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The Influence of Social Marginalization on the Health and Nutritional Status of Women

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DECLARATION

I, the undersigned, declared that this is my original work, has not been presented for a degree in this or any other University, and that all sources of materials used for the thesis have been fully acknowledged.

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

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THE INFLUENCE OF SOCIAL MARGINALIZATION ON THE HEALTH AND NUTRITIONAL STATUS OF WOMEN IN ACTIONAID-ETHIOPIA KOYSHA DEVELOPMENT PROGRAMME AREA

MAREKA GENA WOREDA, SOUTHERN ETHIOPIA.

A THESIS SUBMITTED IN PARTIAL FULFILLMENT FOR THE DEGREE OF MASTERS OF PUBLIC HEALTH

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List of Acronyms and Abbreviations

AAE	ActionAid Ethiopia
ANC	Antenatal Care
BMI	Body Mass Index
CBD	Community Based Distributors
CED	Chronic Energy Deficiency
CHA	Community Health Agent
cms.	Centimetres
CPR	Contraceptive Prevalence Rate
CSA	Central Statistics Authority
DA	Development Area
EPI Info	Epidemiological Information
EPRDF	Ethiopian People Revolutionary Democratic Front
FAO	Food and Agricultural Organization
FGD	Focus group Discussion
FP	Family Planning
HIV	Human Immuno Deficiency Virus
ICPD	International Conference on Population and Development
Kgs.	Kilograms
MSF	Medicine San Frontiers
MUAC	Mid Upper Arm Circumfrance
OR	Odds Ratio
PPS	Probability Proportionate to Size
RH	Reproductive Health
SD	Standard Deviation
SES	Socio-economic Status
SNNPR	Southern Nations Nationalities Peoples Region
SPSS	Statistical Package for Social Sciences
TTBA	Trained Traditional Birth Attendants
UNFPA	United Nations
USA	United States of America
VHW	Village Health Workers
VWC	Village Water Commiittee
VWCT	Village Water Care Takers
WHO	World Health Organisation

Summary

The impact of social marginalization on the health of certain ethnic minority populations, particularly in women is a serious problem worldwide. However, its magnitude and factors are not well explored in developing countries in general and in our context in particular. Hence cross sectional, community based study with social group comparisons was conducted in Koysha Development Area of ActionAid-Ethiopia between January and December 2001. The study aimed at assessing the influence of social marginalization on the health and nutritional status of women. The study particularly focused on the health and nutritional status differences between the Manja and Malla social groups. All peasant associations within AAE-Koysha development program area were represented in the survey. The two study populations were stratified based on their social strata and selecting villages using probability proportionate to size technique enabled us to identify the required numbers of respondents. Data were collected using structured and pre-tested questionnaire, focus group discussions, in depth interviews and anthropomery. Data entry and analysis were performed using Epi Info and SPSS statistical software.

The utilization of services for reproductive health problems by minorities (Manja social group) was low compared to the dominant Malla social group. There was a statistically significant difference between the two social groups in the use of antenatal care [OR = 2.93(1.39,6.25)], median number of antenatal care visit ($p<0.05$), and birth attended by trained traditional birth attendants or health professionals [OR = 4.61(1.75,13.17)]. The study also revealed that Mnaja women were at a reproductive health and nutrition disadvantage than their counterparts including, history of spontaneous abortions [OR = 1.71(1.08,2.72)], too many pregnancies [OR = 1.97(1.33,2.91)], grand multiparty [OR = 1.63(1.09,2.42)], and nutritional status as measured by MUAC <22.5cm [OR=3.34(2.05,5.39)].

From the study it is concluded that Manja mothers are discriminated in many aspects of social, economic and political processes. Manja mothers are at a greater risk of reproductive health and malnutrition (with regard to undernutrition) compared to the majority Malla social group. Scaling up of interventions to improve the livelihood of socially marginalised groups (Manja) in general and women in particular by all pro poor partners, including AAE is an area that needs to be emphasized in the future.

1. Introduction

It is generally recognized that health and well being are a function of multiple interrelated factors, including biologic factors, social factors, life style behaviors, and use of health services. Even though its contribution is marginal, health care (medical care) is one input among many, all of which contribute to an output refereed to as “good health”. Modeling “good health” as an output of a combination of such inputs is what we call the concept of “health production function”. A production function describes the relationship between combinations of inputs and the resulting output. With regard to health, in addition to medical services, other factors that will be included in the production function include: lifestyle variables, such as income, occupation, cigarette smoking, and alcohol consumption; and environmental variables, such as the quality of housing and urbanization. The term social environment, as used in this paper, refers to socioeconomic factors (e.g. employment, education), physical surroundings (e.g. neighborhood), social relations (e.g. within a community), and power arrangements (e.g. political empowerment, individual and community control and influence). Factors such as these, individually and in combination with more personal factors, are potential determinants of health status[1].

Social inequality is recognized to be the most devastating event that affects the stability of human life. This condition coupled with poverty remains a chronic problem and still a threat to human race particularly those in the unfortunate end of the world. Studies show that social inequality (discrimination, stratification etc) is a common phenomenon in most societies [2,3]. Based on the form of social stratification takes, societies are portrayed as class systems, caste systems, caste like system etc.

In most parts of southwestern Ethiopia farmers are thought of as primary social groups while administrators, artisans, and slaves are seen as secondary [4]. In the past this stratification and hierarchy had serious implications of which access to economic resources (particularly land) and political offices were the most important ones.

The population in the study area shares some of the characteristics of these common cultural features of southwestern Ethiopia in the sense that first, the society is differentiated into various strata such as administrators/governors, farmers, artisans and foragers; second, each of these strata is associated with specific occupations; and third, according to the

traditional law in the society, people from different social background did not have equal access to land, political offices and social prestige.

The study area (the Koysha development area of ActionAid Ethiopia) is comprised of a society known as Dawro that is characterized by rigid hierarchic social organization or social stratification. According to this stratification, traditionally there are five ranked social groups, which form one type of social structure of the Dawro society. These are, ranked in descending order according to their level of social status: the Malla (the farming majority), the Wogache (blacksmiths), the Dencha (tanners), the Manna (potters) and the Manja. Social strata are created due to occupational and life style (food behavior) differences. According to this social hierarchy, the social groups that are not part of Malla are discriminated in about every aspect of human interaction[5]. The condition of marginalization is much worse for the two strata of the population such as Manja and Manna. A recent unpublished study conducted by ActionAid-Ethiopia revealed that the situation prevailing in the area appears to be much worse than the sorts found in conventional definition of marginalization[5]. For instance, Flower defines marginalaization as "the exclusion of certain populations from the process of decision making that affects their well being and prospects." [6] The situation prevailing in the study area is much more than just being excluded from decision making. It involves being looked down upon as a person of inferior category. In other words, it has many interlocking aspects.

The social inequity among the five ranked social groups and marginalization of the Manja is manifested in their every day interactions and also in their access to economic resources and political power. The condition of power arrangement, economic status and social interactions pertaining to these groups of social strata is more or less explored[5,7]. Information related to nutrition and health status and access and utilization of social services, including health care is sorely lacking.

The lack of scientific research on the social environment could hamper policy makers and practitioners understanding of some of the most critical public health problems facing the community. The major public health problems of today, including women's health and nutrition, have personal as well as social environmental etiologic components. Prevention and treatment of these problems require research and interventions theoretically grounded in an understanding of the complexity of life in the community, which is shaped by an individual's social group status as well as other factors.

The development area program has undertaken several development activities to decrease mortality, morbidity, and fertility rates. Reproductive health care and nutrition are among the priority areas of intervention in the health sector. Despite the presence of these

activities, reproductive health and nutritional status indicators specific for marginalized communities are not readily available. With a lack of such indicators, it becomes virtually impossible to plan, monitor, and evaluate programs such as those implemented by ActionAid to alleviate social injustice and inequity. With such information readily available, current programs can be strengthened to address possible deficiencies and new programs can be undertaken with potentially greater impact.

For effective program development, monitoring, and evaluation, the World Health Organization recommends use of either sentinel surveillance systems or rapid surveys. The more feasible option in developing countries is the survey approach. Fairly accurate estimates of health and nutritional status indicators can be obtained from a sample survey[8,9]. Using this method, we intend to assess the impact of social marginalization on reproductive health and nutritional status of women in Koysha Development Area of Action Aid Ethiopia. The study particularly focuses on Manja by comparing their status with the socially privileged group called Malla.

The reasons for this paper focusing on women's reproductive health and nutrition are many, but to mention some: The health risks of poverty are far greater for female than for males. Indeed, women lag behind men virtually on every indicator of social and economic status. Because of their social and occupational status, poverty among females is more intractable than among males, and their health even more vulnerable to adverse changes in social and environmental conditions. Women also face unique reproductive health threats. High rates of preventable illness and death from complications in pregnancy and child birth, from unsafe abortions, and from sexually transmitted diseases and reproductive cancers are common place whenever females are poor and lack access to comprehensive reproductive health care.

Based on review of literatures [5,7,10,11], the term *social marginalization* is used in this paper to mean the process by which a member, or members, of a group is, or are, treated differently (especially unfairly) because of his/her/their membership of that group. A term *social discrimination* is used interchangeably with social marginalization mainly because there is substantial overlap between the two concepts.

Background of the Study Area

The Koysha development area (DA) of AAE is located in North Omo Zone of Southern Nations, Nationalities, and Peoples Regional State. It lies in Mareka Woreda, about 500 km from Addis Ababa. The DA comprises a total population of about 26,000. Previously the DA was composed of 10 PAs (consisting of 40 villages each) that were recently restructured into 5 PAs and Waka Town[12].

The majority of the people (95%) are from the Malla ethnic group. The remaining are members of the Manja (3%) and Manna ethnicities, socially distinct and outcast groups. There are also a few members of the Amhara and Gurage ethnic groups residing in the area[12].

Population density of the DA is estimated to be 106-people/sq. Km[12]. Total fertility rate of the DA was estimated at 10.7 children per woman in the childbearing age of 15-49 years[13]. Infant mortality rate is estimated at 46.1/1000 live births. Adult literacy rate and the primary school enrollment rates were 14% each[13]. The total population of women including Waka town is about 11,532[14]. Despite their numbers and their productive and reproductive roles women have low social status in the community. Their empowerment is unattained due to lack of access to education, poor health services, early marriage, cultural prejudice, lack of income, credit and other services. In addition to this women are also marginalized nutritionally in that they most of the time eat last and less nutritious food (leftovers) [14].

In the DA there are one health center and one health station run by the government as well as 15 community-owned actively functioning health posts. This makes the geographic health service coverage of the area about 100%[15]. There is also one hospital under construction in the main town.

The health posts are *tukuls* designed to give treatment of minor ailments and preventive care, including distribution of contraceptives, immunization for children and mothers, ANC (by mobile team of health professionals from the health center) and health education. Deliveries are not conducted at the health posts. Among the 15 health posts 2 of them are constructed at the Manja villages and are staffed by CHAs form their social group.

The majority of the households were identified as resource poor on the basis of Participatory Rural Appraisal (PRA) exercise done in 1992. An estimated 3474 households (65% of the total) were, through wealth ranking techniques, classified as poor[16].

Three agro-ecological zones of Ethiopia are represented in the DA: lowland (kola) (24%), mid land (woina dega) (56%), and high land (dega) (20%). Very steep hills, deep valleys and mountains characterize the topography. Higher slopes are primarily for grazing. Middle slopes are mainly for farming, grazing and settlement with high population pressure whereas flat lands are for agriculture with low population density[17].

The livelihood of over 90% of the rural community in Koysha is predominantly reliant on subsistent, mixed, and rain fed agriculture that involves traditional crops and livestock population. The latter is a prominent source of income and a measure of wealth ranking. The average land holding per household ranges from 1.83 ha in the mid land to 1.69 in the low land[14]. The land holding is also further affected by social differences where greater shares go to the majority ethnic group (the Malla), while the minorities earn their livelihood mainly from their respective occupations. Agriculture extension services are inadequate to improve the problem of poor crop and livestock productivity.

