Postconflict internally displaced persons in Ethiopia

*Mental distress and quality of life in relation to traumatic life events, coping strategy, social support, and living conditions*

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To: the three people:

emebet for bringing me to this world,
aba woldetensai for showing me the world of truth
and aan rob giel
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Abstract


Background: There are about 23.7 million internally displaced persons worldwide today, still living in the low-income countries. Ethiopia has for the past four decades been ravaged by war and famine. A lengthy civil war resulted in Eritrea, formerly a part of Ethiopia, becoming an independent state in 1991. This war led to displacement of one million people, and currently there are about 55000 internally displaced Ethiopians in Addis Ababa, most of them living in temporary shelters. A minority resettled in a small town Debre Zeit south east of Addis Ababa, dispersed in the community.

Objectives: To study the consequences of trauma and extreme stress among these displaced persons.

Methods: A random sample of 1200 displaced persons was selected from the Kaliti and Kore shelters of Addis Ababa, aged between 18 and 60 years. They were interviewed by internationally validated instruments which were translated into the Ethiopian official language Amharic. Information thus obtained covered sociodemographics, childhood trauma, traumatic life events, and mental distress as assessed by the SCL-90-R, the four domains of quality of life assessed by WHOQOL-BREF, coping strategies, perceived social support, and basic living conditions. A sample of 120 subjects from the displaced persons living in Debre Zeit was similarly evaluated. A study comparing prevalence rates and risk factors for PTSD in four postconflict, low-income countries (Algeria, Cambodia, Ethiopia, Gaza) was also undertaken.

Results: Men, compared to women, reported significantly higher experience of trauma, higher perceived social support, and higher task-oriented coping. Women reported higher emotion-oriented coping. In both genders, emotion-oriented coping was correlated with higher trauma events, and task-oriented coping was correlated with higher perceived social support. Mental distress increased and quality of life decreased with age. Mental distress mediated the effects of most trauma in reducing
quality of life, and some trauma reduced quality of life directly. Living conditions were also significantly related to quality of life. Coping strategies and perceived social support influenced mental distress and quality of life directly as well as indirectly by moderation, in part gender specific. Placement in the community setting of Debre Zeit gave a better quality of life compared to placement in the shelters of Addis Ababa. This difference was accounted for by the difference in living conditions, particularly protection from animals (rodents) and insects (mosquitoes), for three domains of quality of life. For domain 3 (social relationships), however, several further factors accounted for the difference, like marital status, ethnic belonging and coping strategy. The comparative study of 4 postconflict countries contributes to the theory that trauma may be the direct cause of the onset of PTSD but that a multiplicity of other adverse events determine the development of this disorder.

Conclusions: Using the same assessment methods, a wide range of rates of symptoms of PTSD were found among 4 low-income populations who have experienced war, conflict, or mass violence. In the Ethiopian context we also found gender differences in the trauma background, coping strategies and perceived social support. Mental distress mediated much of the effects of trauma on quality of life. Coping strategies and perceived social support were significant moderators in this process.

Key words: Ethiopia, postconflict displaced persons, trauma, mental distress, quality of life, coping, social support.
List of original papers

This thesis is based on the following four papers, which will be referred to in the text by their Roman numerals.


Acronyms

AAU: Addis Ababa University
APA: American Psychiatric Association
AU: Africa Union
CIDI: Composite International Diagnostic Interview
CSA: Central Statistics Agency of Ethiopia
DPPC: Disaster Preparedness and Prevention Commission
EPI-INFO: free software program developed by the Centres for Disease Control and Prevention that allows the user to create databases, enter data sets and analyze data.
EPRDF: The Ethiopian Peoples Revolutionary Democratic Front
IDP: Internally displaced person
IPSER: Institute for Psychosocial and Ecological Research
MOU: Memorandum of Understanding
OAU: Organization of African Unity
PTSD: Post Traumatic Stress Disorder
TPO: Transcultural Psychosocial Organization, Amsterdam
SCL-90-R: Symptom Check List 90 Items Revised version
SPSS: Statistical Package for Social Sciences
UNECA: United Nations Economic Commission for Africa
UNHCR: United Nations High Commissioner for Refugees
WHO: World Health Organization
WHOQOL-BREF: The WHO abbreviated 26 item Quality of Life Instrument
Background

Global situation of postconflict internally displaced persons

The UN Refugee Agency, the UNHCR, distinguishes between refugees and internally displaced persons as follows: “Both groups often leave their homes for similar reasons. Civilians are recognized as ‘refugees’ when they cross an international frontier to seek sanctuary in another country. The internally displaced, for whatever reason, remain in their own states.” (UNHCR, 2007).

The number of refugees and displaced is increasing globally from time to time. Though the cold war is long over, the social upheavals in different parts of the world mainly in the developing countries is still continuing. The Indian Peninsula, The Middle East and mainly countries below the Sahara in Africa are the most affected.

There are estimated to be about 23.7 million internally displaced persons worldwide in 52 different countries today, half of them in Africa, living amidst war and persecution. They have little legal or physical protection and a very uncertain future, since they are not covered by international laws regarding refugees (UNHCR, 2007).

One of the hot spots in Africa is the Horn of Africa where the place has been repeatedly hit by natural and man-made disasters where by millions had to flee their homes to spare their lives. Somalia still remains a country without proper government while the situation between Eritrea and Ethiopia, Eritrea and the Sudan remains tense. Though the war between southern Sudanese rebels and the Sudanese government has finally resolved peacefully, the Darfur crisis in western Sudan has created a brand new crisis to the region.

A proportion of the refugees and internally displaced persons worldwide receive help from the UNHCR. At the start of the year 2006, the number of persons of concern to UNHCR was about 21 million, of which internally displaced persons comprised 6.6 million (31%). However, at the close of 2006, the number of persons of concern to UNHCR increased to 32.9 million. The largest increase had occurred among the internally displaced persons, to 12.8 million (38.9%). The increase in the number of persons from East and Horn of Africa of concern to UNHCR, from the beginning to the end of 2006, was 10.4%. (UNHCR 2006 Global Trends, retrieved October 2007 from http://www.unhcr.org/statistics.html).
Knowledge about psychosocial issues of refugees and the displaced is based on research findings that have taken place in the west. Though the vast majority of the displaced are from low income countries, less attention is given to the emotional well being of those victims.

In these series of studies, the type of trauma experienced, coping styles and mechanisms that can mediate between the predictor and the outcome effect, and moderate the predictor effect on the mental health of the displaced that in one way or another influence the quality of life of victims of organized violence in Ethiopia is assessed.

Migration is the process of social change whereby an individual moves from one cultural setting to another for the purpose of settling down either permanently or for a prolonged period. The process is inevitably stressful and stress can lead to mental illness (Bhugra, 2004). The outcome effect depends on the conditions whereby the migrants went through before, during and after the migration.
Forced displacement, trauma, and stress

Traumatic life events due to war, disasters, torture and mass violence are known to lead to serious psychological consequences and mental disorders (Mollica & Caspi-Yavan, 1991; Paardekooper et al, 1999; de Jong et al, 2001; de Jong et al, 2003). Such traumatic events include lack of food, water, shelter and medical care, imprisonment, combat and injury, abuse and isolation, torture, and murder and death of the subject or family. Dose-effect relationships have also been reported between the cumulative trauma and the psychiatric consequences (Mollica et al, 1998a; 1998b).

