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Subject: Submission of Thesis Paper

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DEPARTMENT OF COMMUNITY HEALTH
FACULTY OF MEDICINE
ADDIS ABABA UNIVERSITY

THE MAGNITUDE AND SOCIO-ECONOMIC, HEALTH AND NUTRITIONAL STATUS OF STREET ELDERLY PEOPLE IN ADDIS ABABA

A thesis submitted to the School of Graduate Studies of Addis Ababa University in partial fulfillment of the requirements for the degree of Master of Public Health

By: Goitom G/Medhin, MD
December 1998

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

THE MAGNITUDE AND SOCIO-ECONOMIC, HEALTH AND NUTRITIONAL STATUS OF STREET ELDERLY PEOPLE IN ADDIS ABABA

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The magnitude and socio-economic, health, and nutritional status of street elderly people in Addis Ababa

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List of Abbreviations

AAIA	American Association for International Ageing (Washington,DC,U.S.A.)
MOLSA	Ministry Of Labour and Social Affairs
RA	Rehabilitation Agency
MUAC	Mid Upper Arm Circumference
AAU	Addis Ababa University
DCH	Department Of Community Health
NGO	Non Governmental Organization
BMI	Body Mass Index
WHO	World Health Organization
EPPG	Emergency Prevention and Preparedness Group
PAHO	Pan American Health Organization (WHO)
HAI	HelpAge International
FGD	Focus Group Discussion
PEM	Protein Energy Malnutrition
FDRE	The Federal Democratic of Ethiopia
TGE	The Transitional Government of Ethiopia
SD	Standard deviation
OR	Odds ratio
UN	United Nations
CI	Confidence Interval

ABSTRACT

The number of street people is reported to be increasing with time. To assess the magnitude of and the associated factors with streetism, and the socio-economic, health and nutritional status of street elderly people, a cross sectional survey was conducted in Addis Ababa, the capital of Ethiopia, in May 1998. A total of 2,064 street elderly people were counted during a one-day census. Of these 413 study subjects were enrolled in to the study by means of convenient sampling; 228 (55.2%) males and 185 (44.8%) females were included. The mean ± SD age of the study population was 70.9 ± 9.2 years (range 60-100 years). Three hundred thirty four (80.9%) of the elderly people were single, females being more likely (OR=2.88; 95% CI=1.61-5.19). Three hundred and seventy nine (91.8%) were migrants because of war, starvation, for medical reasons, looking for better job and to see relatives. The Majority did not belong to any social organization, 213 (51.6%) had some role to play and 280 (67.8%) reported to be respected as an elderly. Two hundred and sixty four (63.9%) felt lonely, and 280 (67.8%) felt hopeless. Two hundred and eighty (67.8%) reported to eat food only when available, 230 (55.7%) to have no extra clothes, 76 (18.4%) and 67 (16.2%) to never wash their clothes and their body, respectively. Two hundred and ninety (70.2%) of the respondents reported to be sick during the study period; the most frequently reported health problems were of vision 212 (51.3%), mastication 176 (42.6%), rheumatism 153 (37.0%), abdominal 145 (35.1%) and joint 143 (34.6%) problems. Age was an important predictor for many of the reported health problems. Out of 379 for whom data were available, 302 (79.8%) were found to be malnourished. Two hundred and twenty nine (55.4%) were willing to join any institution providing care for elderly people. One hundred twenty six (30.5%) were "of" the street type while the rest, 287 (69.5%), were "on" the street type. The "of" the street ones were more likely to suffer from different conditions, such as lack of food and clothing, harassment, loneliness, hopelessness. The Focus Group Discussions (FGD) also revealed similar findings, moreover, there were elderly people who reported to be capable and willing to work if they got suitable job. In conclusion, the street elderly people are numerous and have complex social, economic, health and nutritional problems which need urgent and multi-sectoral intervention.

1. INTRODUCTION

Gerontological research has increased dramatically over the past three decades, and yet, some of the basic facts about the lives of the elderly in most countries, especially in developing countries, are still not known (1). There can be no escaping from the fact that ageing will become one of the most important issues needing to be addressed in developing countries in the next few decades (1,2).

According to the UN (1), in 1959 it was estimated that there were 200 million people aged 60 years and over in the world (8% of the total population); this figure rose to 370.8 million (8.5%) in 1982. Projections for the year 2025 indicate that this population will be as high as 1.1 billion accounting for 12.5% of the world's population; 72% of the elderly people will be living in developing regions. While the population of developing countries is expected to increase by 45% between 1991 and 2025, the elderly population will increase by more than 80% (1).

At present two-thirds of the world's elderly population live in developing countries and this figure is expected to rise to three-quarters with in the next decade. By the year 2025, seven of the ten countries with the largest absolute populations of elderly people will be in developing countries (1-4).

Migration, both internal and international is now a global phenomenon, and is creating large pockets of older people, either left behind in rural areas, or concentrated in urban slums. Life for older people in both cases is often characterized by low incomes, substandard housing, and lack of access to inadequate services (5,6). In addition to problems arising out of economic migration to urban areas and to countries where there are better job prospects, there are the problems associated with natural disasters and

political upheavals (2). In Ethiopia, migration from the countryside has been reported as a continuous process. Studies in the late 1970s showed that 83.5% of the population in Addis Ababa over 25 years of age at that time had been born outside the city, most having migrated to the city in the ten years before the 1974 revolution; statistics for 1984 showed that 47.5% of the total population were life in migrants; and migration is still taking place, especially now since previous restrictions on movement have been removed (7).

Some researchers report the continued importance of extended family support provided to African elderly; others speak of the "myth of the protective extended family" or of its disintegration and emphasize failures in the family system (8). However, though extended families, and especially children, remain an important resource for the aged, the childless or near childless are likely to experience greater difficulties in meeting their needs. For example, in some African societies, widows are not well provided for within the family system, though neither widows nor the childless need inevitably be in a precarious situation (8). However, some old people have no family. Destitute elderly, in both rural and urban settings, who tend to be those without family support, are a growing category of persons at high risk, as are aliens living their final years in a foreign country, because of labour migration and the disruption by wars, both civil and international (8). Ethiopia is one of the countries which ratified the United Nation's principles for the elderly (30). Policy issues related to the elderly in Ethiopia include:

1. The health policy: among its priorities is preventing diseases related to affluence and ageing from emerging as a major public health problem (40).
2. The Developmental Social Welfare policy of the FDRE: among its priorities is making arrangements for those elderly without any material and psychological support to receive appropriate social security services and assistance in the communities where they live (section 5.5.2). The policy further emphasizes the

design and implementation of developmental programmes and services aimed at preventing and controlling social problems (12).

3. The National Population Policy of Ethiopia: among its general objectives is significantly improving the social and economic status of vulnerable groups, including the elderly people (41).

Ethiopia is one of the fifty countries in the world projected to have elderly population greater than 2 million by the year 2020 (4,9). However, the living conditions and occupations available to the younger persons are not conducive for them to care for all their elderly relatives (4); this threatens the lives of the elderly people. The principal factors affecting the well-being of the elderly in the Ethiopian context are reported to be: poverty, loss of income and security, attitude changes and the long protracted war, urbanization and migration, weakening of the extended family, drought, and disability (10).

The natural and man-made calamities of the past two decades which have resulted in a worsening of the socioeconomic situation of Ethiopia have brought poverty on countless citizens; poverty has spread in Addis Ababa more than ever before, manifesting itself in poor quality houses, slums, urban squalor and blight, and the increased number of destitute groups such as beggars, street children, prostitutes etc. (11,12). Another report highlighted that an urban crisis is facing several cities in Ethiopia, most seriously Addis Ababa (7) and as the crisis grows, it becomes increasingly important to examine this silent emergency: the lives of the destitute. This cross-sectional study was, therefore, conducted in order to address the magnitude of streetism, the health, socioeconomic and nutritional status of street elderly people, and the factors associated with the type of street life.

2. LITERATURE REVIEW

2.1 MAGNITUDE OF THE ELDERLY POPULATION

It is estimated that between 1950 and 2020, the number of persons over 60 years of age in the world will have risen from 200 million to 590 million; the elderly will then constitute 13.7% of the world's population. These demographic trends will have major effects on society, some potentially detrimental (4). Such were the predictions, subsequently confirmed by UN demographers, of the United Nations World Assembly On Ageing, held in 1982 (4). In percentage terms, while the total population of the world is expected to increase by 37.6% between 1980 and 2000, the over-60s population will increase by 60.5%. Likewise, while the total population of the least developed regions is expected to increase by 46.2%, their over 60s population will increase by 82.5% (1,4,13). Some countries, such as Barbados and Jamaica, can expect a gradual rise in their numbers of aged up to the year 2000 but after that a very steep increase up to 2020. Others, such as Argentina and China, will have exceptionally high relative numbers of people over 70 by 2020. However, the general trend, for countries as different as Ethiopia and Argentina, or China and Lesotho, is for very large relative increases. The time-scale may be slightly different but the gross result is constant for all types and sizes of countries (4).

The world's total population currently is growing at a rate of 1.7% per year, whereas, the population aged 55 and over is increasing 2.2% per year; and the number of persons aged 65 and over, by 2.8% annually. Every month, the net balance of the world's older population (55 years and over) increases by 1.2 million persons. More than 80% of this monthly increase, almost 1 million persons, occurs in developing countries, where the growth rate for persons aged 55 and over (3.1%) is three times as high as in developed countries (13). In 1993, 58% of the world's people aged 55 and over were living in developing countries; over the next 3 decades, the regional distribution of older population will change considerably so that by 2020, the proportion of elderly people living in

developing countries is projected to rise to 72%, with the absolute number exceeding 1 billion (13).

In sub-Saharan Africa where most countries are still in the early stages of the demographic transition, the pattern will also be replicated, but it will come later. By the second decade of the next century population ageing will be a significant problem (2).

Throughout the world, older population became concentrated in urban areas during the 1970's and early 1980's, and this trend is projected to continue. In developing regions, which as a whole are still predominantly rural, approximately 30% of the population aged 60 and over resides in urban areas; this proportion is projected to rise to 40% by the year 2000 (43). Countries in South Asia and Africa are likely to witness the most rapid gains, as these regions are now experiencing their peak rates of urbanization (13).

According to the census in 1984, there were a total of 2,718,900 elderly people in Ethiopia (10), and in 1994 (14) 2,632,171 (some regions were not included for the census was not finalized). According to a report in 1996 (15), there were an estimated 5 million older people (10% of the total population) in Ethiopia in that year; and in the year 2020, this is estimated to rise to 22%. According to the 1994 census (15), the number of elderly people during that period in Addis Ababa was reported to be 87,516; of which 85,674 (97.9%) were from urban and 1,842 from rural settings. This figure is projected to be 100,798 in 1998. The census also reported that there were 182 homeless elderly people, 163 males and 19 females (age 65 and above) in Addis Ababa (defined as people found sleeping outside at night during the census). It is important to note, however, that the counting of street people is an extremely difficult task, as evidenced by the fact that, to date, there are no valid and reliable data collection tools for this purpose. Some of the major difficulties encountered are the lack of clarity in the definition (it is not possible to count

without knowing what is to be counted); the enormity of some cities and urban areas; the impossibilities to access certain zones which may be "off limits" to strangers; and the fact that the street people are constantly moving. Nevertheless, various techniques for counting street people are described and used in the literature (16).