In the DA vegetation cover is generally good but soil erosion is a potential problem. The rainfall amount and distribution in the area provides moderate to marginal production potentials for both crop and livestock. Enset is the predominant food security crop in the DA, which produces a year round food supply. The *enset* based farming system is the most popular in southern region in general and koysha DA in particular. In koysha *enset* with cabbage, sorghum, *godere* and maize are the most common food types. Vegetable consumption except cabbage is practiced very little and production is not common. Even though other crops like maize, sorghum, wheat, barley, *teff* and other pulse crops perform well in the area, *enset* is the most important staple food of the community[14].

Until very recently, road communication was generally poor. The people suffered from remoteness and isolation from major markets and service delivery institutions.

Full program implementation of the AAE-Koysha Development Program started in 1994 with the mission to work with the poor and marginalized people to eradicate poverty by overcoming their injustice and inequity that causes it. The main strategic focus of AAE is right based approach, and to this end the organization tries to address the problem of social inequity particularly arising from gender discrimination and social stratification by targeting the possible root causes in a concerted approach. Since the inception of the program at Koysha DA, the organization has undertaken integrated development activities in food security, education, health and water. The health and water sector has been active for the past five years using community-based health care as its main strategy. The sector primarily focuses on preventive activities with due emphasis on curative and referral services. Community based skilled facilitators such as CHAs, TTBAs, CBDs, VHWs,

VWCs, and VWCTs, all of whom are actively functioning, are the key actors fostering health intervention at the grassroots level. Maternal and child health care, health education, community training, family planning, safe water supply, sanitation, malaria control and rendering curative health care at various levels of health institutions are the main activities of the health and water sector[15].

2. Literature review

2.1 Social Marginalization, Social Environment and Health

Social inequalities (or inequities) in health refer to health disparities, within and between countries, that are judged to be unfair, unjust, and unnecessary and that systematically burden populations rendered vulnerability by underlying social structures and political, economic, and legal institutions [18]. Pursuing social equity in health entails reducing excess burden of ill health among groups most harmed by social inequities in health, thereby minimizing social inequalities in health and improving average levels of health overall [18].

Biological expressions of social inequality refers to how people literally embody and biologically express experiences of economic and social inequality, from in utero to death, thereby producing social inequalities in health across a wide spectrum of outcome[19,20]. This construct of "biological expressions of social inequality" has been evident in epidemiological thought-albeit not always explicitly named as such –since the disciplines emerge in the early 19th century as exemplified by early path breaking research on socioeconomic gradients in-and effects of poverty on-mortality, morbidity, and height [21,22].

Examples include biological expressions of poverty and of diverse types of discrimination, for example, based on race/ethnicity, gender, sexuality, social class, disability, or age. Whether these biological expressions of social inequality are interpreted as expressions of innate versus imposed, or individual versus societal, characteristics in part is shaped by the very social inequalities patterning population health [20]. The construct of "biological expressions of social inequality" thus stands in contrast with biologically deterministic formulations that cast biological process and traits tautologically invoked to define membership in subordinate versus dominant groups (for example, skin color or biological sex) as explanations for social inequalities in health.

People and institutions who discriminate adversely accordingly restrict, by judgment and action, the lives of those against whom they discriminate [20] . At issue are practices of dominant groups-both institutionally and interpersonally-to maintain privileges they accrue through subordinating the groups they oppress (intentionally and also by maintaining the status quo) and the ideologies they use to justify these practices, with these ideologies revolving around notions of innate superiority and inferiority, difference, or deviance [20]. Predominant types of adverse discrimination are based on race/ethnicity, gender, sexuality, disability, age, nationality, and religion, and, although not always recognized as such, social class. By contrast, positive discrimination (for example, affirmative action) seeks to rectify inequalities created by adverse discrimination.

Social epidemiological analysis of health consequences of discrimination require conceptualizing and operationalising diverse expressions of exposure, susceptibility, and resistance to discrimination recognizing that individuals and social groups may be subjected simultaneously to multiple and interacting types of discrimination [20].

Krieger rectify Race/ethnicity as a social, not biological, category, referring to social groups, often sharing cultural heritage and ancestry, that are forged by oppressive systems of race relations, justified by ideology, in which one group benefits from dominating other groups, and defines itself and others through this domination and the possession of selective and arbitrary physical characteristics (for example, skin color) [20,23]. She further noted that, ethnicity, a construct originally intended to discriminate between "innately" different groups allegedly belonging to the same overall "race" is now held by some to refer to groups allegedly distinguishable on the basis of "culture", in practice, however, "ethnicity" cannot meaningfully be disentangled from "race" in societies with inequitable race relations, hence the construct "race/ethnicity" [20]. These concepts are adopted in this paper to discuss issues related to ethnicity and race.

There is a tacit assumption inherent in most health research that ethnicity/race measures some combination of genetic endowment, culture, and socioeconomic status [1]. Two trends in the use and interpretation of data on race/ethnicity deserve note. One trend is the use of race/ethnicity as a biologic marker. Although a number of biologic explanations for racial/ethnic differences in health have been advanced, there is little scientific evidence to support these theories [24,25]. As a consequence, racial classifications are less a marker of biologic inheritance and more a measure of the social and historical experience of being a member of one racial group or another. The other practice is the use of race/ethnicity is unquestionably correlated with social status. The two, however, are not synonymous. Nonetheless, minority groups status is often equated with lower SES despite variation in social strata among minority population group[1].

Research on the relations among racial/ethnic/social status, the social environment, and health is sorely lacking. The challenge for any investigator is to be knowledgeable of the multiple factors (e.g. biologic, social and lifestyle) that influence a health outcome under study. Depending on the purpose of the study, one can make an assessment of which factors are essential and possible to measure. Perceptions that variables measuring ethnicity and the social environment are “soft” and lack essential meaning has affected the development of measurement tools that would permit more rigorous study of these variables [1].

Efforts to develop measurement tools for social conditions should be culturally appropriate and validated using various racial/ethnic population groups. It is conceivable that measurement indicators for social conditions are not comparable across racial and ethnic groups. Additionally, norms, customs, and expectations embedded within a community’s social life may be as important in defining an individual’s social strata as are societal opportunities. Normative patterns of behavior (e.g. religious values, help seeking behavior, alcohol and other drug abuse) reflect and are created by an individual’s social environment [1].

There is considerable evidence that U.S. racial/ethnic minority populations experience social environmental conditions that place them at a heightened risk for ill health and injury[26]. A somewhat crudely constructed analogy in the article stated- "when America get a cold, black Americans catch pneumonia". Further, it noted that although this phrase generally is used in reference to African Americans, it applies also to other population groups that systematically have faced barriers to full inclusion in society.

Different studies in Sweden showed that psychosocial and economic living conditions in non-migrating populations are associated with health. Socially integrated people live longer and healthier lives than socially isolated people. There is also evidence that not only absolute poverty, but also relative deprivation and the degree of relative material inequality causes poor health [27-33].

A Swedish study demonstrated that ethnicity was an independent risk indicator for self reported illness, with an importance equal to traditional risk factors such as social class and lifestyle [34]. Furthermore, other studies in Sweden have demonstrated ethnic difference in self reported health that can partially be explained by social and economic conditions [35].

There is consistent evidence throughout the world that people at a socioeconomic disadvantage suffer a heavier burden of illness and a higher mortality rate than their better off counterparts [36,37.] These socioeconomic inequalities in health are a major challenge for health policy, not only because most of these inequalities can be considered unfair, but also because a reduction in the burden of health problems in disadvantages groups offers great potential for improving the average health status of the population as a whole [38,39].

So far, life history contributions of the study of inequalities in health show that health is a life long development for the individual. The implication of these findings is that chances of reduction of inequalities for any given generation will be greater, the earlier that attempts at reduction are begun. It is unlikely that health inequalities can be easily or rapidly reduced, increasingly so as the individual ages, since individuals carry an accumulation of health potential which is hard to change[40].

2.2 Malnutrition

Malnutrition has been broadly defined as a pathological state resulting from a relative or absolute deficiency or excess of one or more essential nutrients, this state being manifests itself by physical, psychological and biochemical abnormalities [41,42]

Malnutrition is a problem of great prevalence worldwide. According to the Food and Agriculture Organization, 800 million people are undernourished[43]. Malnutrition is particularly devastating among women and children, as they compose as much as 70 percent of the undernourished. The problem is further compounded by the fact that poverty is expected to increase, particularly in Sub-Saharan Africa[43].

A study carried out in ten states of India has shown that half of the adult female population in rural areas is malnourished. Other studies in India have shown chronic energy deficiency in nearly 70% of women. In Asia, similar levels are seen in Bangladesh and Pakistan. There are 30-40% malnourished women in Vietnam. In Africa, the figure varies between 20% and 40% depending upon whether there has been a catastrophe, war, famine or drought[44]

A community based, cross sectional survey undertaken on the anthropometric status of Oromo non pregnant women of child bearing age in the Kersa district of Southwestern Ethiopia revealed that the mean (SD) weight was 46.9(5.3)kg, with 75% weighing less than 50 kg. Women's height averaged 155.5cm with nearly 20% under 150cm. The mean (SD) BMI was 19.4 (1.9) kg/m^2. And 35% of the women had BMI lower than $18.5kg/m^2$. [45]

Women's low status relative to men and their biological role in reproduction often puts them at higher risk than men for many nutritional and health problems [46] For many females in the world, gender discrimination begins at birth with an overwhelming preference for male offspring. Unfortunately, discrimination often continues throughout their lives, resulting in lower education and employment opportunities and higher workloads and possibly in reduced access to family food and community health care. [47] Conservative estimates

suggest that among the 1.1 billion women 15 years and older living in developing countries in 1985, over 500 million were stunted as a result of childhood protein energy malnutrition [48.]

A nutritional problem of women is generally the consequence of earlier problems and the cause of later problems. Therefore it can rarely be assigned to a single stage of the life cycle, particularly as the consequences can be felt by later generations. A cycle of sub-optimal growth is perpetuated across generations. Many social factors contribute to the less than optimal growth from conception to puberty. Indirect factors such as poverty, low social status, and lack of health care play a role. More directly, factors such as infrequent feeding (small stomach capacity), low energy density of food, high exposure to infection, reduced immunocopmetence, and anorexia due to illness, both during pregnancy and early childhood, contribute to growth retardation. It is also important to recognize that behaviors are passed on intergenerationally, and therefore, behavioral patterns that contribute to growth retardation also will be passed on [46].

There is evidence that maternal size constrains fetal growth during the final stage of pregnancy. Therefore small maternal size resulting from stunting during early childhood and/or from very young maternal age will constrain fetal growth beyond what it would have been had optimal childhood growth and/or pregnancy timing for the woman occurred. Compromised growth at early stages (gestation to three years) is particularly difficult to make up for later stages, partially because growth is occurring at such an accelerated pace during this time period. In addition, due to overwhelming environmental factor discussed previously, it is unlikely that an initially poor start will be entirely overcome, resulting in a small adult stature. The females will continue in the cycle by producing offspring with a greater probability of having intrauterine growth retardation, and so the process cycles on[46].

The consequences of adult malnutrition extend beyond those of maternal risk of underweight babies. The ability to sustain work and their sheer physical capacity to cope are markedly dependent upon their body mass. Illness and handicap, in terms of sickness, days off work, days sick in bed and death rates, all increase with increasing malnutrition[49]

It is widely accepted that for practical purposes anthropometry is the most useful tool for assessing the nutritional status. However, a deficit in growth is not necessarily the most sensitive indicator of inadequate

nutrition; for example a marginally inadequate energy intake may cause a reduction in physical activity before there is any impairment of growth. It is also recognized that the extent to which genetic factors, both within and between populations, may affect growth can't be ignored.[50]

The average stature of adults varies markedly from country to country. Environmental conditions and childhood nutrition interact with the genetic potential of the individual to determine increase in height and eventual attained stature. Differences in adult height therefore reflect long-term differences in the socioeconomic conditions of different groups in most developed and developing countries. However, as socioeconomic differences within a society attenuate, so the differences in adult height are reduced [51]. In the more developed countries, genetic potential is the primary determinant of height, since environmental constraints, such as acute and chronic disease, malnutrition and socioeconomic deprivation, are minimized during the years of linear growth. In less developed countries, by contrast, much of environmental influences on linear growth, especially those that affect growth in the first years of life [52].