Although there are a few studies regarding the health status, quality of life, living conditions, and rehabilitation efforts concerning refugees who have been accorded asylum in developed countries, fewer such studies are available concerning internally displaced persons still living in their generally low-income countries (de Jong et al, 2001; de Jong et al, 2002; Mollica et al, 2002; de Jong et al, 2003; Mollica et al, 2004). As internally displaced, they often live in temporary dwellings or shelters which offer poor living conditions. Moreover, these persons have usually gone through severe traumatic life events that cause psychological distress and that are detrimental to their mental as well as physical health. On the whole, they usually have a relatively poor quality of life.

The resilience of persons who have suffered severe trauma or disasters is influenced by the nature of the premigration trauma experienced by them, but it is also influenced by the postmigration psychosocial circumstances and living conditions (Perez-Sales et al, 2005; Porter & Haslam, 2005). Several psychosocial factors have been shown in the literature to speed up the recovery or resilience of posttrauma victims, including sense of belongingness, social recognition, perception of control over one’s own life, sense of predictability and safety in daily life, respect to personal dignity, and optimism regarding the future (Perez-Sales et al, 2005).

Postmigration treatment received by the victims, and the organizational structure of the postmigration dwellings, play an important part in this. One study on the victims of earthquakes in El Salvador found that when allocation to shelters was done with respect to the arriving family’s community of origin, it gave better rehabilitation outcome than when the families were allocated to shelters in order of their arrival (Perez-Sales et al, 2005). Other studies on refugees to Australia found that temporary protection status and detention instead of permanent protection status of the refugees, was associated with higher posttraumatic stress disorder (PTSD), depression and related disability (Momartin et al, 2006; Steel et al, 2006).
309.81 DSM-IV Criteria for Posttraumatic Stress Disorder

A. The person has been exposed to a traumatic event in which both of the following have been present:

(1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others (2) the person's response involved intense fear, helplessness, or horror.

B. The traumatic event is persistently reexperienced in one (or more) of the following ways:

(1) recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions.
(2) recurrent distressing dreams of the event.
(3) acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur upon awakening or when intoxicated).
(4) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
(5) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:

(1) efforts to avoid thoughts, feelings, or conversations associated with the trauma
(2) efforts to avoid activities, places, or people that arouse recollections of the trauma
(3) inability to recall an important aspect of the trauma
(4) markedly diminished interest or participation in significant activities
(5) feeling of detachment or estrangement from others
(6) restricted range of affect (e.g., unable to have loving feelings)
(7) sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)
D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:

1. Difficulty falling or staying asleep
2. Irritability or outbursts of anger
3. Difficulty concentrating
4. Hypervigilance
5. Exaggerated startle response

E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than one month.

F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Although women and men (as well as children) are affected by severe consequences of armed conflicts and war leading to displacement, women and men are likely to be vulnerable in somewhat different ways. Women are more likely to be exposed to abuse and rape and also carry a heavier family burden, whereas men are more exposed to direct combat activities and war conflicts (Carballo et al., 1996; 2004). In general, women are more than twice as likely to develop post-traumatic disorder as men as a result of trauma (Breslau et al., 1997; Eytan et al., 2004; Solomon et al., 2005). Also, women and men usually have different social roles particularly in the populations that are being affected by war trauma and violence. The two genders are likely to differ in the type of coping strategies employed and the degree of social support perceived.

Coping is conceptualized as the individual’s response to stressful or negative events, and different individuals may be inclined to employ different coping strategies. Coping is a multidimensional concept, but three coping styles (or strategies) that have often emerged in the literature are task-oriented coping, avoidance-oriented coping, and emotion-oriented coping, respectively (Endler & Parker, 1990; Parker & Endler, 1996).

Social support is believed to be protective by acting as a buffer against the deleterious effects of stress and trauma, as well as by providing emotional and material nourishment and helping to remove potentially stressful factors from the environment (Berkman et al., 2000; Kaspersen et al., 2003; Cohen, 2004), although the underlying physiological mechanisms are not yet fully elucidated (De Vries et al., 2003).
Mental distress can be evaluated by means of several different instruments, but the instrument we employed in this thesis was the self-report ninety-item Symptom Check List (SCL-90-R), which is a general standardized measure of psychopathology (Derogatis, 1994). The items of the SCL-90-R are known to factorise into nine primary symptom dimensions, denoted by somatisation, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism.

Quality of life can be assessed by several different instruments, but in this thesis we have employed a twenty-six item instrument called the WHOQOL-BREF, developed and validated by WHO in several studies (Skevington et al., 2004; Trompenaars et al., 2005). The items of this instrument factorize into four domains of quality of life, denoted by ‘physical health’ (domain 1), ‘psychological’ (domain 2), ‘social relationships’ (domain 3), and ‘environment’ (domain 4).

Children who grow up in war-like situations that persist for years are exposed to various forms of childhood trauma before they as adults are exposed to further trauma related to the process of displacement. Undoubtedly, various types of severe trauma these persons have gone through are expected to lead to higher mental distress and lower quality of life, but further research is needed to understand the pathways underlying this process. Efficient intervention strategies to rehabilitate and assimilate these persons into the society will be facilitated by a deeper understanding of the role of social support and coping strategies employed by the subjects living in such environment. An understanding of which of the coping strategies are of benefit and which are dysfunctional can be incorporated in the sort of intervention strategies employed. It is also important to have an assessment of how beneficial social support is, or its role in general, in order to choose between different intervention strategies adequately.
Ethiopia’s geography, history and population.

**Geography**

Ethiopia is situated in the Horn of Africa. It lies between the latitudes 4°N and 18°N and between the longitudes 33°E and 48°E. The country covers a total area of 1,104,300 sq. km. It is a mountainous country bounded on the West by the Sudan, on the East by Somalia and Djibouti, on the North by Eritrea, and on the South by the Republic of Kenya. The eco-geographic regions vary from 100 meters below sea level in the Danakil depression to 4600 meters at the Ras Dashen peak.

The climate consists of two main seasons, i.e. the dry season covers the period from October to May and the rainy season lasts from mid June to September. A short but agriculturally important period of the so-called Belg rains occurs between February and March.

![The Horn of Africa](image)

The Horn of Africa
History
The prehistorical archaeological findings in the Ethiopian rift valley of Hadar suggest that Ethiopia remains the cradle of mankind; it is here that a remarkably complete skeleton of an adult female Australopithecus Afarensis (nick-named as “Lucy”) was discovered in 1974. The finding few months back of a complete skull of a much older baby skull named as “Selam” is also an additional proof of the longevity of the country as habitat to our ancestors.

The earliest available writing from Egyptian records show that the History of Ethiopia dates back to around the second millennium BC when the northern and central parts of the country were known to have been occupied by the preceding ethnic groups, especially the Cushites, a Hamito-Semitic speaking society. The Blue Nile River, which originates in Ethiopia, has played an important role in the cultural and political development of Ethiopia. During that time the Egyptian pharaohs were aware of the civilization to the South-eastern lands and sent ships for trade in precious goods with the Abashat people, later known as the Abyssinians.

Lucy (Australopithecus Afarensis)  Queen Makeda
During the last six centuries BC Abyssinia expanded trade, economic and cultural contacts with several dominant empires and influences: Southern Arabia, Hebrew, Greek, Indo-Portuguese etc. In the 2nd century AD the Axumite kingdom emerged. According to the traditional history the kingdom emerged through Menelik I, the legendary son of the Hebrew king Solomon of Israel and the Queen of Sheba (Makeda) from Abyssinia (Zewde, 1991; Pankhurst, 1992).