2.2 FACTORS CONTRIBUTING TO THE IMPOVERISHMENT OF ELDERLY PEOPLE

The demographic transition now being experienced in the South differs in important respects from the patterns of the North. In the southern countries, reductions in birth and death rates have been achieved less by the socio-economic improvements which were a feature of Europe and North America over the past century and more by technological interventions (such as mass vaccination campaigns and introduction of antibiotic therapy) amidst continuing poverty. The prospect for many of these southern countries therefore is one of rapidly increasing numbers of older people who will live out their last years with few of the social, economic and health support systems available in the North (5).

2.2.1. THEORETICAL FRAMEWORKS

Regarding the status of older people and the roles which they are perceived to be assigned or denied in societies undergoing changes, different theoretical frameworks have been established: one of these is the Modernization theory which propounds the view that "modernization often sets in motion a chain reaction which tends to undermine the status of the aged" (5). Features of this process are said to be the decline in importance of the extended family and in land ownership as a resource of high status, increasing social and cultural structures and values (1,5). Colonialism and modernization have been major forces contributing to changes in economic behavior, social relationships, attitudes and beliefs, and behavior towards and by the elderly in Africa (8). Modernization theory has not, however, gone unchallenged. A number of critiques have been made, notably by Neysmith and Edwardh who argue from the perspective of dependency theory, and say

"economic dependency spawns an ideology which blames under development on the characteristics of people, rather than on the economic relations which bind the third world to the other world" (Neysmith and Edwardh, 1984). They, and others, have argued that demographic factors such as gender, the number of surviving children and economic factors such as class, occupation and ownership of assets play a far more significant role than is assigned to them by a concentration on universal status or value systems. Any loss of status on the part of older people is more likely to have been linked to ingrained structural inequalities experienced by most people in most developing countries in earlier life. Impoverishment in old age may be a common cross-cultural experience of the ageing process rather than simply resulting from modernization. However, it seems much more likely that it is poverty, not modernizing forces, which is the prime cause of this family tension (5).

2.2.2 WIDOWHOOD, DIVORCE AND CHILDLESSNESS

The marginalization experienced by older people is greater for those who lack substantial property and therefore have no resources to deploy to ensure care and security from family or from the community in old age. This is especially true for older women, often widows whose property has been distributed to their sons when their husbands die. For many women in developing countries, the descent into total dependency begins with the death of the husband. For women who have never married, or who are childless, the situation is even more desperate, and in many societies an old age lived out in destitution is assured (5). In sub-Sahara Africa, the emergence of female-headed households caused by migration, widowhood and divorce is reportedly a major problem in rural areas (4).

2.2.3 URBANIZATION

Urbanization is one of the most important trends experienced by the world's population. The growth of towns and cities in many countries, and the establishment of industries are influencing and affecting the relationships between generations. As a result, the well being of elderly people is adversely being affected. The American Association for International Ageing (AAIA), in 1985 reported that the loss of status and esteem, displacement in unfavorable housing conditions, and the exclusion economic production processes combine to put the older population in urban settings in a marginal position (13). The consensus to date is, therefore, that rapid urbanization in developing countries has had a more deleterious effect on urban than on rural elderly (13).

2.2.4 THE WEAKENING EXTENDED FAMILY SYSTEM

In the forefront of concern about social support systems in developing countries is the question of whether traditional family support structures will continue to provide effectively for growing numbers of elderly. Although normative changes are difficult to quantify, a number of authors have suggested that traditional patterns of family support in developing countries are disintegrating (8). Other evidence indicates that in Africa today, extended families, though overstretched and often with inadequate resources, continue to be the primary support system for vulnerable members, including children (8,17). Most elderly Samian (a tribe from Kenya) are receiving at least some family support not only from daughters or sons but from other kins as well and extended families remain an important resource for the aged in Samia (8). Surveys of four West African nations conducted between 1985 and 1988 found that about 80% of respondents over the age of 60 were receiving help from children or grandchildren (5). On the other hand, other reports argue that, nowadays, the issue of extended family support for family members, young and old, is coming more and more to the fore as African families are stressed by geographic separation, economic pressures, Western influence and other forces associated with

socio-economic and cultural changes in the 20th century (8,17). A survey of rural elderly in Kenya found that 91% of respondents felt that their children did not do as much for them as they had done for their own parents. A large majority of respondents were reported to be living in poverty, and half of these attributed their condition to neglect by their immediate family (13). The experience of Japan may be illustrative of the kind of change that developing countries can expect, in a country often viewed as especially respectful toward the elderly, significant numbers of them lead destitute and solitary lives (13). In conclusion, there are failures as well as successes; but it is old people without families, especially the childless, who are suffering most (8).

It is important to note that the traditional Ethiopian family structure is characterized by an extended network of kinship ties. However, the family has been undergoing constant transformation, due to social changes, economic problems, modernization, urbanization and migration. Thus, the extended family system has been gradually changing towards a nuclear family system especially in urban areas. As a result, many people now feel less responsible for family relationships and the ability of many families to meet their basic needs has been weakened. Families are not in a position to provide sufficient care for their aged members, consequently, a significant number of elderly people are left without any support (15).

2.2.5 MIGRATION

An increasingly important phenomenon is the migration of large numbers of the elderly in search of better or more appropriate living conditions. In developing countries, these changes are often forced on older people by changing climatic conditions, natural disasters, political upheavals, wars, the impact of urbanization on rural/village life, etc. (1,2,4). A 1979 UN study on ageing in slums, shows that elderly migrants who expect to improve the quality of their lives by migrating out of rural areas for better access to jobs,

housing, and health services have not only usually ended up in slums but have simply transferred misery from a rural to an urban area (1).

2.3 SOCIO-ECONOMIC CHARACTERISTICS

2.3.1 HOUSING AND LIVING ENVIRONMENT

The ownership of housing can contribute significantly to helping the elderly achieve and maintain a satisfactory economic situation. Home ownership provides the security of occupancy, relatively low cash outlays for shelter, and the means to buy other commodities (2,9). The proportion of the elderly living in independent or separate housing units is relatively high in Scandinavia and the English speaking countries, in contrast, a minority of the aged in most Eastern and Southern European countries live independently (2). Likewise, in developing countries the overwhelming majority of living and care arrangements for older people are still intimately connected to living situations involving younger relatives; few live alone. In Latin America, Africa and Asia elderly people are concentrated in slums or squatter settlements characterized by substandard housing, inadequate services and lack of sanitation. Even worse, elderly women are over-represented among shanty town dwellers (2). The WHO's surveys of the aged in Fiji, Malaysia, the Philippines and the Republic of Korea provide information on elderly living environments in these four countries. The survey respondents were asked about their access to water and to cooking, bathing and toilet facilities. In Fiji and Korea, 13–14% of the elderly did not have access to fresh water; in Malaysia and Fiji, 6–8% of the elderly were without adequate toilet facilities; and in the Republic of Korea, 39% lived in housing that did not have cooking facilities and 69% did not have access to adequate washing facilities (2).

2.3.2 EDUCATION

The well-being of older persons is intimately linked to their educational experiences earlier in life. Among the many positive correlates of education is longevity. In one study of 115 countries, the correlation between literacy and life expectancy at birth was higher than for any other specific factor considered (13).

In developing countries, the older populations of today lived much of their lives prior to the period of accelerated socio-economic development. Consequently their rate of literacy is low relative to younger years; in some cases it is less than half of the rate for the 25 to 54 year age group (13). Differences among nations can be enormous- nearly 70% of Mexican aged 55 to 64 are literate, versus less than 11% of Moroccans. More than half of elderly (aged 65 and over) Philippians can read and write as compared to roughly 10% of the elderly in Tunisia and 23% in Turkey. As would be expected, literacy rate among the rural elderly are considerably lower than those of their urban counterparts (Table 1) (18). For older women, a further source of disadvantage as compared with men, is the huge level of illiteracy (4).

Table 1. Literacy rate (%) of population aged 65 and over, by rural versus urban residence in different countries: (18).

Country (year)	Rural	Urban
Bangladesh (1981)	18	29
Philippines (1980)	40	70
Morocco (1982)	5	12
Brazil (1980)	24	56
Guatemala (1981)	22	58

2.3.3 SOCIAL SUPPORT SYSTEM

Older persons living in a community, alone or with families, are sustained by interlocking networks of "informal support system". This consists of relatives, neighbors, and friends who provide the social contact, and sometimes the assistance necessary for health or at least independence. To these may be added group activities in which the elderly may play a part, such as communal prayers, clubs, meetings and outings (19). In at least two studies, greater social activity was found to promote longer life (20). However, some studies showed that a large proportion of elders are not members of such organizations, groups or gatherings. According to Chen et al (21), only about a quarter of the elders were members of social organizations, and a very small proportion belonged to senior citizen groups. Similarly, 79% of the survey subjects in Barbados (22) were found to have no organizational membership.

A study of older people in a Punjabi village (India), also found that less than one third of men aged 60 or more were members of the village organizations, of whom the overwhelming majority were under the age of 70. The conclusion that "participation in village organization was and influenced directly by economic factors and education" and not by chronological age or wisdom, is echoed in other studies (5,23). Another factor affecting social support is that social support in the form of pension covers only those who have been employed in the formal sector (less than 10% of the population of Ethiopia) (15).

2.3.4 GENDER DIFFERENTIAL

Sex differential in survival means that women outlive men in nearly all the countries of the world and they therefore predominate numerically in older populations (1,2,4,13,24). However, women do not necessarily have longer periods of good health. In reality, women may experience increased and longer periods of chronic health problems from non-fatal illnesses associated with the ageing process and with an accumulation of risk

factors for these diseases. Such factors are often associated with previous life styles and environmental and occupational status (1).

Marriage (including consensual union) is the most common status among the adult population and the consensus of existing research is that the married are far better than the non-married on a number of dimensions namely economic, social, emotional, and care-giving, during the progression through older life (13). However, the number of widowed persons, particularly women, within older populations is currently increasing and becoming a major concern (13). Widowhood rates in older population groups vary widely in the developing world, but regardless of the level, these rates increase substantially with age. Among national populations aged 55 to 64 years, recent widowhood rate for men and women combined range from 9 to 28%, while for persons aged 65 and over, the range was 27 to 55% (13). Countries with data for the oldest old show even higher percentages of widowed: nearly 3 of every 4 persons aged 75 and over in the Republic of Korea are without a spouse (13). Widowhood often causes problems, perhaps the most serious is the relatively high probability of detrimental economic situation (2). It is not just economic deprivation that threatens women when they become widowed, but the grief and loneliness that come with the death of a spouse, male or female, can be overwhelming, often adversely affecting health; widowhood is also likely to cause changes in social and friendship networks and social participation: a widow interacts with different and often fewer people (2). A study of 100 people aged 60 and over at Patna, India, (2) found that 26% "often felt lonely" and another 25% "sometimes felt lonely". In a study by Ellickson of two villages in Bangladesh (25), it is mentioned that the elderly widow changed from an "officious, vocal, wifely head of the domestic realm" into an "old widow, much quieter in voice and demeanor" .

2.4 HEALTH STATUS OF THE ELDERLY PEOPLE

The demographic transition mentioned earlier is accompanied by changes in the pattern of disease–its epidemiologic transition (1). In the past, as nations underwent social and economic transformation, improvements were gradually reflected in changing patterns of disease, for instance through the control of parasitic diseases, which were major contributors to early mortality. However, the experience of recent decades has shown that developing countries are now undergoing changes in disease patterns even in the absence of socio–economic development (1).