Use of maternal height as an indicator of health and nutritional status must therefore take account of the environmental context in which growth occurred. For example, a short woman in a developed country may be at risk of obstetrics complications: her relatively small pelvis may be a constraint on vaginal delivery of normally grown fetus. A short woman in a less developed country, on the other hand, may be at risk of bearing a poorly grown fetus if a poor childhood environment has persisted into her adult years, influencing her current pregnancy. The environmental conditions that lead to poor maternal linear growth may also result in poor growth and sub-optimal development of the anatomical and physiological systems that sustain optimal fetal growth or maximize maternal health [52].

Once adult stature has been achieved, biological inputs on height are limited to disease status, e.g. Cushings disease or ankylosing spondilitis, or to environmental processes that accentuate bone loss or osteoporosis.

In contrast to the effect on height, changes in nutritional intake and health can have a major input on body weight. Seasonal changes in food availability and in physical activity produce fluctuations in both average weight and the population distribution of weights, and any illness that induces anorexia, elevated metabolic rates, or preferential catabolic loss of lean tissues will also produce a fall in body weight. This makes the monitoring of adult weight or some alternative index of body mass a useful tool for assessing the impact of illness, food shortage, or unusual physical demands. Other factors, such as cigarette smoking and drug and alcohol dependence are also usually associated with lower body weight [51].

2.3 Reproductive Health

In 1994, the international conference on population and development (ICPD) signaled a major breakthrough in the way governments and health professionals think about the sexual and reproductive health of women and men. Whereas previous development efforts gave priority to the achievement of demographic goals and programmatic targets, the ICPD program of action for the first time placed people's needs at the center of development efforts. It defined reproductive health as: "A state of complete physical, mental and social well being not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and process." Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when, and how often to do so. Implicit in this last condition are the rights of men and women to be informed and have access to safe, effective, affordable acceptable methods of family planning of their choice and the women to go safely through pregnancy and child birth and provide couples with the best chance of having a healthy infant. In line with this, reproductive health care is defined as the constellation of methods, techniques, and services that contribute to reproductive health and well being through preventing and solving reproductive health problems. It also includes sexual health; the purpose of which is the enhancement of life and personal relations, and not merely counseling and care related to reproduction and sexually transmitted diseases[53].

The reproductive health concept recognizes the degree to which individual needs arise not only as consequence of purely biological circumstances, but also of events that might be more culturally, socially, or ethically defined. Thus, the scope of reproductive health includes concerns over women's status and the guarantee of human rights. Finally, the concept calls for the reproductive health needs of all individuals, including those of men and adolescents to be addressed.

The essential messages of the programme of action of ICPD are that population issues and development issues are one and the same. The message is about poverty reduction, women’s empowerment, economic growth,

and changing life styles. It is about inequities in the sharing of power and the distribution of resources. It is also addressing these inequities and correcting the social and economic injustice responsible for poor health and suffering. In terms of reproductive health and reproductive rights, the message is that they are key factors in development.

Among women of reproductive age in developing countries, the burden of reproductive ill health is far greater than the burden from tuberculosis, respiratory infections, motor vehicle injuries, homicide and violence, or from war. Among these women reproductive ill health accounts for 36% of the total disease burden, compared with 12% for men[54].

The private nature of sexual and reproductive health does not diminish its significance. In all societies and cultures, sexuality and sexual behavior have profound consequences on individuals, families and communities. Estimates of reproductive ill health worldwide indicate a high prevalence of conditions that are preventable, causing unnecessary suffering leading all too frequently to death or life long disability. For example, 120 million couples worldwide would like to limit their family size but are not currently using a method of contraception. Each year, nearly 600,000 women die from conditions related to pregnancy and childbirth, and 40-50 million pregnancies are terminated by abortion [54].

Significant progress has been made over the past few decades in providing health care to populations in developing countries. But this progress has been uneven; women, in particular, have not had an equal share. The availability of care in pregnancy and child birth provides an example: Of the 130 million deliveries that take place each year in the developing world, only 50% are attended by trained personnel. Women's inadequate access to health care is also reflected in mortality statistics: While infant mortality rates have declined significantly over the past few decades, maternal mortality levels remain stubbornly high, despite the fact that "maternal health" has received the most attention within the complex of women's health needs[55].

The elements required for women to have effective access to care are myriad and complex. While ensuring the availability of facilities and personnel within reasonable distance is indeed a primary requirement, effective access to care can only be ensured if that care is considered affordable, appropriate and acceptable by the women it aims to serve. The factors that restrict women's access to care are complex, many of which relate to demand rather than supply. Such factors as distance from the site of care, lack of availability of equipment and supplies at the site, and lack of money to cover the costs of transportation and treatment are some of them. In many cases, however, the key constraints to access were identified as being of a sociocultural or informational nature, including lack of awareness of health issues, the low social and legal status assigned to women in most

cultures, lack of self esteem and sense of control, religious restrictions, and perceived inappropriateness of care [55].

Fertility levels affect the health of both children and women. High parity is correlated with impaired child health and increased prenatal, neonatal, infant, and maternal mortality. In Ethiopia, fertility rates overall are high. The reported crude birth rate was 43.73/1000 populations, and the total fertility rate for rural areas was 6.97 children per woman. Over 68% of women have at least six children [56]. In Koysha area, total fertility rate was estimated to be 10.8 children per woman aged 15-49 years. Growth rate has been estimated at 4.02% per year. Problems of high fertility are compounded by a low contraceptive prevalence rate of 5% [13].

A recent national study showed that nearly 73 percent of women received no antenatal care for births in preceding five years [57]. It also indicated that overall 33% of women visited ANC at least once during their last pregnancy. In rural areas, ANC utilization was estimated at 29%[57].

In rural areas of Ethiopia births typically occur at home with the assistance of untrained relatives or neighbors. The national health and nutrition survey conducted in 1998 showed that 9% of deliveries nationwide were assisted by a medical professional, community health agent or trained traditional birth attendant [56]. Almost all women in rural areas (96%) delivered their last child at home.

The situation of health and nutritional status of the majority of women in countries like Ethiopia can be summarized with the following statements:

She is thirty-five years old. When she was born her woman was malnourished and overworked. She was very small and low weight at birth. She grew slowly. During childhood she had little good food to eat-even less than her brothers. She could not go to school as her brothers did, but remained at home with her woman to help with the housework and child minding.

By adolescence, her pelvic bones were misshapen and she was shorter than she should have been. As was the tradition, she was married and had her first baby when she was only 14, even before she has fully developed. It was a difficult birth, and she survived it and many more, though once she had so much bleeding that everyone was afraid she would never recover. She's been anemic ever since, a condition aggravated by the hookworm she carries. During another pregnancy she suffered a malarial fever and miscarried.

Like her woman before her, she never went to a health center when she was pregnant. It was too far away and too foreign. She used the same traditional midwife who delivered her and who helped her sisters. The midwife had no training in cleanliness, and she suffered serous infections after birth.

She had little time between pregnancies to regain her strength, and little enough food at any time. During later pregnancies her fatigue was draining her.

She had so much work in the house and outside she could not bear the thought of another pregnancy. When it came she went to a woman in the village for something to end it. She was very sick, but it worked.

Today she still feels dull pain and soreness in her belly, which flare up from time to time. Also after so many pregnancies she probably has a partially prolapsed uterus, which often causes her discomfort, especially after a hard day's work carrying bricks.

> *She is a woman who cares desperately about her family and wants to limit her pregnancies. She heard about family planning from her sisters, but was always too afraid of her husband, who would never allow it...(UNFPA 1989; Hammer 1981)* [58,59].

3. Objectives

General:

To assess the effect of social marginalization on health and nutritional status of women at Koysha development area of ActionAid Ethiopia.

Specific:

* To assess and compare the level of utilization of family planning, antenatal care and delivery services in marginalized Manja communities and the majority Malla communities.
* To assess and compare the prevalence of self rated illness in the two social groups.
* To assess and compare the nutritional status of women in the two social groups.

4. Methodology

- **Study Design**

This is a community based cross sectional survey with social group comparison.

- **Study Subjects and Methods**

All PAs (there are a total of 10 PAs) within the ActionAid Ethiopia-Koysha DA were represented in the survey. The 10 PAs are comprised of a total of 40 villages, each forming an entity of a cluster. A map of the DA was collected from the Koysha office and adjacently lying villages forming a cluster of commune were

clearly marked. The population in the Malla and Manja social groups in the DA were considered as source population. The lists of all households in the DA in which individuals in the two social strata are living were used as a sampling frame. Non pregnant, married women were the study units.

Stratified cluster sampling method was administered to select the study population. To this end, the source populations were stratified according to their social group (Malla and Mnja). Out of the total of 35 Malla villages 25 clusters of villages were identified using probability proportionate to size technique[*]. The required number of households from the majority groups was identified after identifying a central place in the village using a modified EPI cluster sampling procedure [64]. To get all the required number of respondents in the minority population all households were included in the study. In a polygamous family each woman constituted a separate household and was interviewed independently.

Using the general formula to determine the proportion between two population (see below), a sample size of 675 was determined with 95% confidence, 80% power, by assuming P_2 to be 50% (prevalence of illness in unexposed group) and the difference between P_1 and P_2 to lie between 10-15% and taking the ratio between unexposed to exposed to be 4:1. In this study, the Manjas (the minority) are taken as exposed group (social discrimination was taken as an exposure variable) whereas the Mallas (the majority) are considered unexposed group. To this end, 135 subjects (n_1) from Manja ethnic group and 540 from the majority ethnic group (n_2) were represented in the study.

$$n_1 = \frac{\left[Z_{\alpha/2} \sqrt{(1+1/r)P(1-P)} + Z\beta \sqrt{P_1(1-P_1)+P_2(1-P_2)/r} \right]^2}{(P_1-P_2)^2}$$

- **Variables**
  - **Dependent Variables**
    - Level of utilization of reproductive health services (family planning, ANC, delivery services)
    - Nutritional status of women
    - Self reported health (long term illness, acute illness, ill health)
    - Prevalence of spontaneous abortion
  - **Independent Variables**

[*] In one village you find only one of the social groups. The two social groups do not form their commune in one village together.

- Socioeconomic conditions (income, occupation, and education). For economic index construction see annex 3.
- Demographic variables (age, sex, births, marital status, religion, ethnic group, etc.)
- Reproductive characteristics of women(age at first marriage, age at first delivery, outcome of last pregnancy, gravidity, parity)
- Psychosocial factors (lifestyle behavior, social relations, manifestations of discriminations)

Quantitative data was collected using structured questionnaire (see annex 1). The questionnaire was developed in English and then translated into Amharic and local language (Dawrigna). In depth interview and focus group guiding semi structured questions were designed to get information related to psychosocial factors including, life style behavior, social relations and manifestations of discriminations, the impact of ActionAid intervention, and economic conditions. Married women and men from the Manja and Malla social strata were eligible for focus group discussions (see annex 2). A total of eight focus group discussions were conducted with eligible groups in their respective localities. An assistant who knows the local language and I conducted all FGDS using tape recorder. I undertook in depth interviews with two resource persons who are knowledgeable about the social conditions of the study area.

Height and weight measurements were accomplished using standard adult measuring scales. Weight was measured to the nearest 0.1kg. All subjects wore light clothing and removed their shoes before weight measurements were taken. Height was measured to the nearest 0.1cm. For each height reading, the heel, buttocks and shoulder blades were in contact with the vertical surface of the anthropometer. MUAC, on the left arm, taken with MSF insertion tape at mid point between the acromial and olecranon process without compressing the skin of the arm which was hanging loosely. Women with illness which makes attendance difficult were excluded from the study.