Known also as Abyssinia until the 20th century, Ethiopia is the oldest independent nation in Africa. It was home to the powerful Christian kingdom of Axum that flourished from around the first century AD.

Ethiopia has a long history of survival, and this national preservation for thousands of years was not without a cost. The highlands of Ethiopia with the two thousand years or more settled agriculture have contributed to the world in domestication of animals and agricultural products. Coffee, Sorghum and Castor Bean are some of the agricultural products the country has presented to the rest of the world. Though the country was also known as the Hidden Empire, it is also evident that the institution of the monarchy with its legendary roots in Old Testament and the common faith, traditions, and culture of an ancient Christian church were valuable assets in the formation of natural and political consciousness essential to survival (Rubenson, 1991).

After the 1500s Ethiopia is divided into a number of small kingdoms, the period known as the era of the “mesafint” or judges.

The unification of Abyssinia and creation of Modern Ethiopia was a process largely started by King Tewodros II and continued by his subsequent successors notably Yohannes IV, Menelik II and more recently Haile Sellassie I. During these periods Ethiopia’s history is colourfully marked by indomitable and non-compromising successful struggles against the scramble for Africa variously by the Ottomans, the Mahdists, Portuguese, British, Italians and the French. In the early 1930’s upon the ascending to the throne, Emperor Haile Sellassie I began the modernization program. By the 1960’s Ethiopia was one of the most powerful and advanced independent African states and became a founding member of the OAU now known as the AU.

Though, the country is hit by several man-made and natural disasters, it remains the symbol of Sub-Saharan civilization, icon of liberty for Black Africans who were in the hands of colonialism and slavery. The fact that the country has never been a colony of any outside power; is a country of 1600 years Christianity and a thousand years Islam, having its own unique alphabet and calendar, certainly puts this ancient state as a place of pilgrimage for many African Americans in the western hemisphere. The calendar
which is 7-8 years younger than the Gregorian has just brought the country to its own millennium and for all Ethiopians and friends of Ethiopia this millennium is expected to be different from its predecessor, i.e. era of development, peace and stability and thus contributing to the well-being and prosperity of the peace thirst region of the Horn of Africa.

While the remote past history seems to be glamorous, the recent and the immediate past is to the contrary. In 1974, as the result of the popular uprising, the Emperor was deposed by the military, and the centuries lasting Monarchy was abolished to be replaced by a Marxist-Leninist-Socialist military government known as the Dergue. The military regime lasted nearly two decades before it was militarily defeated and thrown out by the coalition forces of the EPRDF.

During those seventeen years of military rule, Ethiopia has witnessed two major famines, one major war with the neighbouring Somalia, endless ethnic and ideological strifes that wiped out one whole generation and traumatized the remaining for decades to come. Many of my fellow compatriots have chosen silence not to waken the suppressed traumatic emotion buried in each person’s psyche. The popular revolution of the seventies has thus managed to wipe out not only the Solomonic Dynasty of the late Emperor Haile Sellassie, but also the then bright-hopeful generation the country had hoped to bring her from the demise of backwardness and serfdom. Had the country managed to spare those lives from the meaningless wars and summary of political executions, the renaissance of the country would have been achieved long time ago.

By and large, what is now needed is pave the way to sustainable democracy and development and hence make the traumatic past a history.

Eritrea, which had been part of Ethiopia since the 1950s, became an independent nation in 1993 after a protracted civil war that had lasted almost thirty years. It was at this time that many Ethiopians and Eritreans had to flee Eritrea in fear of reprisals and sought refuge in what was then a strange land (Ethiopia) for many of the displaced.
Population

The population of Ethiopia (2007 estimate) is a little over seventy seven million, thus making the country one of the most populous in the continent (Central Statistics Agency of Ethiopia, 2007). Followers of Ethiopian Orthodox Tewahido Church and Sunni Islam account for the majority of the population.

St Mary’s Church in Axum

Most highlanders are Christians while the lowlands are predominantly inhabited by Muslims. Both religions have shown great tolerance and respect to one another. While the Arc of the Covenant is believed to be kept in St Mary’s Church in Axum, the place not far from the same place known as Negash, has served a refuge to close family members of Prophet Mohammed who in return as goodwill ordered his followers never to harm Ethiopians.

Ethiopia has a diverse population comprising over 80 nationalities with similar number of languages as well as over 200 dialects spoken in the country. The 1995 constitution has created nine federal states with all the rights and privileges of an autonomous state, plus two chartered cities, namely Addis Ababa and Dire Dawa.
Addis Ababa is the capital of the country as well as the seat for UNECA, AU and many other International Organizations.

Administrative regions and major ethnic groups of Ethiopia. Total Population by Region. (Central Statistics Agency of Ethiopia, 2007):

<table>
<thead>
<tr>
<th>Region</th>
<th>Population</th>
<th>Major Ethnicities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addis Ababa</td>
<td>3,059,000</td>
<td>Amhara, Oromo, Gurage, Tigrawai</td>
</tr>
<tr>
<td>Afar</td>
<td>1,418,000</td>
<td>Afar (91%)</td>
</tr>
<tr>
<td>Amhara</td>
<td>19,624,300</td>
<td>Amhara (92%)</td>
</tr>
<tr>
<td>Benishangul-Gumuz</td>
<td>640,000</td>
<td>Berta, Gumuz, Shinasha</td>
</tr>
<tr>
<td>Dire Dawa</td>
<td>412,000</td>
<td>Oromo, Amhara, Somali</td>
</tr>
<tr>
<td>Gambela</td>
<td>253,000</td>
<td>Nuer, the Anuak, Amhara, Oromo</td>
</tr>
<tr>
<td>Harari</td>
<td>203,000</td>
<td>Oromo, Amhara, Harari, Gurage</td>
</tr>
<tr>
<td>Oromia</td>
<td>27,304,000</td>
<td>Oromo (85%), Amhara, Gurage</td>
</tr>
<tr>
<td>Somali</td>
<td>4,444,000</td>
<td>Somali (96%)</td>
</tr>
<tr>
<td>Southern Nations, Nationalities,</td>
<td>15,321,000</td>
<td>45 indigenous ethnic groups</td>
</tr>
<tr>
<td>Peoples Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tigray</td>
<td>4,449,000</td>
<td>Tigrawai (95%)</td>
</tr>
</tbody>
</table>
Postconflict displacement in Ethiopia

Early 90’s was a year of the beginning of the end of the cold war where socialism in Eastern Europe was disintegrating with the dismantling of the Berlin wall followed by popular uprising in many of the former Soviet allies including the Soviet Union itself. Africa was not immune from this sudden tsunami of revolution for change. Many African countries mainly in central and eastern Africa were entangled by famine, ethnic unrest and military dictatorships that cost millions of innocent lives. Since early seventies Ethiopia in particular has been the epicentre for man-made and natural calamities attracting the world attention. By the beginning of the 1990’s it was clear that with the downfall of the Soviet system the fall of the military government in Ethiopia was inevitable.

Eritrea which was formerly the northernmost province of Ethiopia since it was united with the rest of Ethiopia in 1952 was able to form an independent government ending the 32 years war with the Ethiopian governments of the late Emperor Haile Sellassie and the Military Marxist Regime of Mengistu Haile Mariam.

The war in Eritrea and the civil war within the country was at a very high human and developmental cost that took the country several decades backward.