The priorities concerning the health status of elderly people center on the shift in disease patterns associated with the epidemiological transition. Infectious diseases are now largely curable with available technology; chronic diseases are now taking over as the major causes of morbidity and mortality as the population ages (3). Elderly people are reported to be the main users of health services and accessibility is a key factor in their effective utilization since elderly people are the least mobile within the population. In addition, health services are not presently geared towards the specific and unique needs of the elderly population and tend to be primarily focused on maternal and child health care (3). There is a need for programmes that specifically deal with the needs of the elderly, and take into account the relationship of their health needs to their social, economic and physical conditions (1). There is an enormous dearth of knowledge on the special health needs of older people in the developing world and to make matters worse, in the poorest 4th world nations access to modern health services and personnel may be almost non existent (1,5,13,16).

An important finding that emerges from the many studies in developed countries is the large extent to which indicators of health and well being are similar among older populations of different nations. Given this similarity in various developed nations, there

can be some basis for anticipating a similar situation in developing countries. These factors include (2,4,8):

1. An increasing incidence of chronic degenerative diseases in the American Region.
2. Gender-related difference with advancing age in the ability to perform tasks of daily living in Costa Rica.
3. Heart diseases as the foremost cause of death among the elderly, hypertension affecting 41% of persons over 65 years of age in Barbados.
4. In Malaysia, there is an increasing incidence of cardiovascular and cerebral diseases, malignancies and diseases affecting the locomotor system.
5. Studies undertaken in India among the rural elderly population indicating growing levels of functional dependence and psychiatric morbidity.

The results of Thailand's 1981 Health And Welfare Survey also offer a hint of similarity on the rates of self-reported well-being (58%) and disability (7%) that are quite close to those of most developed countries (13).

Additional indications of developed to developing country symmetry in health patterns among older populations come from an analysis of surveys sponsored by WHO in four nations in Asia and Oceania (Malaysia, the Philippines, the Republic of Korea, and Fiji). The review examined population sub-groups constructed on the basis of probabilities of having certain functional and health statuses, and concluded that a number of the basic associations with age, sex, morbidity and disability found in the four developing countries are mirrored in the elderly population of the United States (2,13).

Though health problems of the elderly are enormous, specific problems such as the cardiac ones are the major causes of morbidity and mortality (2,13). Next to cardiac problems and hypertension, problems of hearing, mastication, diabetes and visual impairment are reported to cause significant problems (2,13).

In a survey of Nigerians, approximately half of those aged 60 and over reported problems

of general physical weakness and approximately one third reported vision problems. In the rural areas, bending problems and arthritis were cited by over 40% of those sampled (27).

In a study carried in four countries of the Western Pacific, high incidence of vision problems were reported among the elderly, ranging between 33% in the Republic of Korea, 68% in Malaysia, 73% in Fiji and 81% in the Philippines (28).

Cataracts are estimated to be responsible for over 50% of the blindness that occurs throughout the world (44). Most cataract blindness occurs after the age of 50; it is estimated that 50% of persons aged 60–69 have some opacity; while for those in their 80's, the incidence is nearly 100% (44). Since the magnitude of the cataract problems and the potential blindness arising from it are directly related to age composition of the population, the current shift to older populations through out the world means that the incidence of cataract will rise sharply (2).

In a study among Ecuadorians, more than half of the patients and one–third of the conditions diagnosed concerned the gastro–intestinal tract; musculoskeletal disorders were frequent and arthritis was widely under diagnosed and was regarded as a normal ageing development, not to be reported (4).

In rural areas where there are health outposts to which the elderly could go for help, it often involves walking for miles; elderly people are more likely to suffer from chronic conditions which make walking long distances a great problem; and this results in their low utilization of health services (3).

Cardiovascular, cerebrovascular and malignant diseases were found to be the most common disorders among elderly Ethiopians admitted to a medical ward in Addis Ababa; the most common causes of death were reported to be neoplasia, cerebrovascular accidents and cardiac diseases (29). The incidence of cardiac disease among the Ethiopians was also found to increase with age (29).

2.5 NUTRITIONAL STATUS OF THE ELDERLY

Adequate, appropriate and sufficient nutrition, particularly the adequate intake of protein, minerals and vitamins, is essential to the well being of the elderly. Poor nutrition is exacerbated by poverty, isolation, mal-distribution of food, and poor eating habits, including those due to dental problems (30).

The magnitude and gravity of nutritional problems of the elderly in developing countries are not well known. Moreover, there is no simple, widely accepted methodology for measuring their nutritional status, unlike those that exist for infants and children (31). The measurements to take depend on the person being assessed, the resources available and the situation to work in (32,33). In young adults, nutritional status is assessed using the body mass index (BMI) which relates body weight to height (32). However, the measurement of height in elderly population is problematic since height loss occurs with ageing because of spinal curvature and bowing of legs (32,33). Alternatives to height are long bone lengths, such as height to the knee and arm spans. For Caucasian populations, equations have been developed relating arm span (or knee height) to height in young adults, before height loss has occurred, but the relationship varies in different ethnic groups (32).

Mid-upper arm circumference (MUAC) measurements, which are used to assess nutritional status, are different in different parts of the world. Among Asian and Caucasian peoples, MUAC is different for men and women whereas among African peoples it is the same for both sexes (33).

Measuring nutritional status indicates the presence of a problem but not the cause. Different risk factors for the poor nutritional status have been studied in developed countries but not in Africa (32). People working with elderly individuals or groups need

to identify which risk factors apply to their particular situation, so that nutritional vulnerability can be assessed. Some of the risk factors include socioeconomic factors such as poverty; clinical and physical factors such as disability; psychological factors such as depression, social isolation, etc.; and food and nutrition factors such as poor nutrition knowledge (32).

There are very few studies on the nutritional status of the elderly in Africa. A small study conducted in rural Zimbabwe in 1993 found a malnutrition prevalence of 34% among men and 53% among women (34). In rural Malawi, 31% of the elderly population was found to be malnourished (35). A study of 230 elderly people in Jamaica revealed protein energy malnutrition (PEM) in 24% of men and 18% of women (4).

3.OBJECTIVES OF THE STUDY

General objective

To assess the magnitude of streetism and different conditions of the street elderly people in Addis Ababa.

Specific objectives

1. To measure the magnitude of streetism among the elderly people in Addis Ababa.

2. To assess selected socio-economic indicators and perceived social status of the street elderly people .

3. To investigate on selected health problems and the nutritional status of the street elderly people.

4. To identify factors associated with the type of street life among the street elderly people.

4. MATERIALS AND METHODS

4.1 Study Design

The study was a street based, cross-sectional, descriptive survey to assess the magnitude and the socioeconomic, health and nutritional status of street elderly people in Addis Ababa which used pilot study, census, quantitative and qualitative methods to collect data as follows:

4.1.1 Pilot study: In order to gain a preliminary understanding of the magnitude to identify the major areas where the street elderly people are concentrated, a pilot study was conducted. Five data collectors were recruited and they recorded the age, sex, occupation, and the areas where they found the street elderly people. A number of elderly people who were known to work on some specific streets "permanently" were, at a later stage (during the census), used as a control mechanism for the reliability of the data by checking that they have been identified by the enumerators. Mapping was conducted at the end of the pilot study. Another achievement in the pilot study was to pre-test the questionnaire as a first step for its later modification. Major problems in data collection were identified and reflected during the training.

4.1.2 Census: A census was performed in the areas which had been identified in the pilot study as major concentration sites in order to estimate (determine) the total number (magnitude) of street elderly people. Thirty-five enumerators participated in the census, under the supervision of those who earlier made the pilot study. In order to minimize the risk of double-counting, the enumerators were assigned to a specific sector and proceeded in opposite directions away from the neighboring enumerator's sector.

4.1.3 Quantitative methods: Quantitative data were collected using a structured and pre-tested questionnaire to assess the factors associated with the type of street life, the

socio-economic, and health status of street elderly people in Addis Ababa, in May 1998.

4.1.4 Qualitative methods: Two focus group discussions (FGDs) were conducted in order to expand on some findings (eg., health seeking behavior) and to address some other new issues which were not addressed in the questionnaire. A pre-tested and structured discussion guide was used and homogeneity was kept regarding gender. The FGDs were conducted in a room located in a church campus.

4.2 Study area

Addis Ababa is the capital of Ethiopia with a population of 2,632,171 in 1994 (14), of which 87,516 (3.32%) were aged 60 years and above. One report (7) stated that Addis Ababa is one of the cities seriously suffering from an urban crisis. There were 182 homeless elderly people (age 65 years and above) identified in the 1994 census (14).

4.3 Sample size

A sample size of 423 people was calculated for the study based on the following conservative assumptions: 50% prevalence of health problems, 95% certainty, and an expected difference of ± 5% prevalence between the sample and the total population. A 10% contingency was also added. The sample size was calculated using the following formula:

$$\text{Sample size} = \frac{z^2 * P * (1-P)}{d^2}$$

Where, z is the normal critical value for 95% confidence interval(1.96), P is prevalence of health problems (50%), and d is the margin of error (5%). The required sample size was 384 which after adding 10% contingency, gives a sample size of 423.

Two focus group discussions were conducted in August 1998; there were six participants in each focus group.

4.4 Sampling procedures

A multistage sampling method was used to identify participants in the quantitative study. Geographical areas with high concentration of street elderly people in Addis Ababa were identified during the pilot survey; fourteen such areas were identified. Within each of these areas, three major sub-areas were identified; these were religious institutions, major roads, and market-places. All street elderly people who had been identified in the sub-areas during the survey time and who volunteered to participate in the study were included till the required sample size was reached. Due to the highly mobile nature of the study population, probability sampling techniques were not used in the subsequent stages of sampling. The participants for the focus group discussion were selected on convenience (purposive), that is, by identifying participants from around a church; elderly participants had to be able to communicate and express themselves.

4.5 Ethical considerations

Informed verbal consent was obtained from all study subjects after explaining to them the purpose of the study.

4.6 Data collection and management

Training of enumerators and pre-test

A two day training of enumerators was conducted about the aim of the study, the content of the questionnaire, interviewing techniques including how to approach elderly people, age probing and familiarization with some reference points (local events) was made. Group discussion, demonstration and practical sessions on how to measure the mid upper arm circumference was conducted during the training. The coordinators (supervisors) shared their experiences from the pilot study.

Pre-testing of the questionnaire was conducted and actual data filling was practiced in areas selected for the purpose. After the pre testing, the meanings of some terms were explained again; problems identified while pre-testing and during the pilot study like problems of approaching and creating trust by the elderly people were also explained to the enumerators.

MUAC measurements on the street elderly people were taken twice to assure reliability as described in the literature (33,36). The mean of the two measurements was taken, given that the differences were less than 0.5 cm (33).

Data collectors were given an identification paper from Region 14 Labour and Social Affairs Bureau, which contained a full description of the reasons for data collection. The supervisors had additional identification papers provided by the Department of Community Health, Faculty of Medicine, Addis Ababa University.

The census was conducted in one day, by 35 enumerators with the help of five supervisors who had participated in the pilot study. A map of Addis Ababa was used as a guide of the study area.

A structured and pre-tested questionnaire was used to collect data from the street elderly people on health and socio economic variables. The questionnaires were administered by fifteen trained data collectors and supervised by the five coordinators. All street elderly people aged 60 and above were considered for inclusion in the study. Interviews were conducted over a one week period in May 1998, at the site where the elderly people were found. Gentian violet was applied on the fingers of the interviewed to avoid re-interviewing. The coordinators and the data collectors were high school graduates who could speak at least two of the following three languages: Amharic, Oromigna and

Tigrigna. Since no physical examination could be conducted during the interview, perceived health status and a list of health problems which were reported to be frequently encountered by elderly people in survey after survey were used as proxy indicators of health status (2,3). The value of self-reported health status has been demonstrated to be an effective means of summarizing objective and subjective aspects of health (19). Nutrition status was assessed using MUAC.