Community health agents and health assistants undertook measurement taking and interviewing tasks. Nurses and other qualified health professionals working in the area took part in the supervision of data collectors. A three days training on interviewing and measurement taking was provided for data collectors and supervisors by the investigator. Pretest was undertaken in an adjacent area with the same sociodemographic characteristics. A total of 12 data collectors, 12 assistants (high school graduates), and 3 technical supervisors were involved in the data collection.

Verbal consent was obtained from the respondents. Those who were unwilling for cultural or other reasons were given the right not to participate.

Reliability and validity of the study was maximized through careful design of questionnaire, by training, on the spot evaluation, calibration of measuring devices and correction of measurement errors, and editing of data with computer.

Data entry, cleaning and analysis were performed using Epi Info version 6 and SPSS version 10 statistical software.

Frequencies, rates and ratios were calculated for all variables. Bivariate and multivariate analysis, logistic regression, was performed, and then OR values and CI of 95% level were taken to determine significance of associations. After checking for normality of distribution using Kolmogrove-Smirnov test, T- test was undertaken for selected continuous variables to compare means between the two social groups. Since the distributions of ANC visits were skewed, non-parametric Kruskal-Wallis test was performed to compare median scores. Pearson's correlation test was carried out to see the relations between BMI and height.

Analysis of FGD results were made after validation using in depth interview results. Details of findings were written for each group and individual discussions. Then issues were arranged by place and topic. Finally the findings were put in a summery and maximum care was taken to reflect the actual response: agreements and disagreements were shown, range of ideas were considered instead of frequencies, important words were put as expressed by respondents, key concepts that were voiced were indicated, and all the issues of concern were tapped.

The following operational definitions were used in this paper:

Acute illness (period prevalence):

All individuals who had been ill and had sought health care during the previous one month, were counted as ill.

Antenatal care coverage:

Percentage of women attended prenatal care, at least once during pregnancy, by skilled health personnel (excluding trained or untrained traditional birth attendants) for reasons relating to pregnancy.

BMI (Body Mass Index):

Is calculated as weight in kilograms divided by the square of the height in meters (Kg/m^2).

CPR (Contraceptive Prevalence Rate):

Percentage of women who are using (or whose partner is using) a modern contraceptive method at the time of the interview.

Chronic Energy Deficiency (CED):

Degrees of underweight categorized on the basis of BMI.

Economic index:

It was constructed using items that are used by the community as measure of wealth ranking, including housing type, ox ownership, land holding, tax paying capacity, and radio ownership. For details of determining the index refer to annex 3.

Ill health:

Those who describe their general health status as poor or anywhere between satisfactory and poor were considered as having ill health.

Long term illness:

Those who describe that they were suffering from any long standing illness with moderate to very high severity were considered to have long term illness.

Malnutrition:

Refers to protein energy deficiency.

Thinness:

Condition of low BMI (BMI<18.5).

Under-nutrition:

Refers to MUAC < 22.5cm.

5. Results

5.1. Results of the Quantitative Part of the Study

5.1.1 General Descriptions

5.1.1.1 Socio-demographic Characteristics

Anticipated number of target respondents as per the sample size calculation were involved in the interview. All Manja households found in the development area were visited and all married women who were not pregnant were included in the study to get the required number of respondents. A single woman who was married (could be widowed or divorced at the time of data collection) and not pregnant was included from each household in the study.

To this effect, 140 and 547 married women from Manja and Malla social strata respectively were involved in the study.

The mean age of women included in the study was 27.9(SD=5.92) and 29.65(SD=9.03) from Malla and Manja social groups respectively (Table 1). The percentage of female-headed households was 4.3% for Manja and 3.8% for Malla. The bivariate analysis revealed that there is a statistically significant difference between the two social groups in polygamous marriage: The husbands of 56.4% of Manja and 28.3% of Malla women were engaged in polygamous marriage. It is interesting to note that more than 70% of Manja follow traditional belief, whereas more than 97.4% of Malla are Christians (Orthodox or Protestant Christian).

The bivariate analysis also showed a statistically significant difference between the two social groups in education of women and their husbands, household economic status, household food crops production, and safe water supply. More than 97% of Manja women were illiterate as compared to 74.8% of Malla women. By the same token, more than 84% of the husbands of Manja women were illiterate as opposed to 38% for Malla's. Approximately 63% of Manja households were poor whereas the proportion of poor Malla households were only 46.3%. The proportion of Manja households with year round food crop shortage accounted for 17.9% as opposed to 3.8% of Malla. Safe drinking water was accessed by 26.1% and 7.9% of Malla and Manja households respectively. No significant difference was observed in latrine use between the two social groups- the result showed that more than 30% of households in both social groups have access to latrine. It is worth mentioning that 8.9% and 6.4% of Malla women and their husbands respectively were government employee as opposed to 1.4% and 0.7% of Mnaja women and their husbands respectively. More than 98% of Manja and 83.3% of Malla women were housewives. The majority of husbands of both social groups were farmers (99.3% for Manja, 90.7% for Malla).

Table 1. Sociodemographic characteristics of women, husbands and households. Koysha DA of ActionAid Ethiopia, Southern Ethiopia. 2001.

Variable	Ethnic group		OR(95%CI)
	Manja (N= 140)	Malla (N=547)	

	#/%	#/%	
Age of woman			
12-17	10(7.1)	2(0.4)	27.82(5.54,188.69)
18-29	62(44.3)	345(63.0)	1
30-44	58(41.5)	196(35.9)	1.65(1.08,2.5)
45+	10(7.1)	4(0.7)	13.91(3.85,54.58)
Mean ±S.D	29.65±9.03	27.92±5.92	
Household head			
Woman	6(4.3)	21(3.8)	1.12(0.4,3.01)
Man	134(95.7)	526(96.2)	1
Polygamy			
Yes	65(56.4)	155(28.3)	2.19(1.47,3.26)
No	75(53.6)	392(71.7)	1
Religion of woman			
Christian	41(29.3)	533(97.4)	1
Traditional belief	99(70.7)	14(2.6)	91.93(46.40,185.11)
Education of woman			
Illiterate	136(97.1)	409(74.8)	11.47(4.0,37.11)
Literate	4(2.9)	138(25.2)	1
Husband's education			
Illiterate	118(84.3)	208(38.0)	8.74(5.25,14.67)
Literate	22(15.7)	339(62.0)	1
Household economic index			
Good	50(35.7)	292(53.3)	1
Poor	88(62.9)	253(46..3)	2.03(1.36,3.04)
No response	2(1.4)	2(0.4)	
Woman's Perceived economic status of household	11(7.9)	88(16.1)	1
Good	45(32.1)	240(43.9)	1.50(0.71,3.23)
Medium	84(60.0)	219(40.0)	3.07(1.50,6.41)
Poor			
Extent of household food crop production	10(7.1)	71(13.0)	1
Surplus for sale	48(34.3)	219(40.1)	1.56(0.71,3.47)
Just sufficient	43(30.7)	150(27.4)	2.04(0.92,4.60)
Seasonal shortage	25(17.9)	21(3.8)	8.45((3.24,22.57)
Year round shortage	14(10.0)	86(15.7)	43.61(16.96,116.08)
No food production			
Latrine use	43(30.7)	178(32.5)	1
Yes	97(69.3)	369(67.5)	1.09(0.72,1.66)
No			
Safe water supply	11(7.9)	143(26.1)	1
Yes	129(92.1)	404((73.9)	4.15(2.11,8.37)8
No			

5.1.1.2 Health and Nutritional Status

In the bivariate analysis there was no statistically significant difference in health of women, including prevalence of acute illness [OR = 1.64(0.99,2.71)], long-standing illnesses [OR = 1.29(0.78,2.12)] and perceived

health status [OR = 1.49(0.96,2.3)] (Table 2). Of all cases of acute illness who seek health care, only 25.6% and 24.4% visited modern health institutions from Manja and Malla social groups respectively. The other 59.0% from Malla and 60.5% from Manja were treated by the local witchcraft/wizards. Lack of money was the main reason (89.7% for Manja and 74.1% for Malla) for not visiting health institute for acute illness.

In the DA, the prevalence of moderate to severe malnutrition as measured by MUAC (under 22.5cm) [64] was 24.7%. The level in Manja women, 43.6%, is more than two times of the level seen in Malla, that is 19.7% in Malla, and this difference is statistically significant in bivariate analysis [OR = 3.12(2.06,4.72) (table 2). The mean MUAC in Malla was 240.54 (SD=21.54), where as in Manja it was 217.63 (SD=31.14) and this difference was statistically significant with t=8.15 and p value of less than 0.001.

When nutritional status was measured using BMI, the level of women malnutrition (CED) in the study area was 14.9% with no statistically significant difference between the two social groups [OR=0.91(0.52,1.59)]. The mean BMI in Malla was 20.38 (SD=2.08), whereas in Manja it was 20.13 (SD=1.95) and this difference was not statistically significant with t= 1.29 and p value of 0.20.

Marked difference was noticed in the height of women between the two social groups. More than 12% of Manja and 4.4% of Malla height was below 1.45 meter, and this difference was statistically significant [OR = 3.01(1.49,6.04)]. When we take the cut off point at 1.50 meter, it was found that the height of 37.9% of Manja and 16% of Malla were below this cut off point, and this difference was statistically significant [OR = 3.18(2.06,4.89)]. The mean height of Manja women was 151.77 $\pm$ 6.44, whereas for Malla women it was 155 $\pm$ 6.32, and this difference was statistically significant (t=6.21, p<0.001). The mean weight of Manja women was 46.41$\pm$5.53, whereas for Malla it was 49.33+5.98, and this difference was statistically significant (t=5.23, p<0.001)

Table 2. Women's nutritional status and health related variables. Koysha DA of ActionAid Ethiopia, Southern Ethiopia. 2001.

Variable	Ethnic group		OR(95%CI) or t(95%CI of the mean difference)
	Manja (N= 140)	Malla (N=547)	

	#/%	#%	
Self reported health			
Bad	40(28.6)	116(21.2)	1.49(0.96,2.3)
Good	100(71.4)	431(78.8)	1
Acute illness			
Present	29(20.7)	75(23.7)	1.64(0.99,2.71)
Absent	111(79.3)	472(86.3)	1
Long term illness			
Present	28(20.0)	88(16.1)	1.29(0.78,2.12)
Absent	112(80.0)	459(83.9)	1
MUAC			
Normal	79(56.4)	436(79.7)	1
Under-nutrition	61(43.6)	108(19.8)	3.12(2.06,4.72)
Not measured	0(0.0)	3(0.5)	
Mean MUAC±S.D	217.63±31.42	240.54±21.54	8.15 (17.37,28.46)*
BMI			
Normal	120(85.7)	461(84.3)	1
Underweight	20(14.3)	84(15.4)	0.91(0.52,1.59)
Mean BMI±S.D	20.13±1.95	20.38±2.08	t= 1.29, p=0.20
Height			
≥ 1.45m	123(87.9)	523(95.6)	1
< 1.45m	17(12.1)	24(4.4)	3.01(1.49,6.04)
Height			
≥ 1.50m	87(62.1)	459(84.0)	1
< 1.50m	53(37.9)	88(16.0)	3.18(2.06,4.89)
Mean Height ±S.D	151.77± 6.64	155.53 ± 6.32	6.21(2.57,4.94)*
Mean Weight	46.41±5.54	49.33±5.98	5.23(1.82,4.02)*

*** p<0.001**

5.1.1.3 Reproductive Characteristics

Table 3 illustrates that the mean age at first marriage was 16.63(SD=2.28) and 14.65(SD=1.72) for Malla and Manja respectively and this difference was statistically significant (t=11.31, p<0.001). The bivariate analysis also demonstrates that there is a statistical significant difference in early marriage where 93.6% of Manja's marry at the age of 10-17 as opposed to the 70.0% for Malla. The mean age at first delivery was found

to be 18.65(SD=2.42) and 17.64(SD=1.86) for Malla and Mnaja respectively, and this difference was statistically significant (t=5.26, p<0.001). There is statistically significant difference in use of prenatal care [OR = 2.93(1.39,6.25)], birth attended by health professionals [OR = 4.61(1.75,13.17)], history of spontaneous abortions [OR = 1.84(1.21,2.80)], gravidity [OR = 1.97(1.33,2.91)] and parity [OR = 1.63(1.09,2.42)] in the two social strata (Table 3). To this end, Manja women are at a greater reproductive health risk than their counter parts.