During the past four decades Ethiopia has been ravaged by large-scale civil war and famine. A large number of people suffered traumatic experiences by being involved in the civil war, while very often losing home, friends and relatives. According to estimates of the Ethiopian Disaster Prevention and Preparedness Commission (DPPC), by the end of the civil war in 1991, about one million Ethiopians were displaced as a result of famine and war. Most were sheltering in Djibouti, Kenya, Sudan and Yemen. It took almost one year to repatriate the displaced from the neighbouring countries and months for those who managed to make it to Addis through different routes.

The war, which many had thought, was over with the fall of the military junta and the cessation of Eritrea has unfortunately caused too much suffer to hundreds of thousands of Ethiopians and Eritreans alike. The border clash that broke out in May 1998 developed into full blown war and left over eighty thousand people dead and displaced hundreds of thousands on both sides. Though a fragile truce has held, the UN warns that ongoing disputes over the demarcation of the border threaten peace and stability in the region.
To make things worse, the current unrest in neighbouring Somalia is a threat for regional instability and escalation of human misery and influx of citizens to spend their lives indefinitely in unsafe shelters.

For hundreds of thousands of people in the region the occurrence of war and famine will have resulted in a variety of psychosocial and psychosomatic complaints or in serious mental problems such as long-lasting depression, anxiety, somatisation or PTSD. These mental health problems are expected to have a pervasive negative influence on attitudes with regard to involvement in economic activities. The social, economic and political crisis the war has brought into the society has become endless agony of the country.

Ethiopia still bears the burden of caring for hundreds of thousands of internally displaced people of which about half are in Tigray, and the remaining refugees from Somalia, Eritrea and Southern Sudan.

The independence of Eritrea sixteen years ago, the recent fight between Ethiopia and Eritrea and the conflict in the Sudan and Somalia are the main causes for the displacement in the country. These figures are rising every day.

Little is known about the extent and nature of the psychosocial and psychiatric problems among the displaced and refugee populations let alone in Ethiopia but in the whole region. The aim of the study is, therefore, to look into traumatic life events that might cause mental distress, which in turn affect the quality of life of the displaced, and hence recommend intervention programs that alleviate the emotional well being of the displaced persons.
Background to the research project

The principal investigator (PI) of this survey (the author of this thesis) did his training in Psychiatry in Groningen in The Netherlands in mid eighties and it was there he met Dr Joop de Jong (later Professor) at the latter’s thesis defence based on his work as a young Psychiatrist in Guinea Bissau (de Jong, 1987). Ever since, the relationship developed from casual acquaintance to lasting friendship and full cooperation.

And it is through this connection established by Professor Robert Giel, the renowned researcher and Social Psychiatrist who is a mentor to the PI, that the present study was initiated. A proposal prepared by AAU and IPSER-Amsterdam, later to be known as TPO-Amsterdam, was submitted to sponsors and got approved. Then a MOU was signed between the AAU and TPO-Amsterdam. Following the official agreement between the two institutions, administration coordinators, psychologists and research assistants were hired locally and from abroad (see Appendix B), office complex was rented from the university and the pilot project was officially launched.

The present activity is therefore, the result of a joint endeavour between AAU and TPO-Amsterdam. Though the field work was conducted in late 90’s, the analyses and write-up has fortunately added additional collaborative work with researchers from Umeå University, Department of Psychiatry, who kindly agreed to participate in the analyses, research training, and thesis supervision of the PI.

The data collection team consisted of a Data Administrator, thirty Data Collectors and three Data entry clerks. The data administrator was a master’s degree holder in Sociology/Anthropology while the data collectors and data entry clerks were high school and or diploma graduates with several years experience in data collection and entry(see Appendix B). While the quantitative survey was underway, the qualitative data collection with intervention programs to alleviate stress among the adults and the young was organized by the research team consisting of an Anthropologist from the USA, two Psychologists from the Netherlands and Sweden and a playwright/sociologist from the Netherlands. The whole activity was administered by an Ethiopian lady with masters in Management while the overall program Director was the PI (see Appendix B).

In view of the above joint agreement, a pilot project in three shelters for the displaced in Addis Ababa and displaced people living in the community in Debre Zeit town was launched.
In this study, it is attempted to look into different factors that might have any impact in causing mental distress and factors that might also moderate the outcome. The sample in the study is unique in a sense that the respondents though they migrated to Ethiopia as refugees have ended up as IDPs. According to Webster’s Dictionary, a refugee is somebody who seeks or takes refuge in a foreign country, especially to avoid war or persecution.

Eritrea, by the time it became independent from the rest of Ethiopia, it had a population of 4 million of which the Tigrawai and Tigre ethnic groups constituted the majority of the population. There are also 7 more ethnic groups in Eritrea which inhabit most of the lowland of that country. About half of the sample population (46.1%) was born in Eritrea and most were grown up there, however, when they left the country it was without any hope of going back to the country which they all thought they belonged. Most of the displaced were from Tigray region now the southern border of Eritrea, and the Amharas who were in the country as civil servants, merchants or served in the Ethiopian Army. A refugee no matter when, whether in few days or in thousand years believes that there will be time to go back to home-country. And it is such belief that is a driving force to sustain ones identity and preserve hope. What will happen to the Ethiopian-Eritrean displaced person that belongs to neither side is a matter that needs further closer follow up and study.

Social network is thought to be an important factor affecting coping (de Jong, 1996). Unlike in the materially developed world, people in low-income countries have maintained a strong social network with the culture of sharing. Families are extended, meagre material resources are shared and emotional support is also sought from community to the deity. Every event is associated to the deity’s punishment or appeasement and thus the remedy is sustaining harmony with the latter. Different studies have shown that belief systems are found to have protective factors for traumatized refugees (Brune et al., 2002) Sustaining harmony with the supernatural force along with traditionally accepted culture of sharing is believed to have a moderating effect on emotional well being of people after individual or social crisis.

The general objectives of the study of posttraumatic experience responses amongst the internally displaced persons sheltering in Addis Ababa and Debre Zeit were to asses the frequency and nature of those responses, and try to identify their possible predictors.

The major traumatic event of having to evacuate their homes in Eritrea occurred for most victims some six years ago (prior to the commencement of the study). The
migration was not the same for everyone. The process took some people hours and others weeks or even months, on foot, by bus, train, by truck or by air to reach the final destination, Addis Ababa. Of course, hardship on the way to Addis Ababa varied accordingly. This major event is considered to have come to a conclusion with the arrival in Addis Ababa, when a new period of hardship in the shelters began. Prolonged and dependent life in the shelters of Addis Ababa as one of the trauma responses, which will be compared with independent life of the displaced people in Debre Zeit is also considered.

“The best houses in Kaliti shelters”

There are also other trauma responses for consideration. These are: increased or specific physical morbidity, increased (medical) help seeking behaviour, mental disorder, substance abuse, suicide or suicidal ideation, PTSD proper, social problems, etc (e.g. divorce, criminal behaviour).

When the PI went with one of the collaborators for the first time to one of the shelters in Kaliti to talk to the key informants, one of the elderly key informants was amazed to see some one came to talk more about their deep-seated emotional problems than the usual routine of handing out rolls of plastic sheets and food. This was a remark
positively accepted by many when asked whether there were needs for sharing their traumatic experiences with someone who is ready to listen. Whenever there is a massive social crisis in low income countries, what the donors are interested is the relief works the package which doesn’t necessarily include the emotional well being of the victims.

To summarize the objectives:
The main objective of the survey is to look into psychosocial conditions and coping styles of the displaced persons in Addis Ababa, and based on the findings, design applicable psychosocial rehabilitation program to the general population undergoing similar condition.