Data processing

The collected data were submitted everyday to the principal investigator for quality check and coding. Data entry and cleaning was performed by the principal investigator. Data were then processed using EPI Info version 6.0 statistical package. Frequencies, rate ratios with 95% confidence interval (95% CI), chi-square tests, and tests for trend were used to analyze the data.

Focus group discussion (FGD):

Two FGDs were conducted in August, 1998. Homogeneity within the groups was maintained regarding gender. The participants were informed that the discussions were about "street elderly people's lives" and were asked for their consent to participate. The discussions were moderated by the principal investigator who used pretested discussion guides (see Appendix 10.3, page 56-57) which dealt with same topics among the groups. The discussion was recorded verbatim by a recorder and a tape recorder, after explaining its purpose; and finally, findings were transcribed.

4.7 Operational definitions

Street: A place where life goes on; it is a habitat and a place for work (16).

Streetism: To use the street as a living or working place.

Elderly people: Unless and otherwise stated, elderly people are those people who are 60 years old and above (37).

Street Elderly people: are those elderly people who use the street as their main place of living or place of working.

Elderly people "on" the street:

are elderly people who spend most of their time in the street, usually returning home at night, having spent all the day away from home. These elderly people can be characterized as having primarily an economic involvement with street life, perhaps making a substantial contribution to the overall family income, or obtaining just the basic necessities for themselves (16).

Elderly people "of" the street:

are elderly people who fully participate in street life, not just at an economic level; their principal home is the street. A key indicator of elderly person "of" the street is his or her place of sleeping (16).

Type of street life: means to be either "on" the street or "of" the street type.

"Iqqub": Rotating credit association (38).
"Meredaja Mehaber": Associations for mutual help (38).
"Iddir": Burial associations (38).
"Mehaber": Religious or ethnic associations (38).

Young old: 60–75 years old (9).
Old old: 76 – 85 years old (9).
Oldest old: > 85 years old (9).

Impairment: any loss, or abnormality of, psychological, physiological, or anatomical structure or function (9).

Disability: any restriction or lack (resulting from impairment) of ability to perform an activity in a manner, or in the range, considered normal (9).

Handicap: a disadvantage for a given individual, resulting from an impairment or a disability that limits or prevents the fulfillment of the role that is normal (9).

Social security:

"the protection which society provides for its members, through a series of public measures, against the economic and social distress that otherwise could be caused by stoppage or substantial reduction of earnings resulting from sickness, maternity, employment injury, unemployment, invalidity, old age and death (15).

Modernization:

is the transformation of a total society from a relatively rural way of life based on animate power, limited technology, relatively undifferentiated institutions, and parochial and traditional outlook and values, towards a predominantly urban existence based on in-animate sources of power, highly developed scientific technology, highly differentiated institutions matched by segmented individual roles, and a cosmopolitan outlook which emphasizes efficiency and progress (5).

Nutritional status assessment using MUAC (33).

MUAC measurement (cm.) (both sexes)	Nutritional status
Above 24.0	Well-nourished
23.1 - 24.0	Mild malnutrition
22.1 - 23.0	Moderate malnutrition
Below 22.1	Severe malnutrition

Malnourished: all elderly people with mid upper arm circumference of 24 cm or less.

To be harassed: to be annoyed, mistreated or violated for any reason and by any body.

Social problems: are like prostitution, lumpenness, begging, drug and alcohol use, street life, juvenile delinquency (12).

Single: are those who are divorced, widowed, or never married.

5. RESULTS

5.1 CENSUS

A total of 2,064 street elderly people were registered during the one day counting, of whom 1,117 (54.1%) were males and 947 (45.9%) were females. The majority, i.e., 1,191 (57.7%) were involved in begging, 186 (9.0%) in selling food items, 154 (7.5%) in *"Gulit"*, 128 (6.2%) working as a daily laborer, 77 (3.7%) in selling fruits, vegetables and sugar cane, 75 (3.6%) in selling fire wood, and the remaining in various other activities as shown in Table 2. Many of them were found around churches. The majority were in the age group 60–69 years, accounting for 1,437 (69.6%), followed by 70–79 years 384 (18.6%,) and the remaining 243 (11.8%) were 80 years of age or older.

"Gulit" is a small scale market.

Table 2: Magnitude of the street elderly people by Occupation and Sex, Addis Ababa, 1998. (census finding)

OCCUPATION	MALE		FEMALE		Total	
	Freq.	%	Freq.	%	Freq.	%
Beggar	669	60	522	55.1	1191	57.7
Selling Food Items	56	5	130	13.7	186	9.0
Gulit	20	2	134	14.1	154	7.5
Laborer	112	10	16	1.7	128	6.2
Selling Fruit, Vegetable /Sugar Cane	62	5.5	15	1.6	77	3.7
Selling FireWood	27	2	48	5.1	75	3.6
Tailor	53	5	4	0.4	57	2.8
Selling Cloth and Second Hand items	28	2.5	24	2.6	52	2.5
Merchant	34	3	16	1.7	50	2.4
Others[1]	56	5	38	4.0	94	4.6
TOTAL	1,117	54.1	947	45.9	2,064	100.0

[1] Selling candle, wood, lottery tickets, tooth sticks, cement paper, house furniture, handcraft, shoes repair, brokery, coin exchange, etc.

5.2 STRUCTURED INTERVIEW (QUANTITATIVE STUDY)

Out of the total 2,064 street elderly people, 423 subjects participated in the study for an in depth investigation of their socioeconomic, health and nutritional status. Data were either inconsistent or incomplete for ten subjects who were excluded from analysis, leaving a sample size of 413 subjects for analysis.

Socio demographic characteristics:

The basic demographic characteristics of the 413 subjects are shown in Table 3.

Of the 413 subjects, 228 (55.2%) were males; the dominant age group was 60–69 years, accounting for 208 (50.4%) of the study population. The mean ± SD age of the study population was 70.9 ± 9.2 years (range 60–100 years). Amhara was the majority ethnic group accounting for 241 (58.4%), followed by Oromo 84 (20.3%), Gurage 35 (8.5%), Tigre 27(6.5%), and others 26 (6.3%). Regarding religious faith, the majority were Orthodox Christians 397 (96.1%), followed by Muslims 13 (3.1%); 3(0.7%) were from other religious groups.

The majority, 330 (79.9%) of the elderly people were unable to read and write (illiterate); females were more likely to be illiterate (OR=4; 95% CI=2.2–7.5). One hundred and eighty of the interviewed (43.6%) reported being widowed, and 85 (20.6%) were divorced; currently, 334 (80.9%) of the elderly people reported being single. Females, as compared to males, were more likely to be single (OR=2.9; 95% CI=1.6–5.2).

Table 3. Socio-Demographic characteristics of street elderly people, Addis Ababa, 1998. (n=413)

Variable	Frequency	Percent
Sex		
Male	228	55.2
Female	185	44.8
Age years		
60-69	208	50.4
70-79	125	30.3
80-89	60	14.5
> 90	20	4.8
Ethnicity		
Amhara	241	58.4
Oromo	84	20.3
Tigre	27	6.5
Gurage	35	8.5
Others	26	6.3
Religion		
Orthodox Christian	397	96.1
Protestant	2	0.5
Muslim	13	3.1
Others	1	0.2
Education		
Unable to read & write	330	79.9
Can read & write only	76	18.4
Attended Primary school	6	1.5
Attended Secondary school	1	0.3
Current marital status		
Married	79	19.1
Single	334	80.9
Current occupation		
vending/daily laborer	85	20.6
Begging	328	79.4
Occupation before street life (n=379)		
Farming	245	64.6
Military	17	4.5
Other govt employee	9	2.4
*Private business	44	11.6
Merchant	19	5.0
Others (kid, housewives,...)	45	11.9
Previous area of residence		
Addis Ababa	34	8.2
Other Urban area	75	18.2
Rural	304	73.6
Reason for leaving previous area of residence (n=379)		
War	34	9.0
Starvation	52	13.7
To seek medication	60	15.8
To look for better Job	46	12.1
To visit relatives	125	33.0
Other(with family,were Children with husband...	45	11.9
Job transfer	17	4.5

* House maid, tenant, metal work, carpenter etc.

Regarding family characteristics, 173 (41.9%) had no children alive while the remaining 240 (58.1%) reported to have 1–8 alive children; of these 240 with children, only 108 (45.0%) had children who were self–supporting , while 132 (55.0%) were still dependent. From the 108 elderly who reported having alive and self– supporting children, only 33 (30.6%) admitted receiving any help from their children, while the remaining 75 (69.4%) denied getting any help from their children. For the 33 receiving help from their children, the type of help was as follows: money 11 (33.3%), shelter 7 (21.2%), food 5 (15.2%), clothing 2 (6.1%), and all of the above 8 (24.2%). Only 16 of the 413 (3.9%) elderly reported getting some help from other relatives. The most common reasons for not getting any support from relatives were either having no relatives at all (52.8%), or the relatives are poor (34.2%). As seen in Table 3, most of the respondents, 328 (79.4%) were involved in begging while the remaining 85 (20.6%), were vending or working as daily laborers. Married subjects were less likely to be involved in begging (OR=0.47; 95% CI=0.26–0.86). Of the 413 interviewed, 105 (25.4%) had at least someone whom they helped or took care of. Elderly people who were not beggars were more likely to have dependents as compared to beggars (OR= 3.60; 95% CI=2.09–6.18).

Two hundred eighty seven (69.5%) of the elderly people were "on" the street (that is, they have a house to sleep at night), while 126 (30.5%) were "of" the street type (i.e., completely homeless).

Thirty four people (8.2%) were indigenous to Addis Ababa and 379 (91.8%) were immigrants. Of the 379 immigrants, 304 (80.2%) used to be living in rural areas while 75 (19.8%) came from urban areas. Reasons for migration included war for 34 (9.0%), famine/starvation for 52 (13.7%), 60(15.8%) for medical reasons, 46 (12.1%) to see relatives, 125 (33.0%) to look for a better job, and 62 (16.4%) came with family or for other reasons. Two hundred and forty five (64.6%) of the migrant elderly people used to be farmers, 44 (11.6%) had a private business, 26 (6.9%) were government employees,

including soldiers, 19 (5.0%) were merchants, and the remaining 45 (11.9%), were dependent children or housewives before coming to Addis Ababa and joining the street life (Table 3). Seventy four(19.5%) of the migrant elderly people were willing to return to their original residence, whereas the rest, 305 (80.5%) preferred to stay here and not to go back.

One hundred and fifty six (37.8%) reported having some disability. The most frequently reported disabling problems were: problems of sight by 75 (48.1%), walking (mobility) problems by 43 (27.6%), skin problems by 9 (5.8%), problems of hearing by 2(1.3%), combined or multiple problems by 13 (8.3%), and other problems by 14 (9.0%).

Table 4 shows some of the socio-economic characteristics of the street elderly people.

Regarding sleeping place, 126 (30.5%) reported to be sleeping around religious institutions and corridors. Of these, 23 reported sleeping around religious institutions which may be in houses of the churches or by the side of the church's compound. The remaining 287 (69.5%) reported to sleep in a house; many of these reported times of "of" streetism when money to pay for house rent was either lacking or unavailable. Eighteen (4.4%) elderly people reported to own their private house.