Information on ANC utilization was obtained from women who were pregnant in the last twelve months before the survey. The result showed 55% ANC coverage in the study area, but there is still marked difference in coverage between our two main interest groups in the study area (33.3% for Manja and 59.4% for Malla). This difference was statistically significant [OR = 2.93(1.39,6.25)]. The median ANC visits in the study area was 1.5 for Manja and 3.0 for Malla, and this difference was statistically significant (K-W H= 5.47, p=0.02).

In the contrary, no statistically significant difference was observed in the place of delivery of last child [OR = 0.81(0.28,2.57)], outcome of pregnancy [OR = 1.72(0.23,9.91)] and current contraceptive use [OR = 0.73(0.43,1.25). It is worth mentioning that 96.2% and 96.9% of deliveries of Malla's and Manja's respectively has occurred at home. As to the outcome of last pregnancy, 95.2% of Malla's and 97.2 of Manja's was found to be live birth. The contraceptive prevalence rate in the DA was 14.0% with some difference in the two social groups (17.1% for Manja and 13.2% for Malla), however this difference was not statistically significant.

Table 3. Selected Reproductive characteristics of women. Koysha DA of ActionAid Ethiopia, Southern Ethiopia. 2001.

Variable	Ethnic group		OR(95%CI) or t(95%CI for the mean difference)
	Manja (N= 140)	Malla (N=547)	

	#/%	#/%	
Age of woman at first marriage			
10-17	131(93.6)	383(70.0)	7.01 (3.24,15.83)
18-28	8(5.7)	164(30.0)	1
Don't recall	1(0.7)	0(0.0)	
Mean ± S.D	14.65 ±1.72	16.63± 2.28	11.31(1.64,2.33)**
Age of woman at first delivery			
14-17	52(37.1)	193(3.8)	1.19(0.79,1.79)
18-30	80(57.2)	354(96.2)	1
Nulliparous	8(5.7)	0(0.0)	
Mean ± S.D	17.64 ±1.86	18.65± 2.42	5.26(0.63,1.39)**
Use of prenatal care *			
Yes	14(33.3)	126(59.4)	1
No	28(66.7)	86(40.6)	2.93(1.39,6.25)
Median ANC visit	1.5	3.0	K-W H=5.47, P=0.02
Place of delivery of last child			
Home	131(99.2)	530(96.9)	4.20(0.58,85.49)
Health Inst.	1(0.8)	17(3.1)	1
Birth attended by health profes. and TTBA of last child			
Yes	5(3.8)	84((15.4)	1
No	127(96.2)	463(84.6)	4.61(1.75,13.17)
Outcome of pregnancy *			
Live birth	40(95.2)	206(97.2)	1
Still birth & Abortion	2(4.8)	6(2.8)	1.72(0.23,9.91)
History of abortion			
Yes	49(35.0)	124(22.7)	1.84(1.21,2.80)
No	91(65.0)	423(77.3)	1
Current contraceptive use			
Yes	24(17.1)	72(13.2)	1
No	116(82.9)	475(86.8)	0.73(0.43.1.25)
Gravidity			
0-4	67(47.9)	352(64.4)	1
4+	73(52.1)	195(35.6)	1.97(1.33,2.91)
Mean ± S.D	4.99± 3.64	3.94± 2.35	3.26(0.42,1.70)****
Parity			
0-4	79(56.4)	371(67.8)	1
4+	61(43.6)	176(32.2)	1.63(1.09,2.42)
Mean ±S.D	4.34 ±3.26	3.65 ±2.19	2.37(0.12,1.27)***

*** Women who were pregnant in the last 12 months (n=254) ** P<0.001 *** P<0.05 **** P=0.001**

5.1.2 Determinants of Health Status of Women

Ethnicity showed no association with occurrence of acute illness, chronic illness and ill health both in bivariate and multivariate analysis after controlling socio-demographic, reproductive health and nutritional variables.

5.1.3 Determinants of ANC and Delivery Service Utilization

Ethnicity was found to be the only determinant of antenatal care utilization (table 7). Being Malla social group showed a significant association with antenatal care utilization [OR=2.92(1.25,6.85)], when controlled for age, age at first marriage, gravidity, parity, polygamy, education of woman and husband, and household economy. It was worth noting that the exclusion of education of women and their husbands from the multivariate model increased the odds ratio to 4.04(1.82,8.95).

In the bivariate analysis it was found that the utilization of ANC is associated with woman's and their husbands educational status. Women who are literate were more likely to receive antenatal care than illiterate women [OR = 2.38(1.28,4.48)]. Similarly, wives of literate husband were likely to receive antenatal care than their counter parts [OR = 2.00(1.17,3.42)]. Differences in antenatal care between high and low economic index group and between age groups of women are negligible.

The same is true also for assisted delivery by trained TBAs or health professionals, where being a Malla social group showed a strong association with assisted delivery by health professionals or trained TBAs after controlling for age, age at first marriage, gravidity, parity, polygamy, education of woman and husband, and household economy (table 8). To this end, ethnicity is found out to be the only predictor for assisted delivery by trained TBAs or health professionals (In the context of very high home delivery rate in both groups).

5.1.4 Determinants of Nutritional Status

Ethnicity was detected to be a predictor for undernutrition (table 9). Being a Manja social group showed a strong association with undernutrition, when controlled for socio demographic, health and reproductive variables [OR = 3.32(2.05,5.39)]. There was no significant association between the other independent variables and under-nutrition neither in

the multivariate nor in the bi-variate analysis, except for gravidity which showed significant association in the bi-variate analysis.

No single determinant was detected to be a predictor for chronic energy deficiency state in women in the DA. The bivariate analysis showed gravidity and parity as having strong association with low BMI (table 10).

5.1.5 Determinants of Spontaneous Abortion

Chronic illness, age above 20 years and being a Manja social group were significant risk indicators for spontaneous abortion (table 11). But, in the bi-variate analysis all the factors considered in the analysis have shown significant association with spontaneous abortion except low economic index and height.

Table 4. Relationship between use of prenatal care (n=254) and selected variables. Koysha DA of ActionAid Ethiopia, Southern Ethiopia. 2001.

Variable	Use of ANC		Crude OR (95% CI)	Adjusted OR (95% CI)
	Yes #(%)	N0 #(%)		

Ethnicity				
Malla	126(59.4)	86(40.6)	1	1
Manja	14(33.3)	28(66.7)	2.93(1.39,6.25)	2.92(1.25,6.85)
Age of woman				
12-19	6(60.0)	4(40.0)	1	1
20-34	118(55.9)	93(44.1)	1.18(0.28,5.16)	3.49(0.63,19.44)
35+	16(48.5)	17(51.5)	1.59(0.31,0.46)	1.60(0.66,3.85)
Age of woman at first marriage				
10-17	105(55.0)	86(45.0)	0.56(0.33,0.98)	0.86(0.46,1.60)
18-28	35(55.6)	25(71.4)	1	1
Gravidity				
0-4	90(54.2)	76(45.8)	1	1
>4	50(56.8)	38(43.2)	0.90(0.52,1.57)	0.55(0.12,2.63)
Parity				
0-4	95(54.6)	79(45.4)	1	1
>4	45(56.3)	35(43.7)	0.94(0.53,1.65)	1.12(0.23,5.76)
Polygamous marriage				
No	102(56.4)	79(43.6)	1	1
Yes	38(52.1)	35(47.9)	1.19(0.67,2.13)	0.84(0.45,1.57)
Education of woman				
Literate	49(70.0)	21((30.0)	1	1
Illiterate	91(49.5)	93(50.5)	2.38(1.28,4.48)	1.80(0.94,3.43)
Husband's education				
Literate	90(62.5)	54(37.5)	1	1
Illiterate	50(45.5)	60(54.5)	2.00(1.17,3.42)	1.43(0.78,2.61)
Household economic index				
High	65(53.7)	56(46.3)	1	1
Low	73(56.2)	57(43.8)	0.91(0.53,1.54)	0.92(0.53,1.62)

Table 5. Relationship between birth attended by health professionals or TTBAs (n=679) and selected variables. Koysha DA of ActionAid Ethiopia, Southern Ethiopia. 2001.

Variable	**Assisted delivery by health prof. & TTBAs**		**Crude OR (95% CI)**	**Adjusted OR (95% CI)**
	Yes #(%)	**N0 #(%)**		

Ethnicity				
Malla	84(15.4)	463(84.6)	1	1
Manja	5(3.8)	127(96.2)	4.61(1.75,13.17)	3.56(1.33,9.53)
Age of woman				
12-19	4(14.8)	23(85.2)	1	1
20-34	70(13.6)	446(86.4)	1.11(0.31,3.52)	1.13(0.29,4.39)
35+	15(11.0)	121(89.0)	1.40(0.36,5.10)	0.85(0.41,1.76)
Age of woman at first marriage				
10-17	68(13.4)	439(86.6)	0.90(0.51,1.56)	0.73(0.43,1.25)
18-28	21(12.2)	151(87.8)	1	1
Gravidity				
0-4	60(14.5)	354(85.5)	1	1
>4	29(10.9)	236(89.1)	1.38(0.84,2.28)	0.93(0.33,2.64)
Parity				
0-4	64(14.4)	380(85.6)	1	1
>4	25(10.6)	210(89.4)	1.41(0.84,2.39)	1.50(0.49,4.64)
Polygamous marriage				
No	67(14.5)	394(85.5)	1	1
Yes	22(10.1)	196(89.9)	1.51(0.88,2.61)	1.37(0.80,2.34)
Education of woman				
Literate	24(17.0)	117(83.0)	1	1
Illiterate	65(12.1)	473(87.9)	1.49(0.87,2.56)	1.01(0.58,1.74)
Husband's education				
Literate	61(17.0)	298(83.0)	1	1
Illiterate	28(8.8)	289(91.2)	2.11(1.28,3.50)	1.55(0.92,2.60)
Household economic index				
High	37(11.1)	297(88.9)	1	1
Low	52(15.2)	289(84.8)	0.69(0.43,1.11)	1.42(0.88,2.28)

Table 6. Relationship between Undernutrition (n=169) and selected variables. Koysha DA of ActionAid Ethiopia, Southern Ethiopia. 2001.

Variable	**MUAC < 22.5cm**		**Crude OR (95% CI)**	**Adjusted OR (95% CI)**
	Yes #(%)	**N0 #(%)**		

Ethnicity				
Malla	108(19.9)	436(80.1)	1	1
Manja	61(43.6)	79(56.4)	3.12(2.06,4.72)	3.34(2.05,5.39)
Age of woman				
12-19	9(31.0)	20(69.0)	1	1
20-34	123(23.7)	396(76.3)	0.69(0.29,1.68)	1.29(0.45,3.65)
35+	37(27.2)	99(72.8)	0.83(0.32,2.18)	1.06(0.63,1.81)
Age of woman at first marriage				
10-17	132(25.8)	379(74.2)	1.32(0.85,2.04)	0.98(0.63,1.52)
18-28	36(20.9)	136(79.1)	1	1
Gravidity				
0-4	92(22.0)	326(78.0)	1	1
>4	77(28.9)	189(71.1)	1.44(1.00,2.08)	1.57(0.71,3.44)
Parity				
0-4	103(22.9)	346(77.1)	1	1
>4	66(28.1)	169(71.9)	1.31(0.90,1.91)	0.84(0.37,1.94)
Polygamous marriage				
No	115(24.8)	349(75.2)	1	1
Yes	54(24.5)	166(75.5)	0.99(0.67,1.46)	0.79(0.52,1.18)
Education of woman				
Literate	26(18.4)	115(81.6)	1	1
Illiterate	143(26.3)	400(73.7)	1.58(0.97,2.59)	1.21(0.73,2.01)
Husband's education				
Literate	79(22.0)	280(78.0)	1	1
Illiterate	90(27.7)	235(72.3)	1.36(0.94,1.95)	0.82(0.54,1.25)
Household economic index				
High	76(22.4)	264(77.6)	1	1
Low	93(27.4)	247(72.6)	1.31(0.91,1.88)	1.15(0.79,1.68)
Acute illness				
No	142(24.4)	439(75.6)	1	1
Yes	27(26.2)	76(73.8)	1.10(0.66,1.82)	0.84(0.49,1.43)
Chronic illness				
No	146(25.6)	424(74.4)	1	1
Yes	23(20.2)	91(79.8)	0.73(0.43,1.23)	1.72(0.98,3.02)

Table 7. Relationship between Low BMI (n=104) and selected variables. Koysha DA of ActionAid Ethiopia, Southern Ethiopia. 2001.

