this study
APPENDIX 11

FOCUS GROUP DISCUSSION

As the health committee members of this community, you must be aware of health seeking behavior of the residents here in Mukuru Fuata Nyayo. We are going to discuss some of the problems encountered here and the health facilities where people go for health services. The information you give me will be held in strict confidence.

1. In your opinion, what are some health problems encountered in this area?

2. Where do people normal go for health services when sick?

3. (a) Please name some Government health facilities near this area where people go to for health care.

(b) What are the charges there?

4. (a) About how many private health facilities are in this place?

(b) Generally how do they charge?

(c) How do people get money to pay for private health care?

5. (a) As members of the health committee, what service do you offer to the people of this area?

6. (a) Where do people living in this area normally go for health services?

(b) What reasons do you think make them go there?

7. Do you think that the health facilities are sufficient for the population living in this community?

8. (a) What factors do you think contributes to good health in this place?

(b) What factors contribute to poor health in this area?

9. What would you recommend to improve access to health care by the residents of this community?
Dear Madam

RE: RESEARCH AUTHORIZATION

Following your application for authority to conduct research on 'Health seeking practices and their Budgetary allocations among slum Dwellers', I am pleased to inform you that you have been authorised to conduct research in Nairobi for a period ending 28th February, 2003.

You are advised to report to the Provincial Commissioner, the Provincial Director of Education and the Provincial Medical of Health Nairobi, before embarking on your study.

You are further expected to avail two copies of your research findings to this Office upon completion of your research project.

Yours faithfully

[Signature]

A. K. KAARIA
FOR: PERMANENT SECRETARY/EDUCATION

CC
The Provincial Commissioner
Nairobi
The Provincial Director of Education
Nairobi
The Provincial Medical Officer of Health
Nairobi