Seventy "of" the street elderly people (68.0%) reported wearing plastic sheets to protect themselves from rain; whereas 33 (32%) reported having nothing or wearing what they may find. The majority of the elderly people , 296 (71.7%) reported earning below two birr per day, 85 (20.6%) 2-3 birr per day, and only 32 (7.7%) get more than 3 birr per day. The mean income was 1.36 $\pm$ SD 0.62 birr. A few, i.e., 58 (14%) claimed to save some of their earning.

Table 4. Socio-economic Characteristics of street elderly people Addis Ababa, 1998.

VARIABLE	Frequency	Percent
1.Income		
<2 birr/day	296	71.7
2-3 birr/day	85	20.6
>3 birr/day	32	7.7
2.Saving		
Yes	58	14
No	355	86
3.Frequency of meals (eating)		
Only when food is available	280	67.8
At least once/day	33	8.0
At least twice/day	69	16.7
At least three times/day	31	7.5
4.Sleeping place		
Churches, corridor, street	126	30.5
** In a house	287	69.5
5.Own extra clothes		
Yes	183	44.3
No	230	55.7

6.Frequency of Washing	Clothes	Body
When water is available	71(17.2%)	83 (20.1%)
Every 2 Weeks	95(23.0%)	110(26.6%)
When felt dirty	142(34.4%)	105(25.4%)
Never Wash	76(18.4%)	67(16.2%)

** 18 reported to own their private house

The males (OR=1.8; 95% CI=1.1–2.9) and the non–married (OR=4.2; 95% CI=1.9–9.42) were more likely to be "of" the street. This study did not show significant association between education, previous area of residence (urban/rural), being disabled and receiving or not any help from children or other relatives with the type of street life (Table 5).

the street elderly people,

Most of those who responded to this question, 331 (80.1%) reported getting some support/ help from the public; and only 27 (6.7%) and 19 (4.6%) from NGOs and the government, respectively. The public was reported as being the most reliable source of charity by 325 (78.7%) respondents, while 11 (2.7%), 9 (2.2%), 3 (0.7%) reported NGOs, the government, and relatives, respectively, as the most reliable alms givers.

Of the total study subjects, 280 (67.8%) reported eating only when food was available (at times, this may mean eating nothing in a day), 33 (8.0%) claimed to eat at least once a day, 69 (16.7%) at least twice, and 31 (7.5%) three times a day. Two hundred and thirty one (55.9%) and 171 (41.4%) reported begging as a means to get water for drinking and for washing, respectively; 16 (3.9%) and 69 (16.7%) reported using river (stream) water for drinking and washing, respectively. Majority of the respondents, i.e., 230 (55.7%), had no other clothes than what they wore at the time of the interview; the remaining reported having other clothes.

With regard to washing their clothes and their body, respectively, 142 (34.4%) and 105 (25.4%) reported doing so when they felt dirty, 95 (23.0%) and 110 (26.6%) of the reported washing every two weeks, 71 (17.2%) and 83 (20.1%) reported to wash only when water was available; whereas 76 (18.4%) and 67 (16.2%) of the respondents neither washed their clothes nor their body.

One hundred and ninety five (47.2%) were defecating in open field and the remaining used latrines. The "of" the streets were more likely to be defecating open field, (OR=4.47; 95% CI= 2.8–7.3).

Substance use (cigarette smoking, alcohol consumption, or chat chewing) was reported by 105 (25.4%) of the elderly people .

Regarding perceived health status, 290 (70.2%) of the respondents reported being sick or in a poor health status. The most frequently reported health problems were of vision 212 (51.3%), mastication 176 (42.6%), rheumatism 153 (37.0%), abdominal problems 145 (35.1%), and joint problems 143 (34.6%) (Table 6). Increase in age was statistically significantly associated with most of the health problems. (Table 8)

Only 99 (24.0%) of the respondents reported going to health institutions whenever they felt sick, the rest reported taking other measures, that is, 26 (6.3%) to use herbs, 15 (3.6%) to go to a local healer, and 260 (63.0%) take holly water. Being male and being "on" the street was associated with going to health institutions as compared to females and "of" the street elderly people (OR=1.67, 95% CI=1.02–2.76; and OR=3.7, 95% CI=1.9–7.3 respectively).

Nutritional assessment was carried out on 379 elderly, of whom 302 (79.7%) were malnourished and only 77 (20.3%) were well or over–nourished (Table 7). There was no significant difference in the nutritional status by age, gender or by type of street life.

With regard to harassment, 83 (20.1%) reported having been harassed either by police or gangsters. The male, "Of" the street elderly people had higher chance of being harassed ($P<0.05$).

Regarding membership in different social organizations, only a few, i.e., 128 (31.0%) reported being members of an "idir", 32 (7.7%) had "iqub", and 16 (3.9%) were members of "meredaja mehaber". "Of" the street elderly people were less likely to be members of organizations, (OR=0.08; 95% CI=0.03–0.18).

Table 6. Frequency of the reported health problems by the street elderly people, Addis Ababa, 1998.

Reported problems	Frequency	Percent (n=413)
Vision	212	51.3
Mastication	176	42.6
Rheumatism	153	37.0
Abdominal problem	145	35.1
Joint	143	34.6
Cough	138	33.4
Febrile illness	123	29.8
Hearing	83	20.1
Skin	35	8.5

Table 7. Nutritional status of street elderly people, Addis Ababa, 1998.

	Frequency	Percent (n=379)
Well nourished	77	20.3
Mild malnutrition	77	20.3
Moderate malnutrition	56	14.8
Severe malnutrition	169	44.6

Table 8. Age as a determinant of selected health problems among street elderly people, Addis Ababa, 1998.

Health problem and age (years)	Yes	No	OR	95% CI
Perceived ill				
60–75 (years)	202	103	1.00*	
76–85	57	13	2.24	1.13–4.51
>85	31	7	2.26	(0.93–6.27)
Joint problem				
60–75	93	212	1.00*	
76–85	28	42	1.52	(0.86–2.69)
>85	22	16	3.10	1.50–6.60
Mastication problem				
60–75	117	188	1.00*	
76–85	31	39	1.28	(0.73–2.23)
>85	28	10	4.50	2.00–10.32
Vision Problem				
60–65	146	159	1.00*	
76–85	38	32	1.29	(0.74–2.25)
>85	28	10	3.05	1.36–6.98
Hearing difficulty				
60–75	47	258	1.00*	
76–85	20	50	2.20	1.15–4.18
>85	16	22	3.99	1.84–8.64
Rheumatism				
60–75	103	202	1.00*	
76–85	33	37	1.75	1.00–3.06
>85	17	21	1.59	(0.76–3.30)

* reference category

N.B.=> P Value of chi square for trend was significant at p=0.05 in all the above cases.

Two hundred and thirteen (51.6%) of the elderly people claimed to have had some role to play as an elderly (arbitration, advising children, telling tales, etc.), while the remaining (48.4%) did not. The majority of the elderly people, 280 (67.8%) claimed to be respected as an elderly. Neither sex nor type of street life were significantly associated with role or respect.

Feeling of loneliness was reported by 264 (63.9%) of the elderly. Members of social organizations (OR=0.40; 95% CI=0.25–0.63), "on" the street elderly (OR=0.35; 95% CI=0.2–0.6), those receiving help from children or relatives (OR= 0.29; 95% CI=0.11–0.76), and the married (OR=0.28; 95% CI=0.2–0.5) were less likely to feel lonely. Most of the respondents, i.e., 289 (70.0%), reported having no future hope. Feeling lonely was significantly associated with hopelessness (OR=0.63; 95% CI=0.4–1).

As mentioned earlier, two hundred and eighty seven (69.5%) of the street elderly people were "on" the street type, while 126 (30.5%) were "of" the street type meaning they were completely homeless. The "of" the street elderly people had more chance to go without food on some days, not to own extra clothes, to defecate in open field, to be harassed, to feel lonely, to be hopeless, not to save income and wanted to join an institution–based care (Table 9).

Table 9. Bi-variate analysis of factors associated with the type of street life in street elderly people, Addis Ababa, 1998

Variable and type of street life	Yes	No	OR	95% CI
Go without food on some days				
"Of"	102	178	2.6	1.53–4.45
"On"	24	109		
Own extra cloth				
Of	46	80	0.32	0.20–0.51
On	184	103		
Defecate open field (n=409)				
Of	91	35	4.48	2.76–7.27
On	104	179		
Harassed				
Of	37	89	2.18	1.28–3.70
On	46	241		
Visit health institution when sick				
Of	13	113	0.27	0.14–0.52
On	86	201		
Feel lonely				
Of	100	26	2.88	1.71–4.88
On	164	123		
Have hope for the future				
Of	29	97	0.60	0.36–1.00
On	95	192		
Save some income				
Of	6	120	0.23	0.08–0.57
On	52	235		
Member of social organizations (n=267)				
Of	7	119	0.01	0.00–0.02
On	125	16		
Would like to join a supportive institution				
Of	89	37	2.53	1.57–4.07
On	140	147		

5.3 THE FOCUS GROUP DISCUSSIONS (FGDs)

Two FGDs were conducted and the major findings are presented below.

1. HEALTH STATUS AND RELATED ISSUES.

All the elderly people, except one male, said that they felt sick at the time of the discussion. Regarding the determinants for their poor health status, the elderly women attributed it to poverty and/or hunger; both groups added cold weather as an additional determinant for their poor health status. The males had divided opinions as to what determines their health status. Difficulty to see was the main health problem for all the participants; as a determinant for poor sight, repeated weeping after the death of children, husbands, and other relatives was cited by all the elderly women. The elderly men mentioned age as the determinant for their vision problem.

Almost all the participants said they do nothing when they are sick; some said they use holy water. One woman and one man were exceptional in that they go to health institutions. The woman said that she paid for the treatment; the elderly man went to the tuberculosis center where he received treatment for free.

Lack of money was the most frequently mentioned reason for not going to health institutions. Some raised the problem of obtaining poverty certificate and lack of address/ identification card as a reason.

2. FEEDING HABITS AND ASSOCIATED FACTORS.

All elderly women, except one, said that they eat only once in a day; one woman and all the male elderly said they usually eat twice in a day . All said that there are times when they eat nothing and stay the whole day with an empty stomach.

The most frequently consumed food types are reported to be "injera" and bread. Fruits were never raised by both groups and all laughed when fruits were mentioned. With regards to perceptions and recommendations on good food, both groups, regardless of

sex, agreed that meat with butter and oil is the best food and it is recommended for elderly people. Some said any food is good if prepared with butter or oil.

3. PRIORITY NEEDS

Though the groups had divided opinions, the majority identified shelter and health as priorities while some added food to the list.

When asked about harassment, all the elderly women shouted in one voice that they had never been harassed by gangsters or police; rather they said: "they respect us". The males, to the contrary, complained of harassment and looting by gangsters and they reported that they are pleased with the police for protecting them.

4. SOCIAL SUPPORT SYSTEM

Almost all expected the government and members of the community to provide them with shelter and food. The view of both elderly men and women regarding the proposal of having an old people's home as an option for addressing the problem of the poor elderly was positive. "After gathering and registering us, selection should be done because there are some who are able to work if they get suitable job, myself being an example". This was the view of one elderly man, also shared by most of the male respondents.

6. DISCUSSION

This study revealed that a large number of elderly people are working and/or living on the streets of Addis Ababa. However, this may only be "the tip of the ice berg" because the study concentrated on the city's major roads, and may have missed large numbers of street elderly working and living in other parts of the city.