Variable	**BMI < 18.5**		**Crude OR (95% CI)**	**Adjusted OR (95% CI)**
	Yes #(%)	**N0 #(%)**		

Ethnicity				
Malla	84(15.4)	461(84.6)	1	1
Manja	20(14.3)	120(85.7)	0.91(0.52,1.59)	1.42(0.76,2.65)
Age of woman				
12-19	4(13.8)	25(86.2)	1	1
20-34	67(12.9)	453(87.1)	0.92(0.29,3.24)	0.75(0.19,2.98)
35+	33(24.3)	103(75.7)	2.00(0.60,7.35)	0.69(0.39,1.22)
Age of woman at first marriage				
10-17	78(15.2)	434(84.8)	1.06(0.63,1.77)	0.94(0.56,1.56)
18-28	25(14.5)	147(85.5)	1	1
Gravidity				
0-4	47(11.2)	372(88.8)	1	1
>4	57(21.4)	209(78.6)	2.16(1.39,3.36)	0.80(0.29,2.26)
Parity				
0-4	51(11.3)	399(88.7)	1	1
>4	53(22.6)	182(77.4)	2.28(1.46,3.55)	0.64(0.22,1.86)
Polygamous marriage				
No	65((14.0)	400(86.0)	1	1
Yes	39(17.7)	181(82.3)	1.33(0.84,2.09)	0.79(0.50,1.25)
Education of woman				
Literate	21(14.8)	121(85.2)	1	1
Illiterate	83(15.3)	460(84.7)	1.04(0.60,1.81)	1.07(0.60,1.89)
Husband's education				
Literate	51(14.2)	309(85.8)	1	1
Illiterate	53(16.3)	272(83.7)	1.18(0.76,1.83)	0.93(0.57,1.50)
Household economic index				
High	50(14.7)	290(85.3)	1	1
Low	53(15.5)	288(84.5)	1.07(0.69,1.66)	0.90(0.57,1.40)
Acute illness				
No	86(14.8)	496(85.2)	1	1
Yes	18(17.5)	85(82.5)	1.22(0.67,2.20)	1.07(0.58,1.99)
Chronic illness				
No	83(14.6)	487(85.4)	1	1
Yes	21(18.3)	94(81.7)	1.31(0.75,2.28)	1.05(0.58,1.90)

Table 8. Relationship between history of induced abortion (n=173) and selected variables. Koysha DA of ActionAid Ethiopia, Southern Ethiopia. 2001.

Variable	**History of Abortion**		**Crude OR (95% CI)**	**Adjusted OR (95% CI)**
	Yes #(%)	**N0 #(%)**		

Ethnicity				
Manja	49(35.0)	91(65.0)	1	1
Malla	124(22.7)	423(77.3)	1.84(1.21,2.80)	1.71(1.08,2.72)
Age of woman				
12-19	4(13.8)	25(86.2)	1	1
20-34	116(22.2)	406(77.8)	1.79(0.58,6.18)	3.70(1.16,11.80)
35+	53(39.0)	83(61.0)	3.99(1.22,14.39)	1.76(1.15,2.70)
Education of woman				
Illiterate	148(27.2)	397(72.8)	1	1
Literate	25(17.6)	117(82.4)	1.74(1.06,2.88)	1.38(0.83,2.29)
Husband's education				
Illiterate	94(28.8)	232(71.2)	1	1
Literate	79(21.9)	282(78.1)	1.45(1.01,2.07)	1.05(0.70,1.57)
Household economic index				
Low	81(23.8)	260(76.2)	1	1
High	92(26.9)	250(73.1)	0.85(0.59,1.21)	0.82(0.57,.18)
Chronic illness				
Yes	45(38.8)	71(61.2)	1	1
No	128(22.4)	443(77.6)	2.19(1.41,3.42)	1.87(1.20,2.92)
Height				
< 1.45m	14(34.1)	27(65.9)	1	1
$\geq$ 1.45m	159(24.6)	487(75.4)	1.59(0.77,3.24)	1.53(0.75,3.11)

5.2 Focus Group Discussions and In depth interviews Results

5.2.1 Social Relations and Manifestations of Discrimination

The Malla represent a stratum of the farming majority composed of indeterminate number of clans which are themselves ranked as higher or lower depending on the origin myth and associated deeds. Only in

contrast to the Mnaja and artisans that this group is treated as one group. In its broader reference the Malla form the most prestigious and dominant stratum. The term Malla is almost synonymous with the term Dawro itself and it still implies that the social group called Malla are privileged "Dawro citizens" as opposed to the other social groups such as the Manja and the artisans who hold a very low position. In the past, they were property owners and holders of political titles whereas the artisans and the Manja were not entitled to these rights of citizenship.

The Manja in Dawro are descendants of former hunters and wood workers. They are ranked lowest in the local hierarchy. Their current livelihoods include, farming, firewood and charcoal selling, and a bit of hunting also. Women in Manja are responsible for arduous works like fire wood collection and selling. Every day they have to travel a long distance in a hilly difficult terrain carrying a huge load of firewood to sell it in Waka town. The reason for ranking them low has to do primarily with their dietary behavior (they eat any meat including the meat of wild animals and meat from dead animals without being slaughtered). Perhaps the other reason is they are associated with the forest where dangerous wild spirits live. But, some Manja argue on this point and in a discussion with a Manja female group one middle aged woman said that, "The reason that Malla are superior over Manja is because we are born poor and it is by luck the Malla are born Malla and rich and superior." The other group member also noted that, "The main reason for the social status difference is poverty; we are poor because we are extravagant, our males spend what they get unwisely by drinking alcohol. We have to avoid this and work hard to be equal with the Malla."

With regard to social interaction the discussions revealed that people from the dominant Malla stratum, have the upper hand in terms of economic, social, and political benefits. It was also noted that the people at the lowest hierarchy, the Manja, also have their own mechanisms to exploit opportunities to manipulate their position for survival. There is strong internal solidarity within the Manja social group. They help each other in times of trouble and they give emotional support for the needy relatives or neighbors.

It was noted that the different social groups reside at different villages, by forming their own commune and exercising their own traditions, norms and beliefs independently. But there is a day today interaction manifested in personal and structural (institutionalized) frameworks among these groups for different reasons, including economic and social.

The Manja are not allowed to inter to Malla houses, they can not shake hands with the Malla, they have to show extreme respect wherever they meet, they can not eat from the same plate with the Malla and so on.

The Malla consider the Manja as “ritually unclean” and “polluting” mainly because of their food habit. The Malla strongly condemned their feeding habit and it is clearly spelt out that there could not be any room for healthy interaction between the two social groups unless there is a change in food habit by Manja communities. The Malla tried to change this habit by converting the Manjas to be Orthodox or Protestant Christian followers but most of the time they revert back to their usual feeding habit.

The Manja are not allowed to enter the house of the Malla except during funerals and wedding celebrations to play musical instruments. Even in such cases they sit on and eat from ensete leaves. Any utensil, which was used by the Mnaja, had to be immediately broken or thrown since the Malla should use nothing touched by the Manja. The Malla also attend the funeral ceremony of Manja but they do not eat whatever food may be served during the occasion.

The Manja are major suppliers of handles of most agricultural tools such as ploughs, axes, and the like. To this end, there is a strong mutual economic bond between the two social groups.

There are different informal groups, including “idir” and “ikub and formal groups that are used by the different social groups either together or independently. The informal institutions are usually confined within a specific social strata whereas the formal group like the “kebele” and “woreda” administration, school committee and the like are shared by the different social strata.

In the study area “idir” is the most powerful local institution. The two social groups have their own separate “idir” and this situation demonstrated the fact that the two groups lack an important forum of social interaction which reinforces the long existing boundary between them.

In the formal institutions both social groups participate but their level of participation differs. The Manja are not entitled to get position in the group hierarchy, if they get they usually assume the lowest position and above all they wouldn’t have a say in decision-making.

The participation of women is low in every group activity. Particularly in the formal institution their participation is almost nil. There is a long-standing tradition that assumes women are not capable of undertaking any leadership roles. The women groups also attest that they are not capable of involving in such kind of activities because they are not educated.

In all the discussions it was observed that there was no discrimination in access or use of social services like health and education in the development area. However, it was strongly spelt out during the discussion that Manjas are not at ease to get services in the local health institutions where most of the health professionals are from the Malla social group. As a mechanism to solve this problem AAE constructed two health posts and trained two CHAs from the Mnaja social group to give services at their vicinities. With regard to children's education, Mala are not happy to learn together with Manja. They usually inflict verbal and physical harassment to stop the Manja children from coming to school. The Manja complained that the Malla children frequently harass their children. Government and ActionAid are trying to stop this by applying penalty and giving advice to the Malla.

5.2.2 The Impact of Religion, Intervention by Government and ActionAid in the Social Interactions

Social structural and cultural changes alter people's living conditions and their ways of life. These changes are supposed to influence the health status and its social patterning in the population.

In the study area the number of people following Protestant Christianity is increasing. The followers of traditional religion (either pagan or followers of wizards) and Orthodox Church are being converted to protestant Christians. Though not as pronounced as it is with the followers of traditional religion and Orthodox church, the protestant also do not approve of the Manja's feeding habit. Apparently, the prejudices appear to be less strong among the protestant Christians.

The achievement made by ActionAid could be summarized by a case study of a Manja informant from one of the group discussions: "The presence of ActionAid has contributed a lot in the livelihood of Manja. For example, I was very poor, even though I have land I was not able to use it because I have no oxen and plow. I borrowed money from ActionAid and now I had two oxen. I grow coffee and trees in my back yard, I will sell the harvest so that I

can pay my debts. I and My children go to school equally with Malla and we have equal access to health services too."

In matters related to food habits, which is the most important reason for distancing Manja, the change after ActionAid intervention is negligible. "We Manjas do not accept the notion that we are inferior to Malla. It is our right to eat whatever food we like to. We know that in other countries people eat horses, dogs and the like and hence what is wrong with us eating whatever food we prefer to eat?" Said a Mnaja in one of the group discussions.

From the discussions it was understood that at the time of data collection there was scarcity of meat in the locality and this has greatly affected the Manja ethnic group because it is their most favorite food. The long Ethiopian Orthodox Church fasting season, the increasing restrictions laid by the local government on hunting of wild animals, and the effect of deforestation and dry season on the forest density were some of the explanations given for scarcity of meat in the area.

The Manja discussed that they encourage their children to go to school, especially because they believe that education could bring change in the attitude and practice of the future generation.

6. Discussion

The health care that a woman receives during pregnancy and at the time of delivery is important for the survival and well being of both the woman and the child. Generally speaking, the antenatal care coverage of the study area (55.1%) is by far better than the national average of 26.7% and also greatly exceeds the rural national coverage of 21.6%. The mobile ANC program, which is initiated by ActionAid Ethiopia, is thought to be the main reason for this increased achievement. Despite this fact, there is marked difference between the two social groups in utilization of prenatal care and this difference was statistically significant even after controlling for possible cofounders in a logistic regression model.