The aim was to: 1) find out the prevalence of psychosocial problems and psychiatric (co)morbidity among the displaced and refugees in the various shelters, 2) assess its relationship to multiple traumatic experiences, 3) assess coping mechanisms and quality of life of the displaced, 4) to see the effect of assimilation with the community, if any, in the psychosocial well being of the displaced, 5) provide information and raise awareness with local leaders and politicians about the extent and nature of the problem, as well as recommend possible solutions, and finally 6) initiate further research in the area.

When the survey commenced by the end of the nineties, there were seventeen shelters inside and around Addis Ababa with a population of seventy thousand. The two shelters were selected randomly. The Kaliti shelter is located in the southern exit of the highway to Djibouti port while the two adjacent shelters in Kore (see map) were on the western part of the outskirt of Addis Ababa. The Kaliti shelters were composed of a large warehouse, an abandoned villa and two giant (6*20 meters) plastic covered tents. In addition to those shelters there were also a number of separate 2*2 m all plastic covered shelters.

In the survey, ten WHO acknowledged instruments the CIDI (sections C, D, E, J, K, L), SCL-90-R, WHOQOL-BREF (see Appendix C), were used. Traumatic events were evaluated by an adapted version of the Life Events and Social History Questionnaire. Coping Style Scale assesses different trait characteristics of coping strategies.
Besides the quantitative survey, qualitative study which is complementary to the previous in understanding traditional concepts of trauma, categories of diseases, social networks, coping strategies, culture bound specific post trauma expressions and other related issues, has also been an ongoing activity in the project.
**Aims of the thesis**

The overall objective of the thesis was to study the consequences of trauma and extreme stress among around one million Ethiopians who were displaced as a result of famine and war by the time of the establishment of an interim government in Eritrea in 1991 after a lengthy civil war.

From a random sample of 1200 subjects from the temporary shelters in the capital Addis Ababa, we specifically studied:

- Gender differences in traumatic life events, coping strategies, perceived social support and demographics;

- The likely pathways underlying the relationships between trauma, mental distress living conditions and quality of life. We also investigated the moderating roles played by different coping strategies and perceived social support. Elucidating whether a characteristic is a mediator, a moderator, or an independent risk factor is helpful when planning rehabilitation or intervention strategies;

We compared the above sample with a sample of 120 subjects from displaced persons placed in the community setting of Debre Zeit, specifically:

- In what ways the quality of life differs between these two placement models (shelters vs. community setting), and what characteristics that account for these differences in quality of life.

A study comparing prevalence rates and risk factors for PTSD in four postconflict, low-income countries (Algeria, Cambodia, Ethiopia and Gaza) was also undertaken.
Materials and methods

Participants

The subjects of the Ethiopian studies Papers I – III and Paper IV discussing Ethiopia, comprised postconflict displaced persons after a lengthy civil war that led to Eritrea’s independent government in 1991. They had suffered tremendous hardships during their travel to Addis Ababa witnessed and or lost close family members/friends through exhaustion, lack of food and water, disease, combat situation and torture. All arrived the capital around 1991-92. The average travelling time was estimated at 6.7 (+ SD 8.4) months. Most affected were women and children.

A majority of these displaced Ethiopians ended up in shelters in the capital Addis Ababa. When this study was commenced in 1997, around 70,000 lived in over seventeen shelters, many of them in tents, 6 to 7 people sharing 4 to 5 meter-square sized partitions. Some shelters (Kaliti) consisted of former warehouses and similar structures with mud-walls and tin-roofs; up to 26 households had to share the four walls in these shelters. Other shelters (Kore) were made of small but detached (around 2m x 2m) structures made of Bamboo stem walls cemented by mud, and the roofs covered by canvas and plastic.

From a list consisting of 8909 registered displaced persons from Eritrea in the Kaliti and Kore temporary shelters of Addis Ababa 1208 were randomly selected. The statistical software called EPI-INFO-6 was used to randomly select the sample population. Because of psychosis (n=2) and lack of registration (n=6) 8 interviewees in total were discarded, leaving in all 1200 completed interviews. The participants comprise of 749 women, 451 men between the ages 18 to 60 years. All agreed to participate. The sample of the studies reported in Papers I and II consisted of these 1200 subjects.

A small minority of the displaced Ethiopians ended up in a small town south east of Addis Ababa, called Debre Zeit. Some of them had fled along the eastern route through Djibouti and decided to settle here before reaching Addis Ababa. Others had chosen Debre Zeit because they had acquaintances or distant relatives there. They were given varying types of smaller shelters within the local community, where the displaced individuals or families lived scattered in the town.
The participants from the community setting of Debre Zeit comprised totally 120 subjects (110 women, 10 men), selected similarly, between the ages 18 and 60 years. All agreed to participate.

In Paper III comparing placement in the shelters with placement in the community setting of Debre Zeit (a town 50 km south of Addis Ababa), we included only women, because most participants in the sample from Debre Zeit were women (110 out of 120 subjects). Thus, the sample for Paper III comprised all the 749 women participants of the sample from the shelters, and all the 110 women of the sample from Debre Zeit. However, because of missing records on some of the variables, 15 respondents were excluded from the multivariate analyses of this study (12 subjects from the shelters and 3 from Debre Zeit).

The subjects of Paper IV, a study comparing prevalence rates and risk factors for PTSD in four postconflict low-income countries, were selected randomly from the survivors of war or mass violence from Algeria (n=653), Cambodia (n=610), Gaza (n=585), and Ethiopia (n=1200, comprising the subjects from the shelters of Addis Ababa described above).

**Instruments**

Transcultural Psychosocial Organisation (TPO) in Amsterdam was responsible for the design and acquisition of the instruments used in the study. All the instruments were translated into the Ethiopian official language Amharic. The instruments were culturally validated (Flaherty et al., 1988) and translated in a 7-step procedure (de Jong et al., 2001). All the thirty interviewers were given a three months training in CIDI and interview procedures by accredited trainers from Europe, and the instruments were then pre-tested in a pilot study.

**Sociodemographics**

Sociodemographic information regarding the respondents included gender, age, country of birth, ethnic group, marital status, literacy, religious activity, the route followed during displacement, and the shelter of residence.
Trauma

Three measures captured childhood trauma (family history, childhood maltreatment, traumatic childhood events), and one measure captured trauma related to displacement.

Traumatic load due to family history of psychiatric illness was denoted by mental problems in parents or siblings, captured by whether or not a parent or sibling had mental illness or a parent had alcohol problems. Childhood maltreatment (or physical abuse in childhood) was given by the total number of yes-responses obtained through the question ‘When you were growing up, did anyone in your household do some of the following things often to you?’, followed by a series of thirteen questions with a “yes-no” response to each, comprising ‘insulting you or swearing at you’, ‘threatened to hit’, ‘pushed, grabbed or shoved you’, and so on, including ‘choked you’ and ‘burned and scalded you’. Traumatic childhood life events were evaluated by the total number of affirmative responses among 16 questions derived from Harvard Trauma Questionnaire, Section I (Mollica et al., 1998a; 1998b), and were posed regarding the life period before 12 years of age. Traumatic life events related to displacement were evaluated by the same questionnaire, but posed regarding the period beginning two years before displacement and up to the time of arrival at the shelters.