The study showed that a considerable proportion of the elderly people were not originally inhabitants of Addis Ababa, and that the majority had migrated from rural areas for different reasons (war, famine, seeking better job and medical care, etc.). Though the elderly people migrated in search of a better life situation, they ended up in a grave situation by transferring misery from a rural to an urban setting. A United Nations study "Ageing in Slums" (1), reported similar findings. Another study in Kenya also reported that destitute elderly in both urban and rural settings are a growing category who live their final years in a foreign area because of war and labour migration (8).

This study showed that a large proportion of the elderly were single (due to widowhood in 43.6% cases), the proportion of widowed females being higher. Another study (13) found similar findings where among nationals aged 65 years and above, recent widowhood rates of 27–55% for men and women combined, were reported.

This study also revealed that those who were married had less chance of being involved in begging; and that the married to be better in a number of dimensions than the non–married as has been reported in another study (13). Again, our finding showed a very high level of illiteracy; nearly 80% were unable to read and write. This situation is similar to findings among Moroccans (13) where only less than 11% were literate and to Turkey where 23% were literate.

Our study revealed that about 25% of the elderly had someone depending on them. This finding implies that the fate of these dependents will not be much different from their predecessors, thereby, creating another category of people destined to live in misery.

Over 30% of the respondents had no house to sleep in, and more than 92% reported earning less than 3 birr per day. This grave situation is further pronounced by lack of access to pure water for drinking and washing.

The public was reported as the most reliable and dependable source of charity which was similar to a previous study in Ethiopia (38), but very much different from a study in Botswana, where it was reported that "the community has nothing to do with elderly by way of social support; everybody minds his own business these days, it is unlike in the old days" (39). This difference may be explained by the fact that many of the study participants were actively begging and they largely depend on the public. In addition, the Ethiopian society traditionally believes in sharing what is available (20), and moreover it was reported (38) that even the very poor Ethiopians will often give at least a little money to beggars. Though the public was the most reliable source of charity, the current situation of severe economic conditions in Ethiopia has begun to erode the capacity of the community members who would normally give part of whatever little they have to beggars (11) and this threatens the lives of the poor.

Many of the respondents (67.8%) reported eating only when food was available; otherwise, they just go back and join the street, where they are exposed to harsh conditions, with an empty stomach. This was also reported during the focus group discussion. Even when food is available, it is simply a left-over and deficient in quality, and its safety is also in question, putting the elderly at risk for different food-borne and/or food-related diseases (11,16). The findings of the nutritional assessment can be seen as an indirect or a proxy indicator of the type of food, in terms of quality and quantity,

consumed by the elderly. The very high rate of malnutrition, nearly 80% in our survey, was much higher than the findings in Zimbabwe where 34% of males and 53% of females were malnourished (34). This is probably because our study subjects were very poor and in a precarious situation. A study in Botswana (39) reported that there was no gender difference regarding nutritional status among the elderly which is similar to our finding.

Nearly 38% of the respondents reported having some sort of disability, which is higher than 7.1% found in Thailand (2). Our study further revealed that only 30.0% of the elderly perceived themselves as being healthy and to make the matter worse only two participants (17%) perceived to be healthy. These figures are much lower than other reports from different countries (Republic of Korea 50%, Fiji 58%, Malaysia 72%, and the Philippines 84% of self-reported well-being) (2). Self-reported well-being was 58.2% in Thailand's health and welfare survey in 1981 (13). Our finding may be explained by the exposure of our study subjects to the harsh environment in particular and to the poor quality of living in general.

The finding on problems of vision, joint pain and rheumatism, mastication problems and hearing difficulties were similar to other studies (28). The very high prevalence of vision problems in our study subjects was similar to the findings from other countries (28,39). The FGD sessions emphasized the magnitude of the problem of vision. Since cataracts are the major causes of blindness in old age, the current shift towards old age means that the incidence of cataract will rise sharply (2).

Although health facilities are physically available in the city, the elderly people's access to them is limited, as seen by the finding that the majority of the elderly, 314 (76 %), reported not going to health institutions for their health problems. Lack of money (for transportation and for medication), and lack of "poverty certificate"(issued by the "kebelle" or district of one's residence) and identification card were cited as reasons for not going

to health institutions. Similar problems by elderly people were cited in another study in Botswana (39) and by street children in Ethiopia (16).

Not surprisingly, many of the respondents were not members of social organizations. This is probably because most of our study subjects were beggars who have less chance of belonging to social organizations. This is comparable to what has been reported in another study (38). Similarly, other studies in Punjabi village (India) (5,23) also reported that participation in village organizations was influenced directly by economic factors and education.

Many of the respondents reported not being respected as elders. This finding is similar to a report from Botswana (39), where "there is no respect" was an emphatic expression often used by the old men. This may be because the younger generation, as more educated, expect to get nothing from the elderly people or else this was related to the life style of the elderly (4). The high rate of harassment reported, especially by the males (also reported during the FGD), may be an indicator of the lack of respect they experience or it may be related to their living and working environment which exposes them to this situation.

Many respondents were willing to join institutions such as an old people's home (also reported during the FGD). The reasons given by those who refused were in order not to be far from neighbors and relatives, not to leave their "idir" and due to concern about who will bury them when they die. This finding was inconsistent with the findings of a study in Botswana (39) where it was reported that the confinement in old people's home was compared to some form of imprisonment.

7. Strengths and Limitations of the study

7.1 Strengths

The main strengths of the study is that pilot study was first carried out, and that the full study used a mixture of methods in data collection. The absence of similar studies in Ethiopia is another strength.

7.2 Limitations

1. Though efforts were made in the design to minimize the risk of double counting, the means to control it might have not been absolutely perfect.
2. Most of the outcomes were assessed only based on the report of respondents and over–reporting of the problems may have occurred since respondents may have felt that this could be a source of help.
3. The study used convenient sampling to select study participants which may have its own limitations.

The study is internally valid for

1. The questionnaire contained closed ended questions, it was pretested, and the results complemented with FGD.
2. The training of the data collectors was intensive using maps, demonstration as well as practical sessions especially on taking the mid upper arm circumference measurement.

8. MAJOR CONCLUSIONS AND RECOMMENDATIONS

In conclusion, the findings indicated that the street elderly people are exposed to complex social, economic, health and nutritional problems, (like suffering from lack of suitable shelter, food and clothing) as well as inadequate use of basic health services.

Recommendations:

1. Immediate attention should be given to this segment of the population who were found to be in a very miserable situation, being exposed to undesirable socioeconomic and living conditions.
2. Ways to make the existing social services accessible to the street elderly people must be explored.
3. There are different policies regarding the elderly in the country and the implementation of these policies must be made practical.
4. Further studies are recommended to elaborately indicate problems of street elderly people and also to identify effective intervention strategies.
5. Though there are large numbers of elderly beggars in the city, the finding showed that some were either willing and/or capable to work if suitable job is provided; and ways to ensure this must be worked out.

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10. APPENDICES

10.1. CURRENT SERVICES PROVIDED FOR ELDERLY PERSONS

Institutional care: The Government provides institutional care for elderly people in the following centers:

Abraha Bahta Home for the Aged

Betheselhome Home for the Aged

Kaliti Home For The Aged

Non-government organizations dealing with older people

Missionaries Of Charity

Children of Light Welfare Association

Integrated Holistic Urban Development Project

HelpElderly Associates

Daughters of Charity Urban Development Project (DOC/UDP)

St.George's Church Welfare Society

HelpAge International

10.2 ABOUT HELPAGE INTERNATIONAL

Founded in 1983 as a federation of national, independent age care organizations. The five founder members were HelpAge Kenya, Colombia, Help The Aged (Canada), HelpAge India and Help The Aged(uk). HAI has 44 members with its secretariat at present in London and Four Regional Offices (in Zimbabwe, Thailand, Jamaica and Bolivia). Through its member net work HAI offers support both to member organizations and project partners in the form of training, publications, fund raising and organizational development advice, and direct project support. The organizations aims are to concentrate increasingly on:

a. bringing a lasting improvement to the quality of life of the poorest and most vulnerable older people.

b. institutional development of local NGOS working with and for older people, and

c. heightening public awareness of ageing issues.

10.3 GUIDE FOR FOCUS GROUP DISCUSSION

1. HEALTH AND RELATED ISSUES

   What factors play role in determining the poor health status of street elderly people?

   a. priority health problems

   b. measures taken when sick (frequently taken measure)

   c. problems faced when visiting health institutions (address, poverty certificate, other costs)

2. FEEDING AND ASSOCIATED FACTORS

   a. frequency of eating (?/day)

   b. Type of meals frequently taken?

   c. knowledge about good foods (esp. vitamins and proteins)

3. PRIORITY PROBLEMS

   a. What is your main problem?

   b. Loneliness, depression, lack of respect by some members of the community (insolence).

   c. lack of membership in / marginalization from membership in different organizations

   d. Accidents (vehicle, animal bite, falling down injuries)

   e. Basic necessities are not available as required (sustainable) Harassment

4. SOCIAL SUPPORT SYSTEM

What needs to be done by the government, community, donors, volunteer individuals, and family members of the street elderly people in order to minimize streetism and the impacts you are encountering?

a. community based rehabilitation

b income generating schemes

c institutional care etc.

10.3 ENGLISH VERSION OF THE QUESTIONNAIRE

INTRODUCTION

This study is aimed at assessing the situation of street elderly people in Addis Ababa. There is no right or wrong answer to any of the questions and you are kindly requested to give us genuine and personal response. The outcome of the study will be helpful to all street elderly people in the city.

Thank you

STUDY QUESTIONNAIRE

Date of interview _____

Name of Interviewer:_____

Name of supervisor :_____

I. SOCIO-DEMOGRAPHIC DATA

1. Code
2. Sex 1. male 2. Female
3. Age (years)
4. Ethnicity
    1. Amhara
    2. Oromo
    3. Tigre
    4. Gurage
    5. Others, specify
5. Religion
    1. Orthodox
    2. Protestant
    3. Catholic
    4. Muslim
    5. Others (specify)

6. Marital status before street life

1. single
2. married
3. divorced
4. widowed
5. separated

6.1. If divorced/ separated, what are the reasons?

6.2. If widowed, specify cause

7. Current marital status

1.single
2.married

8. Educational status

1. Illiterate
2. Able to read and write
3. Primary school completed
4. Grade 7 – 12
5. > grade 12

9. Name of the location/ area/ street you are living currently

10. If you had children, how many of them are alive ?

10.1 If some or all are alive, do you have children who are economically independent or who have jobs?

1. Yes 2. No

If NO GO TO Q. 14.

10.2 If some or all of your children are alive, and have job do you get any support from your children?

1. Yes 2. No

11. If yes, what type of support do you get from your children?

1. cash
2. food
3. shelter
4. clothing
5. all the above
6. others (specify)

12. Do you get support from other relatives

1. Yes 2. No

If NO, GO TO Q. 14.

13. If yes, in what form ?

1. cash
2. food
3. shelter
4. clothing
5. all the above 6. others (specify)

14. If your children/ relatives are not supporting you, what are the reasons?

15. Do you have anyone whom you support?

1. Yes 2. No

If NO, GO TO Q. 17.