Though it was not elicited in the logistic regression analysis, the high level of illiteracy of women and the husbands in the Manja ethnic group as compared to their counterparts, could be a possible explanation for the difference in ANC utilization. The recent national demographic and health survey (DHS 2000) revealed that women with a secondary education or higher are more likely to receive antenatal care (72%) than less educated women (45%) and women with no education (21%) are [61]. In the SNNPR community and family survey, the relative importance of literacy was explored, and the result showed that among all rural women, literate women were more likely (33.5%) than illiterate women (22.9%) to get antenatal care[65]. In other similar studies, higher levels of maternal education have also been positively associated with protective health behaviors, including early and timely use of prenatal care and in infant health [66]. Hemce, this is a clear indication that social marginalization has an effect on education of women which in turn resulted in low ANC utilization. Furthermore, the fear and uneasiness to visit services rendered by health professionals that are part of the Malla social group might be the other reason for this low ANC coverage for Manja ethnic group.

Antenatal care is more beneficial in preventing adverse pregnancy outcomes when it is sought early in the pregnancy and continued throughout pregnancy. It is generally recommended that the first antenatal visit should occur within the first three months of the pregnancy and continue on a monthly basis through the 28th week of pregnancy and fortnightly up to the 36th week (or until birth). If the first antenatal visit is made at the third month of pregnancy and as regularly as recommended thereafter, there will be a total of at least 12 to 13 antenatal visits. The median number for ANC visit in the study area (3.0) was about four times less than the recommended number of 12 or 13 visits, and it was even less for Manja (1.5) which was about nine times less. The national demographic and health survey showed that the median number of ANC visits in the country was 2.5, and is about five times less than the recommended figure [61].

An important component of efforts to reduce the health risks of women and children is to increase the attendance of deliveries by health professionals or trained birth attendants. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may cause death or serious illness to either the woman or the baby or both. As described in the result part, more than 97% of births of the youngest child in the study area occurred at home irrespective of ethnic background, which is quite the same as the national rural average of 97.9%. It is somewhat ironic that while the ANC coverage is relatively higher than the other rural settings in the country, the home delivery is still very high. This might be explained by low economic status of the people in the study area. With regard to Manja, their low status in the society might have also created fear and uneasiness to visit health institutions.

The situation of assistance at delivery in the study area (13.1%) appears relatively better than the rural average in the country, which is estimated at 5.8%. However, the difference between the two social groups is quite remarkable and even the coverage for Manja

(3.8%) is below the national rural average. The fear and feeling of uneasiness to visit the health center and health station due to their low social status in the society on the one hand, and the presence of only one TTBA[15] from their ethnic group could be among the possible explanations given for this situation. The high level of illiteracy could also contribute for this difference, though in the logistic regression model it showed a marginal statistical significance. The recent national survey illustrated that births to women with primary education were almost four times more likely to receive delivery assistance from a health professionals than births to women with no education [61].

It might raise an interest to see that the modern contraceptive utilization is greater in Manja than in Malla, though this difference was not statistically significant. The report at the AAE Koysha office showed that there are two health posts constructed amidst Manja villages[15]. These health posts are run by Manja CHAs and meant to give service to Manja social group. This approach was designed as a response to social discrimination and the resulting fear and uneasiness by Manja social groups to get services from health posts staffed by the Malla social group. In the health posts basic curative and preventive activities are undertaken, including treatment of minor ailments and distribution of contraceptives like pills and condom. In addition there are two Manja CBDs who give service on voluntary basis.

In the study area, the overall prevalence of moderate to severe undernutrition among women as measured by MUAC (<22.5cm) is 24.7%, which is a bit higher than 23.6% SNNPR rural average [65], and strikingly much higher than the 13.3% Sub-Saharan average [64]. However, when we look at the situation of under-nutrition separately for the two social groups the picture is quite alarming. The prevalence of moderate to severe undernutrition for Manja was 43.6%, whereas for Malla it was 19.7%. The multivariate analysis (logistic regression) showed that ethnicity was the only independent risk indicator for under-nutrition.

When we look at the situation of nutritional status of women in the area using BMI, the result showed that the prevalence of chronic energy deficiency (thinness) was 15.2% which is by far below the national rural prevalence of 31.8%. However, no ethnic difference was detected even after controlling for possible cofounders.

Here, we can see that there is a clear difference in the nutritional status determined by the BMI compared to that using MUAC. This difference might arise from the fact that the applications and reflections/interpretations of the two measurements are different.

Variability in adult weight is recognized as being linked with variation in adult height, which in turn reflects a number of environmental factors active throughout much of childhood. The term "underweight" in adult assessment has therefore been applied to individuals of low body weight relative to height; it is generally expressed in terms of body mass index [50]. Degrees of underweight have recently been defined as "chronic energy deficiency" (CED) due to the fact that BMI measures long-standing nutritional situation in an individual or a community [67,68]. Measuring MUAC has the advantage that it reflects the mass of just three tissues-bone, muscle, and fat-the last two of which are particularly sensitive to body weight gain or loss. Changes in arm circumference thus reflects more accurately the increase or decrease of tissue "reserves" of energy and protein than a body weight per se [50].

The other angle that we have to look at when we investigate the difference in these two measurements is taking into consideration of the effect of body shape and stature in the interpretation of anthropometry. A study indicated that there is a linear, but only very moderate, correlation between BMI and height; correlation coefficients range between –0.01 and 0.23 in different ethnic and sex groups [69]. BMI may therefore be considered as essentially independent of height. However, for values of height below 1.50m or above 1.90m, a strong non-linearity between BMI and height has been reported [69].

In this study, the correlation between BMI and height was tested and the result showed weak relationship (-0.12 for Malla and –0.13 for Manja). To this effect, we can say there is little or no relationship between height and BMI. Hence, the effect of the significant number of women with height less than 1.50m in the Mnaja social group on BMI was non existent.

As per the WHO expert committee classification [50] , we can categorize the women's nutritional status in the DA as medium prevalence (poor situation) in terms of chronic energy deficiency state. The Manjas unrestricted food habit and the extra source of income from their charcoal, firewood and furniture sells could have contributed to their present nutritional status with regard to thinness (CED) despite strong manifestations of marginalization and reproductive ill health situation. Here we could able to attest that the life style behavior of Manja paves the way for balance with their counter parts in terms of CED.

The univariate model has shown that gravidity and parity as a predictors for CED. It has to be kept in mind that the effects of too many pregnancies and deliveries have deleterious effect on the overall nutritional status of women. To understand more this situation, it is good to look at the concept of nutrition throughout the life cycle as described in the literature review part.

With respect to under-nutrition (MUAC<22.5cm), Manja women are at a greater risk. As the oral accounts displayed from FGD and in depth interviews, the long fasting season which hampers the availability of the most desired meal, meat, the scarcity of wild animals for hunting due to dry season, and the hard labour for firewood collection and selling could account for the prevailing situation. Seasonal changes in food availability and in physical activity produce fluctuations in both average weight and the population distribution of weights [50]. As discussed above, changes in arm circumference reflects more the increase or decrease of tissue reserves of energy and protein than body weight per se. Fluctuations in body weight during seasonal changes in food availability have a different impact on the body

composition of adults of low body weight than on those of greater weight; the former group loses proportionately more lean tissue [50].

The mean height of Manja and Malla women was 151.77cms and 155.53cms receptively. The recent national demographic and health survey showed that the mean height of Ethiopian women was 156cms, with 155.6 centimeter of rural mean[61].

Maternal height is a measure of past nutritional status and reflects in part the cumulative effect of social and economic outcomes on nutritional foods during childhood and adolescence. It can be used to predict the risks associated with difficult deliveries, since small stature is often associated with small pelvis size and a greater likelihood of obstructed labor. Short stature of mother is also correlated with low birth weight in infants, high risks of still births, and high rates of miscarriage. The height below which a woman is considered to be at nutritional risk is in the range of 140 to 150 centimeters [61].

The prevalence of spontaneous abortion in the study area was high (25.2%), particularly Manja women (35.0%) were at a greater risk. The high prevalence of chronic illness in Manja women and age above 20 years were the other predictors detected in this study. Though, in either of the models the effect of short stature was not elicited, we thought that it could be one of the reasons that contributed to the high prevalence of spontaneous abortion in the Mnaja social group.

The analysis of the quantitative part of this study showed that ethnicity was not a risk indicator for self reported illness. This result appears contrary to other similar study findings[16,37], where they demonstrated a clear difference in self reported health between ethnic minorities and majorities. These studies attest that ethnic minorities have poor self reported health as opposed to ethnic majorities and this difference was explained by psychosocial and economic factors.

It has been proposed that cultural differences between ethnic groups may imply that they perceive their combined physical and psychological health differently [70]. The Manja's different cultural practices and their stressful lifestyle behavior, which is a result of their social discrimination might account for their perception of health status and the resulting insignificant association. Further more, the respondents low literacy level and lack of access to information could confound the level of awareness of the people towards being healthy.

The socio-political processes of terror, the social conditions of marginality and the resulting individual psychological distress could have caused a deleterious effect on the health of the minority. On the contrary, a strong social integration and emotional support was identified as the identity within the Manja social group during the discussions, and this could contribute to the promotion of health of marginalised Manja ethnic group. Socially integrated people live longer and healthier lives than socially isolated people [27-31]. There is also evidence that not only absolute poverty, but also relative deprivation and the degree of relative material inequality causes poor health [30,31].

In the bivariate model there was economic index difference between the two social groups, where the Malla ethnic group with a better condition. This economic difference didn't appear as a risk factor for ill health when controlled for other variables in a logistic regression model. The remoteness, the very rural nature of the area and the general poor living standard in the DA population might reduce the gap that is ideally expected in other settings, and could be one of the explanations for this. In addition, the existence of ActionAid and the interventions by different actors, including government might have an effect on the overall economic, psychosocial and health of the people in the DA, particularly on the livelihood of minorities.

As illustrated in the result part, age of woman, particularly the age above 20 was the only risk factor for ill health. Both self-reported health and mortality are closely related to

age, but their mutual relation may not be the same in all age groups as among the old. However, even for the younger and middle aged, the respondent's perceived global health is a consistent and significant predictor of mortality [37,70].

This study, however, is not free of limitations. To begin with, its cross sectional design makes it difficult to draw inferences about causal pathways between the independent variables and the outcome variables considered in the study. Besides, psychosocial factors were not treated in the quantitative part of the study, and this has an implication on the causal pathway of self-rated status in the study groups. However, addressing the psychosocial and environmental factors in the qualitative part of the study could fill this gap. Apparently, being a cross sectional study, trends in seasonal variations could not be seen because the Manjas food behavior was largely affected by seasonal food availability.

There is the possibility of bias from self-reported data. Although self-rated health status is a useful indicator of health conditions of a population, it is a subjective and imprecise measure of health, which reflects a person's general perception of health more than well-defined health outcomes. Doubt about the significance of self rated health status have been suggested by an Australian study that revealed unexpected gender differences in health ratings and survival [71]. In addition, the reference point for assessment of self-rated health is not absolute and varies with demography and social context. However, the stability over time of self rated health status was demonstrated, as well as the fact that this kind of subjective health assessment was a valid indicator of health in middle aged populations and could be used in cohort studies [72].

The lacks of studies in similar settings have constrained comparability of results. Last but not least the small sample size of the study population due to limited number of Manja population in the area have an effect on looking into associations of casual pathways of the different variables in the study.

There is no similar study in Ethiopia, hence it could be used as a turning point for further exploration in the future. Utilizing both qualitative and quantitative method of data collection and the use of both bi-variate and multivariate analysis method could be sited as the strength of the study.

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

The Influence of Social Marginalization on the Health and Nutritional Status of Women

BY

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Examiner

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Examiner

DECLARATION

I, the undersigned, declared that this is my original work, has not been presented for a degree in this or any other University, and that all sources of materials used for the thesis have been fully acknowledged.