Mental distress

Mental distress was evaluated by the self-report ninety-item Symptom Check List (SCL-90-R), which is a generally standardized instrument that helps evaluate a broad range of psychological problems and symptoms of psychopathology (Derogatis, 1994). It has been tested (Schmitz et al., 2000; Olsen et al., 2006), and employed in various cultural and clinical settings including those concerning trauma victims (Lev-Wiesel & Amir, 2000; Wang et al., 2000; Punamäki et al., 2005). The symptom level of each item of the SCL-90-R is rated by the subject on a five-point scale of distress, from “not at all” (score 0) to “extremely” (score 4). The average of the scores of these 90 items, called the global severity index (GSI), indicates an overall degree of mental distress. The items of the SCL-90-R are known to factorise into nine primary symptom dimensions, denoted by SOM (somatisation, 12 items), OCD (obsessive-compulsive, 10 items), IPS (interpersonal sensitivity, 9 items), DEP (depression, 13 items), ANX (anxiety, 10 items), HOS (hostility, 6 items), PHO (phobic anxiety, 7 items), PAR (paranoid ideation, 6 items), and PSY (psychoticism, 10 items), comprising in all 83 items. The remaining 7 items are called additional items and are usually not reported. For each of these nine dimensions, the average score of the items comprising this dimension constitutes the score of that dimension. Since a relatively large number of
subjects will usually have a score 0 (not at all) for a given item, and the score digits range from 0 to 4, the mean scores for a large group often obtain values less than 1.

**Quality of life**

Quality of life was assessed by an instrument called the WHOQOL-BREF, developed and validated by WHO in several studies (Skevington et al., 2004; Trompenaars et al., 2005). Besides the first two items of general nature, the remaining 24 items of the instrument are known to factorise into four domains of quality of life, denoted by ‘physical health’ (domain 1, 7 items), ‘psychological’ (domain 2, 6 items), ‘social relationships’ (domain 3, 3 items), and ‘environment’ (domain 4, 8 items), respectively.

**Coping strategies**

Coping strategies were assessed by a list of ten items adapted for the survey. To each item, the respondent was asked to respond with “this is like me” or “this is not like me”. The instrument roughly captures the three coping strategies often described in the literature as task-oriented, avoidance-oriented, and emotion-oriented coping strategies (Endler & Parker, 1990; 1994; Rafnsson et al., 2006).

**Perceived social support**

Perceived social support was captured in a series of eight statements, partly in line with the Social Provisions Scale (Cutrona & Russell, 1987), with the response “agree” or “disagree” to each statement. These statements roughly capture the components reassurance of worth, reliable alliance, and guidance. The total number of “agree” among these eight items constituted a measure of the overall perceived social support.

**Self-reported indicators of living conditions**

The subjects were asked a number of questions with a “yes-no” response to each, that captured the living conditions of the shelters. These included questions about whether the accommodation was too cramped, a bed/mat/mattress was available, private facilities were available, toilets or latrines were available, if there was sufficient food and water, if protection against animals and insects was provided, if the organizational support was enough, if the subject’s health was good or very good, or whether the subject had experienced loss of general benefits during the last year.
Statistical methods

All the statistical analyses were performed using the SPSS software version 14.0 (SPSS, 2005). All statistical tests were two-sided. Chi-square tests were used when comparing two proportions or when testing independence between two categorical variables. Differences between two groups for quantitative scores adjusting for other variables were evaluated by ANCOVA. Partial correlation coefficients were calculated to assess relationships between two quantitative variables when controlling for other variables. Factor analysis was performed by the method of principal components with varimax rotation.

When predicting a quantitative score with a set of relevant variables, we employed multiple linear regressions. Binary logistic regression was performed when comparing two groups with regards to a set of continuous or categorical predictor variables.

Structural Equations Modelling by AMOS 6.0 (SPSS, 2005) was employed to evaluate the mediating and moderating effects of the variables specified by models with path diagrams. This software performs analysis of moment structures through maximum likelihood estimation. The approach includes, as special cases, many well-known conventional techniques, including the general linear model, regression analysis, and common factor analysis. We employed standardized variables (obtained by subtracting the mean and dividing by the standard deviation) in path analysis and in regression analysis, in order to reduce the problem of multicollinearity which partly (but not exclusively) arises when interaction terms are introduced in the analysis.

To investigate whether a variable X is a mediator between variable A and variable B by means of path analysis, one draws a direct path from A to B in a first analysis, and then adds in the next analysis two paths, one going from A to X and the other from X to B. If X is a significant mediator, the weight of the path from A to B will decrease substantially in the second analysis compared to the first.

To investigate whether a variable X moderates the effect from variable A to variable B by means of path analysis, the interaction term XA (X multiplied by A) is constructed. The analysis then contains a path from A to B, from X to B, and from XA to B. If the path from XA to B is significant, then X is said to be a significant moderator.

There are a large number of measures in the literature used for evaluating model fit and model comparison, derived from different theoretical perspectives, and there is no consensus about which measures that are generally suitable. However, it is generally
agreed that the significance of the chi-square measure of fit is not appropriate (Bentler & Bonett, 1980) when the sample size is larger than about 100 (as is the case in our studies), because this measure is then almost always significant for all models.

For model comparisons (in Paper II), we have selected seven measures that capture model evaluation from several different theoretical perspectives: CMIN/df is the minimum value of sample discrepancy divided by its degrees of freedom (range 1 to more; smaller values preferable); AGFI, the adjusted goodness of fit index (larger values preferable); CFI, the comparative fit index in comparison with the independence model (range 0 to 1; larger values preferable); NNFI (TLI), the non-normed fit index in comparison with the independence model (range 0 to 1; larger values preferable); RMSEA, the root mean square error of approximation based on population discrepancy (range 0 to more; smaller values preferable); AIC, the Akaike information criterion for which simple well-fitting models get low values and complex poorly-fitting models get high values (smaller values preferable); and HOELTER (0.05), the largest sample size for which one would accept at 0.05 significance that the model is correct (larger values preferable). AMOS 6.0 calculates all these measures.

Ethical considerations

Before commencing the study, ethical clearance was obtained from the Ethiopian Science and Technology Agency as well as from the Addis Ababa Disaster Preparedness and Prevention Commission Bureau.

As victims of war, trauma and famine, our subjects were very vulnerable persons. They were highly dependent on the authorities, charity organizations, and the neighbouring community for their survival. Therefore, they would be inclined to accept participation in the study irrespective of what they would actually prefer.

We also envisaged the possibility that our asking for detailed recall of what they had been through would perhaps arouse negative psychological consequences that would create increased distress, requiring substantial help that was outside the domain of the research project.

Another problem that could arise in such research was that the subjects might have expectations that are far beyond what we intended to do. Our objective was to investigate and understand the processes behind their conditions and their experiences, but the risk was that they would perceive the research project as an inventory of their
immediate needs, or something which would give them betterments in the short term perspective.

Selecting a relatively small sample from this population for participation also risked to be construed as a project that gave special favours to some selected subjects from the population.

However, most of our fears based on these ethical considerations turned out to be unnecessary. The participants were, on the contrary, very positive to partaking in the project, and we had virtually no refusals. We were particular about explaining the goals of the research project. We made it clear that participation was voluntary, and a refusal to participate would not lead to any negative consequences for the individual or his/her family, and also that agreeing to participate would not lead to special favours.