16. If yes, how many people are you supporting?

1. 1 2. 2 3.If >2, specify

17. What is your means of living (earning) currently?

1. Itinerant street vending
2. daily laborer
3. Begging
4. others (specify)

18. When did you come to Addis Ababa? (year of arrival in E.C.)

19. Where were you living before coming to Addis Ababa?

1.urban 2.Rural

20. What was your means of income before coming to Addis Ababa?

1. farming
2. military person
3. civil servant
4. private employee
5. Business person
4. others (specify)

21. Why did you change your place of residence, i.e., why did you come to Addis Ababa?

1. war
2. famine
3. medical reason
4. to see relatives
5. looking for better job/life
6. others (specify)

22. Do you want to go back to your home land (to your previous area of residence?)

1. Yes 2. No

IF NO, GO TO Q. 26.

23. If yes, how much do you think is enough to fulfil some of your needs and to cover your transport cost?

1. 150 – 200 birr
2. 201 – 300 birr
3. > 300 Birr

24. Do you have any impairment?

1. Yes 2. No

24.1 If yes, specify the type. _____

II. SOCIO-ECONOMIC DATA

1. Where do you sleep?

1. Around/ in religious institutions
2. Relative's house
3. Kebele's house
4. kitchen
5. on the street/ corridor
6. others (specify)

2. If you live on the street, what do you do to protect yourself from rain / cold ?

1. wear plastic sheet
2. wear what I have
3. do nothing
4. others (specify)

3. What is your current average daily income?

1. < 1 birr/day
2. 2 – 3 birr/day
3. > 3 birr/day

4. Do you save some of your income?

1. Yes 2. No

IF NO, GO TO Q. 6.

5. If yes, what is your saving mechanism?

1. bank box
2. Iqqub 3. others (specify)

6. Did you get any support (aid) from

6.1. NGOs	1. Yes	2. No
6.2. Government	1. Yes	2. No
6.3. Community	1. Yes	2. No

6.1 If supported, specify the type of support obtained. ____

7. Which of the above support providers is most dependable so far?

1. NGOs
2. Government
3. Community
4. Relatives
5. Not applicable

8. How many times do you eat/day?

1. As available
2. once/day
3. 2/day
4. 3/day

9. What is your usual source for drinking water?

1. begging
2. leakage sites/ river
3. buying
4. others (specify)

10. What is your usual water source for washing facilities

1. begging
2. leakage sites/ river
3. buying
4. others (specify)

11. Do you have other clothes than the ones you are wearing?

1. Yes 2. No

12. How frequently do you wash your clothes?

1. every 2 weeks
2. when dirty
3. never wash
4. when water is available
5. others (specify)

13. How frequently do you wash your body?

1. every 2 weeks
2. when dirty
3. never wash
4. when water is available
5. others (specify)

14. Where do you often relieve yourself?

1. open air (in the field)
2. latrine
3. others (specify)

15. Do you have habits like smoking, alcohol drinking/chat chewing?

1. Yes 2. No

IF "NO" GO TO NEXT SECTION.

16. If yes, which of the following habits do you have?

16.1 alcohol 1. yes 2. no

16.2 smoking 1. yes 2. no

16.3 chat chewing 1. yes 2. no

16.4 others (specify)

III. HEALTH STATUS INDICATORS

1. Do you feel sick/ healthy?

   1. Healthy 2. Sick

2. Which of the following health problems do you have?

	Yes	No
2.1. Problem of Mastication	_____	_____
2.2. Arthritis	_____	_____
2.3. vision problem	_____	_____
2.4. Hearing problem	_____	_____
2.5. Abdominal	_____	_____
2.6. Cough/Chest symptom	_____	_____
2.7. Febrile Illness	_____	_____
2.8. Skin problem	_____	_____
2.9. Rheumatism	_____	_____

3. Result of MUAC measurement _____cm

4. What measures do you often take when you are sick ?

   1. go to medical institution
   2. take traditional medicine
   3. visit traditional healer
   4. take holy water
   5. do nothing (prey, etc.)
   6. others (specify)

5. Have you been harassed by any external force like police, gangsters, etc. during the street life?

   1. yes 2. No

   IF NO, GO TO Q. 6.

6. If yes, what was the reason?

   1. theft (looting)
   2. Don't know
   3. others (specify) _____

7. History of violence in the last three months

   1. Yes 2. No

8. Any history of accident (vehicle, animal bite, falling down, etc.) during the street life?

   1. Yes 2. No

V. SOCIAL STATUS AND MEMBERSHIP OF SOCIAL ORGANIZATION

1. Are you a member of any of the following social organization?

   1. Iqqub a. Yes b. No
   2. Iddir a. Yes b. No
   3. Meredaja Mahiber a. Yes b. No
   4. others (specify) _____

2. What is your role in the community as an elderly person?
3. Do members of your community respect you as an elderly person?

   1. Yes 2. No 3. partially

4. Which of the following is a priority to you currently?

   1. food
   2. clothing
   3. shelter
   4. illness/health
   5. support 6. others (specify)

5. Do you feel lonely ?

   1. Yes 2. No

6. Do you have future hopes/ aspirations ?

1. Yes 2. No

7. If yes specify_____

8. Have you ever heard the existence of institutions which provide care to elderly people?

1. Yes 2. No

9. Do you like to join and be supported by institutions which provide care to elderly people?

1. Yes 2. No

IF YES, GO TO Qn. 11

10. If no, why?----------

11. Have you ever been in any of the institutions for the elderly ?

1.Yes 2.No

IF NO, THANK THE ELDERLY PERSON FOR RESPONDING.

12. If yes, why did you left the institution?----------

Thank you for participating in the study.

ለሚመለከተው ሁሉ

ይህ መጠይቅ አ/አበባ ከተማ ውስጥ በጎዳና ላይ የሚሰሩ አረጋውያን የአኗኗር እና ሌሎች ተዛማች ሁኔታዎችን ለማጥናት የተዘጋጀ ሲሆን መጠይቁ በመመለስ እንዲተባበሩን በትህትና እንጠይቃለን፡፡

በዚህ መጠይቅ ውስጥ የተካተቱ ጥያቄዎች ከራስዎ የኑሮ ሁኔታ ጋር በማገናኘት ብቻ መልስ እንዲሰጡን በትህትና እየጠየቅን ለማንኛውም ጥያቄ የቀረበው ምርጭ ትክክል ወይም ስህተት ስላልሆነ እርስዎ ይህንን ተገንዝበው በራስዎ ላይ ያለውን ተጨባጭ ሁኔታ ብቻ በመመለስ ቅን ትብብርዎን ይለግሱን፤ የጥናቱ ውጤት ለከተማችን ችግረኛ አረጋውያን ጥቅምና ብልፅግና እንደሚውል ተስፋችን ፅኑ ነው፡፡

ቃለ መጠይቅ የተደረገበት ቀን _____

የጠያቂው ስም _____

የሱፐርቫይዘሩ ስም _____

I. <u>የማኅበራዊና ዲሞግራፊክ መጠይቅ</u>

1. ስም (የጥናት ቁጥር) _____

2. ፆታ 1. ወንድ 2. ሴት

3. ዕድሜ (በዓመት) _____

4. ዘር
   1. አማራ
   2. ኦሮሞ
   3. ትግሬ
   4. ጉራጌ
   5. ሌላ _____

5. ሃይማኖት 1. ኦርቶዶክስ 2. ፕሮቴስታንት 3. ካቶሊክ 4. እስላም
   5. ሌላ _____

6. የትዳር ሁኔታ ከጎዳና ሥራ/ኑሮ በፊት
   1. ያላገቡ 2. ያገቡ 3. የፈቱ
   4. ባል/ሚስት የሞተባቸው 5. ተለያይተው የሚኖሩ

   6.1 የፈቱ ወይም የተለያዩ ከሆነ ምክንያቱ ምንድን ነው?

   _____

   6.2 ባለቤታቸው የሞተ ከሆነ ምክንያቱን ይግለፁ

   _____

7. በአሁኑ ጊዜ የትዳር ሁኔታ 1. ትዳር የሌላቸው 2. ባለትዳር

8. የትምህርት ደረጃ
   1. ማንበብና መፃፍ አይችሉም
   2. ማንበብና መፃፍ ይችላሉ
   3. አንደኛ ደረጃ ያጠናቀቁ
   4. ሁለተኛ ደረጃ ያጠናቀቁ
   5. ከአሥራ ሁለተኛ ክፍል በላይ
   6. ሌላ _____

9. አሁን የሚኖሩበት ሰፈር ወይም አካባቢ ስም ምን ይባላል?

   _____

10. ልጆች ወልደው ከነበረ በአሁኑ ጊዜ ስንቱ በህይወት አሉ? _____

የለም ካሉ ወደ ጥያቄ 12 ሂድ

10.1 በህይወት ያለ/ሉ ልጅ/ጆች ካልዎት ሥራ ያለው/ላት/ላቸው ወይም ራሱን/ሷን/ሳቸውን የቻለ/ች/ሉ አለ/ለች/ሉ?
1. አዎ 2. የለም

10.2 በህይወት ያሉና ራሳቸውን የቻለ/ሉ ልጅ/ጆች ካለዎት ከልጅዎ/ጆችዎ የሚያገኙት ማናቸውም ዕርዳታ አለ?
1. አዎ 2. የለም

የለም ካሉ ወደ ጥያቄ 12 ሂድ

11. መልስዎ አዎ ከሆነ ከልጆችዎ የሚያገኙት ዕርዳታ ምንድን ነው?
1. ገንዘብ 2. ምግብ 3. መጠለያ 4. ልብስ 5. የተጠቀሱት ሁሉ
6. ሌላ ካለ _____

12. ከሌሎች ቤተዘመድ የሚያገኙት ዕርዳታ አለን?
1. አዎ 2. የለም

የለም ካሉ ወደ ጥያቄ 14 ሂድ

13. መልስዎ አዎ ከሆነ በተራ ቁ. 11 ከተጠቀሱት ውስጥ የትኛውን ዕርዳታ ያገኛሉ?
_____

14. ልጆችዎ ወይም ሌላ ቤተዘመድ የማይረዳዎት ከሆነ ምክንያቱ ምንድን ነው?
_____

15. እርስዎ የሚረዱትስ ሰው አለ?
1. አዎ 2. የለም

የለም ካሉ ወደ ጥያቄ 17 ሂድ

16. ለጥያቄ 15 መልስዎ አዎ ከሆነ ስንት ሰው ያህል ይረዳሉ?
1. 1 2. 2 3. ከ2 በላይ ከሆነ ቁጥሩ ይጠቀስ _____

17. በአሁኑ ጊዜ በምን ይተዳደራሉ?
1. በጎዳና ላይ በመዘዋወር መነገድ
2. በቀን ሥራ
3. ልመና (ምፅዋት መጠበቅ)
4. ሌላ ካለ ይጥቀሱ _____

18. አዲስ አበባ የመጡት መቼ ነው? (አ/አበባ የመጡበት ዓ.ም.) _____ ዓ.ም.