Name: W/medhin T/tsadik,

Signature: _____

Place: Addis Ababa, Ethiopia

Date of Submission: October 2001

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

Name: _____

Signature: _____

8. Conclusion

In quantitative terms, social marginalization was not a risk indicator for ill health, acute illness and chronic illness compared with some sociodemographic factors and reproductive characteristics of women. On the other hand, it was noted that factors involved in the cause and definitions of self-rated health status was multifaceted and inter linked. Hence, it must be concluded that self-rated health status is a function of multiple interrelated factors, including social environmental factors, life style behaviors and use of health services. Much broader socio environmental perspective should be taken into account when looking into determinates of the health status of ethnic minority groups.

The coverage and the number of attendance by Manja women is low compared to the dominant Malla social group. This was attributed to the low literacy level in Manja ethnic group which could be the result of social marginalization that limits their access and utilization of education facilities.

In social minorities (Mnaja) assistance at delivery is low compared to the social majorities (Malla). From the results it can be concluded that in Manja the low level of assistance at delivery is a function of high level of illiteracy of women and their husbands, the prevailing psychosocial stress, and absence of adequate number of trained TBAs in their locality.

Women chronic energy Deficiency State in the DA is poor, although it is still better than the other rural settings in the country. No ethnic difference is detected in this regard as there might be a balance between the life style behavior of the minorities and the economic status of the dominant groups.

Ethnicity/social marginalization was an important risk indicator for under-nutrition. At the outset, Manja women are much more predisposed to this situation. Seasonal changes in

food availability and in physical activity are the possible factors that have been considered to contribute for this effect.

Miscarriage rate in Manja women is very high. Factor such as high prevalence of chronic illness in this social group was accounted for this ethnic difference.

9. Recommendations

Based on the findings of the study and considering factors attributable to the stated findings, the following are recommended:

1. Design a strategy to improve the health status of the community in general and the margnalised people in particular taking into consideration the multiple factors determining it.
2. Strengthening the mobile ANC initiative and implementation of essential obstetric care for obstetric complications at Waka health center and in the newly constructed hospital.
3. Construction of health posts according to the new government standard at the vicinity of minority localities and staffing it with trained assistants from the minority population who could assist deliveries and render primary level preventive and curative services.
4. Health education on safe delivery and training of more TBAs from Manja social group.
5. Giving priority attention to education of women and men with more emphasis on social minorities through strengthening the existing formal and non formal education activities being carried out in the development area.
6. Acting on improving the economic conditions and the psychosocial stress prevailing in socially marginalised Manja in a concerted manner.
7. Scaling up of the right based initiative of ActionAid to reduce the social injustice manifested in minorities, including Manja social group and women in the community.

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Annex 1. Questionnaire

Interviewee: Woman

Part I. General Information

1. Address
   1. Name of peasant association _____
   2. Name of village _____
   3. House Number _____
2. Ethnic group
   1. Malla 2. Manja
3. Religion
   1. Orthodox 2. Protestant 3. Muslim
   4. Other (Specify) _____
4. Head of household
   1. Female(Woman) 2. Father (Male)
5. Marital status
   1. Married 2. Single3. Divorced
   4. Widow 5. Other (specify) _____
6. If married, does your husband have another wife?
   1. Yes 2. No

Part II. Information on Socioeconomic Conditions

7. Woman's educational status
   1. Unable to read and write → **to Q9** 2. Aable to read and write
8. If woman can read and write, what is the highest grade completed?
   1. Adult literacy 2. 1-4 3. 5-8 4. 9-12

5. Other (specify) _____

9. Woman's occupational status

1. House wife 2. Trader 3. Government employee

4. Other private gainful work (specify) _____

5. Other (specify) _____

10. Husband's educational status

1. Unable to read and write to → **Q12** 2. Able to read and write

11. If the husband can read and write, what is the highest grade completed?

1. Adult literacy 2. 1-4 3. 5-8 4. 9-12

5. Other (specify)_____

12. Husband's occupation

1. Farmer 2. Trader 3. Government employee

4. Private gainful work (specify) _____

5. Other (specify) _____

13. Housing type (Type of roof)

1. Thatched 2. Corrugated iron sheet

3. Other (Specify)_____

14. Does your household own/have radio?

1. Yes (working) 2. Yes (not working) 3. No

15. Does the household own the following domestic animals? If yes how many of each?

1. Ox _____
2. Cow _____
3. Heifer/Bulls _____
4. Horses _____
5. Mules _____
6. Sheep _____
7. Goat _____
8. Chicken _____
9. Other (Specify) _____

16. Does your household own plow?

1. Yes 2. No

17. Total land holding of the household (in hectare)

1. <0.5 hectare 2. 0.5-1 hectare 3. 1.01-2 hectare 4. >2 hectare

18. Do you have problems in paying government taxes?

1. Never a problem in paying taxes 2. Seldom 3. Yes, often times

19. In your opinion what is your household's economic status compared with other households in your area?

1. Better 2. Above average 3. Average 4. Below average

5. Poor

Part III. Reproductive Health Information

20. Age of woman _____
21. Age of woman at 1st marriage _____
22. Age of woman at 1st delivery _____
23. Is you or your husband currently using contraceptives?
    1. Yes 2. No → **to Q25**
24. If you are using, what type is it?
    1. Pills 2. Injectable 3. Condom 4. Norplant
    5. Other (specify) _____
25. What is the main reason for non-use of contraceptive?
    1. Lack of knowledge 2. Puerperium/breast-feeding
    3. Absence of husband 4. Husband influence 5. Other (Specify) _____
26. Were you pregnant in the last 12 months?
    1. Yes 2. No → **to question 29**
27. If yes, did you have antenatal care?
    1. Yes (no. of visits) _____ 2. No
28. What was the outcome of the pregnancy?
    1. Live birth 2. Still birth 3. Abortion
29. Where was your last child delivered?
    1. Home 2. Health station 3. Health center 4. Hospital
    5. Other (Specify) _____
30. Who delivered (cut the cord) your last child?
    1. Neighbor/relative 2. Traditional birth attendant
    3. Trained traditional birth attendant 4. Health professional
    5. Other (specify) _____
31. Do you think that you are pregnant at present?
    1. Yes 2. No
32. When was your LMP?
    1. < 1 month 2. 1 month 3. 1-2 months 4. 2-3 Months
    5. More than 3 months

33. Did you ever have spontaneous abortion?
    1. Yes (no. of episodes) _____ 2. No
34. Do you suffer from any long-standing illness? (It doesn't include after effects of injury or disability).
    1. Yes 2. No → **to Q37**
35. If yes, what was the problem?

    _____

    _____

36. How is the severity of the illness?

1. Slight 2. Moderate 3. Severe 4. Very severe

37. Were you ill in the past one month?

1. Yes 2. No → **to Q42**

38. When did the illness start?

1. In the last one month? 2. It is more than one month

39. Did you seek health care for the illness?

1. Yes 2. No

40. If the answer is yes, where did you go first to get help/treatment?

1. Health post 2. Health station 3. Health center 4. Drug vendor

5. Self treatment 6. Traditional healer 7. Wizard

8. Other (specify) _____

41. If you did not go to the health institution, why?

1. Lack of money 2. Lack of information about the presence of the service

3. The health institute is far 4. Mild illness

5. I am busy 6. I don't know

8. Other (specify) _____

42. How would you describe your general health?

1. Very bad 2. Bad 3. Optimum

4. Good 5. Very good 6. I don't know

Part IV. Basic Information on Family and Care Takers

43. Does the family have latrine?

1. Yes (in use) 2. Yes (not in use) 3. No

44. Where does the family get its drinking water

1. River 2. Pond 3. Well 4. Piped hand dug well
5. Spring (unprotected) 6. Spring (Protected) 7. Other (Specify) _____

45. Do you have perennial crops land?

1. Yes 2. No → **to Q48**

46. What perennial crops did you cultivate?

1. Coffee 2. Inset 3. Fruits 4. Chat
5. Eucalyptus tree 6. Other (Specify) _____

47. Does the family produce food crops by farming?

1. Yes 2. No → **to Q50**

49. If the family produces food crops, what is the produce like?

1. Surplus for sale 2. Just sufficient 3. Seasonal shortage 4. Year round shortage

Part V. Anthropometric Measurements

50. For women

Name	Age	Gravidity	Parity	Height in cm	Weight in Kg	MUAC in mm

Annex 2. FGD Guide

Discussants:

- Women group (married)
- Men group (married)

The group size in each group ranged from 6-8 and 1 hour was allocated for each group discussion. Each group of discussants were drawn from the two ethnic groups. A total of 8 focus group discussions were conducted, four with women and men group each. The principal investigator facilitated the discussion with the assistance of experienced translator. Tape recorder was used to record the discussion and transcribing of the record was undertaken the same day after the discussion.

Guiding Questions

The questions were open-ended and non-biasing. The questioning technique applied during the discussion was a non-directive moderating style. Assumptions considered in formulating the questions were as follows:

- To start with general and simple question
- To include only relevant ones
- Avoiding quantitative questions
- To use probing questions
- Transition approach
- Time and culture
- Easiness/simplicity to understand

1. Questions related to social relations and manifestations of discrimination (Psycho-social factors)
    - What types of ethnic group exist in your locality?
    - How is the pattern of settlement in the area?
    - Is there any difference among these ethnic groups in terms of social relation? Why?
    - What type of group activities (formal and informal groups) are there in your locality?
    - Do you take part/participate in the group activities?
    - Is the participation of every individual the same in the society (including women)? Why?
    - Does everybody have equal say in a group decision making?
    - Who is favoured to be group leader or to be member of executive committee in groups? Why?
    - Does everyone agree that he/she is rooted in the Dawro society?
    - If you happen to be in some trouble, how far are you sure that you have the opportunity for emotional support?
    - How far are you sure that you get access to guidance, advice, information and services from health institutions existing in the area?
    - Access to other services like education, market, etc.
2. Interaction with other ethnic group
    - How is the scenario of minority and non-minority interaction?
    - Why such discrimination exists?
    - Do you accept your being inferior in social status?

- What do you think should be done?

3. Economic conditions

    - How is the condition of wealth distribution in the area?
    - Generally speaking which social group is in a better economic status? Why?
    - What are the major resources considered in the wealth ranking?
    - What is the situation of land holding in the locality, what is the pattern of land distribution?
    - What is the main household source of income in your social group?
    - What is the source of extra household labour?

4. The situation of marginalization in different settings

    - Before ActionAid
    - After ActionAid
    - The scenarios in the different political systems

† Issues considered in the proceedings:

- Climate setting
    - Introduction (name, role, etc.)
    - What FGD is
- Explaining purpose of the study
- Explaining that no right or wring answer, all comments are welcome
- Insuring confidentiality
- Consent for participation and tape-recording
- Talking one at a time, avoiding repetition

† The method was pre-tested in the field and validated before the actual application.

Annex 3. Economic Index

Item	Level	Score
Housing type	Thatched	0
	Iron sheet	4
Ox ownership	0	0
	1	2
	2	3
	>2	4
Land holding	< 0.5 ha	0
	0.5-1ha	1
	1.01-2ha	2
	> 2 ha	3
Tax paying capacity	Never a problem	4
	Sometimes a problem	1
	Often times	0
Radio ownership	Yes	3
	No	0

The median household economy score was 4. Those households with economic score below the median (n=341) were considered poor, whereas those above the median (n=342) were considered non-poor.

Annex 4. Verbal Consent

Good morning/afternoon/evening

My name is _____, and I am working with ActionAid. We are conducting a survey and would appreciate your participation. I would like to ask you about your knowledge and perceptions about some health problems. You will also be eligible for height and weight measurements. This information will help ActionAid, MOH and any other development actor to plan, implement, and evaluate health and nutrition programs. Whatever information you provide will be kept strictly confidential and will not be shown to other person.

Participation in this study is voluntary and you can chose to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?

Respondent agree to be interviewed ---------- (continue)

Respondent does not agree to be interviewed ---------- (end).