The subjects were particularly appreciative of our questions involving not only material aspects but also emotional aspects, and that we were interested in taking time to hear about their traumatic experiences. Underneath the smiling faces of quite a number of the respondents, there lay deep sorrow. This can be illustrated by an elderly man who, when asked if he was willing to share his deep-seated emotional problems, said, “Many have already visited us here with their cameras and with some food and plastic coverings for the leaking tents, but nobody has bothered to spend some time with us, to listen to what we have been through”, and he started crying. The survey made it clear to us that besides the emergency relief operations offered in conjunction with disasters or crises, there need to be long-term help initiatives to alleviate also the psychological wounds that may last for years.
Results with comments

Gender differences in trauma, coping & social support (Paper I)

For the 1200 subjects living in the shelters of Addis Ababa, we investigated the relationships between trauma, coping, social support, and sociodemographic circumstances, particularly with regards to gender differences. The mean age was 34.2 (±9.4) years in women and 33.7 (±10.5) years in men.

On the whole, the subjects had gone through major changes in their professions, lifestyles, and social roles as a result of displacement. Most of them were now unskilled labourers (41.0% of women, 56.1% of men), in contrast to before displacement (3.7% and 6.4%, respectively). Before displacement, a majority of today’s unskilled labourers were housewives among women and students or skilled labourers among men.

Two-thirds of the respondents in our study were women (Table 1). Of these, 28.2% were separated from their spouses with unknown fate, and 25.5% were widowed, partly reflecting that many males were still engaged in combat activities, or had managed to flee to safer places in fear of reprisals by the victors, leaving behind their spouses and children.

Thus, widowed women reported significantly more displacement related traumatic life events than married women (Table 2), and separated women reported significantly less perceived social support than married women (Table 3).

On both sides of the boundary between northern Ethiopia and Eritrea, the lowlanders were predominantly indigenous Muslim dwellers, while the highlanders were Christian settlers (mostly of Orthodox Tewahido Church) from neighbouring highlands at a later date. Consequently, a vast majority of the displaced persons came from the highlands, our sample containing 95.1% Christians.

The route favoured by the displaced persons during their exodus was the central route along the highway to Addis Ababa, as this was relatively the least hazardous for most mothers with their children coming from the Eritrean town of Asmara and its environs. The alternative routes, mainly the eastern route through Djibouti and the western route through Sudan, were much more hazardous, as reflected by higher displacement-related traumatic events for respondents of both genders who had taken these routes.
Thus, these alternative routes were taken by a considerably higher proportion of men than women (Table 1).

Table 1: Sociodemographic characteristics of the respondents

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Women Number (%)</th>
<th>Men Number (%)</th>
<th>All Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>749 (62.4)</td>
<td>451 (37.6)</td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 – 30 yrs</td>
<td>305 (40.8)</td>
<td>201 (44.6)</td>
<td>506 (42.2)</td>
</tr>
<tr>
<td>31 – 40 yrs</td>
<td>304 (40.6)</td>
<td>138 (30.6)</td>
<td>442 (36.8)</td>
</tr>
<tr>
<td>41 – 50 yrs</td>
<td>95 (12.7)</td>
<td>81 (18.0)</td>
<td>176 (14.7)</td>
</tr>
<tr>
<td>51 – 60 yrs</td>
<td>44 (5.9)</td>
<td>31 (6.9)</td>
<td>76 (6.3)</td>
</tr>
<tr>
<td>Country of birth: Eritrea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>378 (50.5)</td>
<td>185 (41.0)</td>
<td>563 (46.9)</td>
</tr>
<tr>
<td>Other</td>
<td>366 (48.9)</td>
<td>261 (57.9)</td>
<td>627 (52.3)</td>
</tr>
<tr>
<td>Ethnic group:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tigrawai</td>
<td>431 (57.5)</td>
<td>106 (23.5)</td>
<td>537 (44.8)</td>
</tr>
<tr>
<td>Amhara</td>
<td>295 (39.4)</td>
<td>234 (51.9)</td>
<td>529 (44.1)</td>
</tr>
<tr>
<td>Oromo</td>
<td>22 (2.9)</td>
<td>96 (21.3)</td>
<td>118 (9.8)</td>
</tr>
<tr>
<td>Other</td>
<td>5 (0.6)</td>
<td>15 (3.4)</td>
<td>16 (1.4)</td>
</tr>
<tr>
<td>Marital status:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>202 (27.0)</td>
<td>233 (51.7)</td>
<td>435 (36.3)</td>
</tr>
<tr>
<td>Widowed</td>
<td>191 (25.5)</td>
<td>11 (2.4)</td>
<td>202 (16.8)</td>
</tr>
<tr>
<td>Separated</td>
<td>211 (28.2)</td>
<td>16 (3.5)</td>
<td>227 (18.9)</td>
</tr>
<tr>
<td>Divorced</td>
<td>66 (8.8)</td>
<td>13 (2.9)</td>
<td>79 (6.6)</td>
</tr>
<tr>
<td>Never married</td>
<td>79 (10.5)</td>
<td>178 (39.5)</td>
<td>257 (21.4)</td>
</tr>
<tr>
<td>Literacy:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>410 (54.7)</td>
<td>435 (96.5)</td>
<td>845 (70.4)</td>
</tr>
<tr>
<td>No</td>
<td>339 (45.3)</td>
<td>16 (3.5)</td>
<td>355 (29.6)</td>
</tr>
<tr>
<td>Attends religious services regularly:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>420 (56.1)</td>
<td>191 (42.3)</td>
<td>611 (50.9)</td>
</tr>
<tr>
<td>No</td>
<td>329 (43.9)</td>
<td>260 (57.7)</td>
<td>589 (49.1)</td>
</tr>
<tr>
<td>Route followed during displacement:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central route</td>
<td>641 (85.6)</td>
<td>293 (65.0)</td>
<td>934 (77.8)</td>
</tr>
<tr>
<td>Eastern (Djibouti)</td>
<td>91 (12.1)</td>
<td>92 (20.4)</td>
<td>183 (15.3)</td>
</tr>
<tr>
<td>Western (Sudan)</td>
<td>11 (1.5)</td>
<td>57 (12.6)</td>
<td>68 (5.7)</td>
</tr>
<tr>
<td>Other</td>
<td>6 (0.8)</td>
<td>9 (2.0)</td>
<td>15 (1.2)</td>
</tr>
<tr>
<td>Shelter of residence:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kaliti</td>
<td>220 (29.4)</td>
<td>179 (39.7)</td>
<td>399 (33.3)</td>
</tr>
<tr>
<td>Kore</td>
<td>529 (70.6)</td>
<td>272 (60.3)</td>
<td>801 (66.8)</td>
</tr>
</tbody>
</table>
Table 2: Relationships between total traumatic life events related to displacement and sociodemographic characteristics*

<table>
<thead>
<tr>
<th>Sociodemographic characteristic</th>
<th>Women (n=741)</th>
<th>Men (n=426)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.016</td>
<td>0.124*</td>
</tr>
<tr>
<td>Birth country: Ethiopia (vs. Eritrea)</td>
<td>0.001</td>
<td>0.087</td>
</tr>
<tr>
<td>Ethnic group: Amhara (vs. Tigrawai)</td>
<td>0.010</td>
<td>-0.045</td>
</tr>
<tr>
<td>Oromo (vs. Tigrawai)</td>
<td>0.030</td>
<td>-0.053</td>
</tr>
<tr>
<td>Marital status: Widowed (vs. Married)</td>
<td>0.108**</td>
<td>-0.019</td>
</tr>
<tr>
<td>Separated (vs. Married)</td>
<td>0.050</td>
<td>-0.070</td>
</tr>
<tr>
<td>Divorced (vs. Married)</td>
<td>0.054</td>
<td>-0.074</td>
</tr>
<tr>
<td>Never married (vs. Married)</td>
<td>-0.065</td>
<td>0.033</td>
</tr>
<tr>
<td>Literacy: Yes (vs. No)</td>
<td>0.031</td>
<td>-0.007</td>
</tr>
<tr>
<td>Attends religious services: Yes (vs. No)</td>
<td>0.108**</td>
<td>0.020</td>
</tr>
<tr>
<td>Route taken: Eastern (vs. Central)</td>
<td>0.088*</td>
<td>0.042</td>
</tr>
<tr>
<td>Western (vs. Central)</td>
<td>0.110**</td>
<td>0.275***</td>
</tr>
<tr>
<td>Shelter of residence: Kaliti (vs. Kore)</td>
<td>0.023</td>
<td>0.129**</td>
</tr>
</tbody>
</table>

*The table gives partial correlation coefficients between traumatic life events related to displacement, and each sociodemographic characteristic when controlling for the remaining sociodemographics.