19. አ/አበባ ከመምጣትዎ በፊት የት ይኖሩ ነበር? 1. ከተማ 2. ገጠር

20. አ/አበባ ሳይመጡ በምን ሥራ ይተዳደሩ ነበር?
1. በግብርና (በእርሻ) 4. በግል ሥራ
2. በውትድርና 5. በንግድ
3. በመንግስት ሥራ 6. ሌላ ካለ ይጠቀስ _____

21. ድሮ ከሚኖሩበት አካባቢ በምን ምክንያት ቀየሩ? (አ/አ በምን ምክንያት ሊመጡ ቻሉ?)
1. በጦርነት ምክንያት
2. በረሃብ ምክንያት
3. ለሕክምና
4. ቤተዘመድ ለመጠየቅ
5. የተሻለ ሥራ ፍለጋ
6. ሌላ _____

22. ድሮ ወደሚኖሩበት አካባቢ (ወደ ትውልድ ሥፍራዎ) መመለስ ይፈልጋሉን?
1. አዎ
2. የለም አልፈልግም

የለም ካሉ ወደ ጥያቄ 24 ሂድ

23. ለጥያቄ ቁ. 22 መልስዎ አዎን ከሆነ አንዳንድ ወጪዎችንና ለመጓጓዣዎ ጭምር የሚያስፈልገው ወጪ ምን ያህል ነው ብለው ያምናሉ (ይገምታሉ)?
1. 150 - 200 ብር
2. 201 - 300 ብር
3. ሌላ ከሆነ ይግለፁ _____

24. የአካል ጉዳተኛ ነዎት?
1. አዎ
2. የለም

25. አዎ ካሉ ያለብዎትን የአካል ጉዳተኛነት ይጥቀሱ? _____

II. <u>የማኅበራዊና ኢኮኖሚ መጠይቅ</u>

1. የሚተኙት የት ነው?
1. በሃይማኖት ቤቶች ውስጥ (አካባቢ)
2. ዘመድ ቤት
3. የቀበሌ ቤት (የኪራይ ቤት)
4. ማድ ቤት
5. መንገድ (በረንዳ) ላይ
6. ሌላ ካለ ይግለፁ _____

2. የሚተኙት (የሚኖሩት) መንገድ ላይ ከሆነ ዝናብ ሲዘንብ ምን ያደርጋሉ? (በምን ይከለላሉ?)
1. ላስቲክ መልበስ
2. የተገኘውን መልበስ
3. ምንም አላደርግም
4. ሌላ ካለ ይግለፁ _____

3. በአማካይ በቀን ምን ያህል ያገኛሉ?
1. ከሁለት ብር በታች
2. ከ2-3 ብር
3. ከ3 ብር በላይ

4. ከሚያገኙት ገቢ በከፊል ቆጥበው ያስቀምጣሉ?
1. አዎ
2. የለም

የለም ካሉ ወደ ጥያቄ 6 ሂድ

5. ለተራ ቁ. 4 መልስዎ አዎ ከሆነ የማጠራቀሚያ (የመቆጠቢያ) መንገድዎ (ዘዴዎ) ምንድን ነው?
   1. የባንክ ሣጥን 3. በኪሴ ውስጥ በማሳደር
   2. ዕቁብ 4. ሌላ _____

6. ከሚከተሉት ውስጥ ዕርዳታ ለግሶዎት የሚያውቅ ማን ነው?
   6.1 መንግስታዊ ያልሆነ ድርጅት 1. አዎ 2. የለም
   6.2 መንግስት 1. አዎ 2. የለም
   6.3 ሕዝብ 1. አዎ 2. የለም
   6.4 ዕርዳታ አግኝተው ከነበረ ያገኙት የዕርዳታ ዓይነት ይጥቀሱ
   _____

7. ላይ በተራ ቁ. 6 ከተጠቀሱት ለጋሾች ውስጥ የሚተማመኑበት በየትኛው ነው?
   1. መንግስታዊ ያልሆነ ድርጅት
   2. መንግስት
   3. ሕዝብ
   4. ዘመድ
   5. አይመለከተኝም

8. በአብዛኛው በቀን ስንት ጊዜ ይመገባሉ?
   1. እንደተገኘ
   2. በቀን አንድ ጊዜ
   3. በቀን ሁለት ጊዜ
   4. በቀን ሦስት ጊዜ

9. የመጠጥ ውሃ በአብዛኛው ከየት ያገኛሉ?
   1. በመለመን
   2. ከወራጅ ውሃ (ምንጭ፣ ወንዝ....) በመቅዳት
   3. በመግዛት
   4. ሌላ ካለ ይግለፁ _____

10. ለመታጠቢያ የሚሆን ውሃስ በአብዛኛው ከየት ያገኛሉ?
   1. በመለመን
   2. ከወራጅ ውሃ (ምንጭ፣ ወንዝ....)
   3. በመግዛት
   4. ሌላ ካለ ይግለፁ _____

11. አሁን ከለበሱት ሌላ ልብስ አልዎት?
   1. አዎ 2. የለም

12. ልብስዎት በየስንት ጊዜ ይታጠባል?
   1. በየሁለት ሣምንቱ
   2. በቆሸሸ ጊዜ
   3. ጭራሽ አይታጠብም
   4. ውሃ በተገኘ ጊዜ
   5. ሌላ _____

13. ገላዎት በየስንት ጊዜ ይታጠባሉ?
    1. በየሁለት ሣምንቱ
    2. በቆሸሸ ጊዜ
    3. ጭራሽ አይታጠብም
    4. ውሃ በተገኘ ጊዜ
    5. ሌላ _____

14. የት ነው የሚፀዳዱት?
    1. ሜዳ ላይ
    2. ሽንት ቤት
    3. ሌላ _____

15. እንደ ሲጋራ ማጨስ፣ መጠጥ መጠጣት (እንደጠላ፣ ጠጅ፣ ወ.ዘ.ተ.)፣ ጫት መቃም የመሳሰሉት ልምዶች አልዎት?
    1. አዎ 2. የለም

የለም ካሉ ወደ ጤና ጥያቄ ሂድ

16. ከሚከተሉት ውስጥ የትኞቹ ልምዶች አልዎት?

ዓይነት		
16.1. አልኮል (መጠጥ) መጠጣት(እንደጠላ፣ ጠጅ፣ ወ.ዘ.ተ.)	1. አዎ	2. የለም
16.2. ማጨስ	1. አዎ	2. የለም
16.3. ጫት መቃም	1. አዎ	2. የለም
16.4. ሌላ _____		

III. ጤና

1. የሚሰማዎት የጤንነት ወይስ የታማሚነት ስሜት ነው?
    1. የጤንነት 2. የታማሚነት

2. ከሚከተሉት ውስጥ የሚሰማዎት ሕመም (የጤና ችግር) የትኛው ነው?

		አዎ	የለም
2.1	የማኘክ (የጥርስ) ችግር	_____	_____
2.2	የመገጣጠሚያ ሕመም	_____	_____
2.3	የማየት ችግር	_____	_____
2.4	የመስማት ችግር	_____	_____
2.5	የሆድ ሕመም (ቁርጠጥ፣ መንፋት፣ የጨጓራ ሕመም፣ ወ.ዘ.ተ.)	_____	_____
2.6	ሳል፣ ውጋት፣ ወ.ዘ.ተ.	_____	_____
2.7	የትኩሳት በሽታ	_____	_____
2.8	የቆዳ በሽታ (እከክ፣ቁስል፣ወ.ዘ.ተ.)	_____	_____
2.9	ቁርጥማት፣ ወ.ዘ.ተ.	_____	_____

3. ሲያምዎት አብዛኛውን ጊዜ ምን ያደርጋሉ?
   1. ሐኪም ቤት እሄዳለሁ
   2. የባህል መድኃኒት እወስዳለሁ
   3. የባህል (ያበሻ) ሐኪም ጋር እሄዳለሁ
   4. ፀበል እጠጣለሁ
   5. ከመፀለይ ሌላ ምንም አላደርግም
   6. ሌላ ካለ ይግለፁ _____

4. የጎዳና ላይ ኑሮ ከጀመሩ ወዲህ እንደ ፖሊስ፣ የጎዳና ጎረምሳ፣ወ.ዘ.ተ. አንገላትተዎት ያውቃሉ?
   1. አዎ 2. የለም

የለም ካሉ ወደ ጥያቄ 6 ሂድ

5. ለጥያቄ ቁ. 4 መልስዎ አዎ ከሆነ በምን ምክንያት ነበር ያንገላትዎት?
   1. ለመዝረፍ
   2. አላውቅም
   3. ሌላ ካለ ይግለፁ _____

6. ባለፉት 3 ወራት ውስጥ የመንገላታት ችግር ደርሶብዎት ያውቃል?
   1. አዎ 2. የለም

7. በጎዳና ኑሮ እያሉ የሆነ አደጋ ደርሶብዎት ያውቃል? (የተሽከርካሪ፣ በውሻ የመነከስ፣ የመውድቅ፣ ወ.ዘ.ተ.) 1. አዎ 2. የለም

8. የክንድ ዙሪያ መጠን _____

IV. <u>በሕብረተሰቡ አለኝ የሚሉት ደረጃ (ተቀባይነት) እና የማኅበራት አባልነት</u>

1. ከሚከተሉት የማኅበር ዓይነቶች የየትኛው አባል ነዎት?

	<u>አዎ</u>	<u>የለም</u>
1.1. ዕቁብ	_____	_____
1.2. ዕድር	_____	_____
1.3. መረዳጃ ማኅበር	_____	_____
1.4. ሌላ ካለ ይጥቀሱ	_____	

2. እንደ በዕድሜ ባለፀጋነትዎ በሕብረተሰቡ ያልዎት ሚና ምንድን ነው?

_____

3. የማኅበረሰቡ አባላት (ሕብረተሰቡ) እንደ ዕድሜ ባለፀጋነትዎ ያከብርዎታልን?
   1. አዎ 2. የለም 3. በከፊል

4. ከሚከተሉት ውስጥ በአሁኑ ጊዜ ዋነኛ ችግርዎት ምንድን ነው?
   1. ምግብ 4. ጤና
   2. ልብስ 5. ጧሪ (ረዳት)
   3. መጠለያ 6. ሌላ ካለ ይግለፁ _____

5. ብቸኝነት ይሰማዎታል?
   1. አዎ 2. የለም

6. ለወደፊቱ ተስፋ አልዎት?
   1. አዎ 2. የለም

የለም ካሉ ወደ ጥያቄ 8 ሂድ

7. አዎ ካሉ ተስፋዎትን ይግለፁ _____

8. አረጋውያንን የሚጠሩ ድርጅቶች እንዳሉ ሰምተው ያቃሉ?
   1. አዎ 2. የለም

9. ለአዛውንቶች በተዘጋጀ መጠለያ ውስጥ ገብተው መጦር ይፈልጋሉን?
   1. አዎ 2. የለም

አዎ ካሉ ወደ ጥያቄ 11 ሂድ

10. የለም ካሉ ምክንያቱን ይጥቀሱ _____

11. በአረጋውያን ሚሪ ድርጅቶች ውስጥ ኖረው ያውቃሉ?
   1. አዎ 2. የለም

የለም ካሉ ተጠያቂውን ክልብ አመሰግነህ ተለያዩ

12. ለጥያቄ 11 መልስዎ አዎን ከሆነ ከድርጅቱ በምን ምክንያት ለቀቁ?

_____

ጥያቄዎቹን በመመለስ ላደረጉልን ቀና ትብብር ክልብ እናመሰግናለን!

10.6 CENSUS FORM

CENSUS FORM

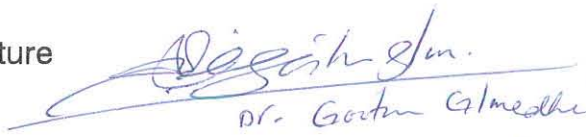
Name of the area	Occupation	Age category	# of Males	# of Females

DEPARTMENT OF COMMUNITY HEALTH, FACULTY OF MEDICINE

DECLARATION

I, the undersigned, declare that this is my work and that all sources of materials used for this thesis have been duly acknowledged.

Name Goitom Gebremedhin

Signature 

Place A.A.U., Medical faculty, dept. of comm. health

Date of submission

This thesis has been submitted for examination with my approval as University advisor,

Shabbir Ismail, MD MPH
Advisor