* p < 0.05; ** p < 0.01; *** p < 0.001.

The shelters in Kaliti consisted of former warehouses and similar structures with mud-walls and tin-roofs; up to 26 households had to share the four walls in these shelters. On the other hand, the houses at Kore shelters were made of small but detached (around 2m x 2m) structures made of Bamboo stem walls cemented by mud, and the roofs covered by canvas and plastic; each family had its own independent four walls. The larger amount of social contacts necessary with each other in the Kaliti shelters may thus be a likely explanation for why the respondents from Kaliti reported higher perceived social support than those from Kore. However, the Kaliti shelters had a considerably worse material standard than the Kore shelters, and Kore lay within a better neighbourhood and with a church nearby. This may possibly explain why Kaliti...
respondents reported higher displacement-related trauma, higher use of avoidance-oriented and emotion-oriented coping strategies, but a tendency to less of task-oriented coping.

Forced social isolation during displacement was significantly more common among women than men, particularly among women who regularly attended religious services. This was likely done to protect women, since they were more vulnerable to abuse and rape under such hard conditions. However, for all the remaining displacement-related traumatic life events, men reported having experienced them to a greater degree than that reported by women, significantly so for most of them.

Table 3: Relationships between perceived social support and sociodemographic characteristics

<table>
<thead>
<tr>
<th>Sociodemographic characteristic</th>
<th>Women (n=740)</th>
<th>Men (n=426)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.016</td>
<td>-0.056</td>
</tr>
<tr>
<td>Birth country: Ethiopia (vs. Eritrea)</td>
<td>-0.032</td>
<td>-0.089</td>
</tr>
<tr>
<td>Ethnic group: Amhara (vs. Tigrawai)</td>
<td>0.055</td>
<td>0.024</td>
</tr>
<tr>
<td>Oromo (vs. Tigrawai)</td>
<td>0.023</td>
<td>0.060</td>
</tr>
<tr>
<td>Marital status: Widowed (vs. Married)</td>
<td>-0.058</td>
<td>0.039</td>
</tr>
<tr>
<td>Separated (vs. Married)</td>
<td>-0.195***</td>
<td>-0.091</td>
</tr>
<tr>
<td>Divorced (vs. Married)</td>
<td>-0.034</td>
<td>-0.048</td>
</tr>
<tr>
<td>Never married (vs. Married)</td>
<td>0.042</td>
<td>0.005</td>
</tr>
<tr>
<td>Literacy: Yes (vs. No)</td>
<td>0.098**</td>
<td>-0.015</td>
</tr>
<tr>
<td>Attends religious services: Yes (vs. No)</td>
<td>0.109**</td>
<td>0.075</td>
</tr>
<tr>
<td>Route taken: Eastern (vs. Central)</td>
<td>-0.037</td>
<td>-0.047</td>
</tr>
<tr>
<td>Western (vs. Central)</td>
<td>-0.021</td>
<td>-0.016</td>
</tr>
<tr>
<td>Shelter of residence: Kaliti (vs. Kore)</td>
<td>0.101**</td>
<td>0.038</td>
</tr>
</tbody>
</table>

* The table gives partial correlation coefficients between perceived social support, and each sociodemographic characteristic when controlling for the remaining sociodemographics. 
* p < 0.05; ** p < 0.01; *** p < 0.001.
Studies in the literature on post-war trauma items have in many cases not published gender-specific values, but in those studies that report these, varying results have been found. A study with a Palestinian sample found that men reported a significantly higher level of lifetime trauma (Punamäki R-L., et al 2005), and in a study among Somali refugees in the UK, men reported significantly higher experience of a majority of trauma items (Bhui K., et al 2003). However, in a study in Kosovo two years after the war, men reported significantly higher trauma experience as regards imprisonment and serious injury than women, but lower as regards lack of shelter and combat situation (Ahern J., et al 2004). Also, a study among Kosovar refugees in the USA did not find any relationship between gender and trauma (Ai AL., et al 2002).

We obtained several interrelationships between displacement-related trauma, perceived social support, and coping strategies. However, it is difficult to draw clear conclusions from these in terms of the directions of causation, since all the information was gathered retrospectively from each respondent during the interview, which was conducted about six years after the respondents had arrived at the shelters.

Trauma during displacement was positively correlated with emotion-oriented coping in both genders, and with task-oriented coping in women. Although the types of life events exposed to by an individual are in general influenced by the coping strategies employed by him or her, this direction of causation is less likely in connection with traumatic life events generated by postconflict or post-war disasters. Thus, our results suggest that most likely, trauma during displacement led to an increased use of emotion-oriented coping in both genders, and of task-oriented coping in women.

Task-oriented coping was also positively correlated with the marital status of being married, so that divorced women and never married men were significantly less likely to use task-oriented coping.

Perceived social support as well as coping strategies are proxy for the individual’s personality, and they presumably all interact with each other. In our study, perceived social support was positively correlated with task-oriented coping in both genders. This explains that perceived social support and task-oriented coping were both simultaneously higher in men compared to women, but the reasons for these gender differences are unclear. A large proportion of women (45.3%) lacked literacy (reading ability), and since being literate was in women associated with higher perceived social support and higher use of task-oriented coping, this lack of literacy may have contributed to these gender differences. Since most men (96.5%) were literate, a
reliable statistical comparison between the genders with regards to the role of literacy is difficult.

Also, a relatively larger proportion of women compared to men were born in Eritrea or belonged to the Tigrawai ethnicity, while most men had been transferred to Eritrea as civil servants from other regions, or had migrated there in search of better job opportunities. So women may have perceived their displacement to Addis Ababa on the whole as far more threatening and alien than men, leading to less perceived social support, which in its turn may be related to less use of task-oriented coping. Also, the women in this society are expected to be shy and timid as compared to men.
Effect of trauma on mental distress & quality of life (Paper II)

For the 1200 subjects living in the shelters of Addis Ababa, we explored here the likely pathways underlying the relationships between trauma, mental distress and quality of life, and we also investigated the moderating roles played by different coping strategies and perceived social support. Elucidating whether a characteristic is a mediator, a moderator, or an independent risk factor is helpful when planning rehabilitation or intervention strategies.

There is a conceptual difference between the psychological domain (domain 2) of the quality of life instrument WHOQOL-BREF, and the instrument SCL-90-R employed to measure mental distress. Whereas the latter instrument probes into 90 specific questions to measure the severity of distressing symptoms covering a wide spectrum of mental disorders, the former instrument essentially captures how the subject enjoys life or finds life meaningful and satisfactory. Only one of the six items of the psychological domain of quality of life is an open question about how often the subject has negative feelings such as blue mood, despair, anxiety or depression.

Also, a conceptual difference between the physical health domain (domain 1) of WHOQOL-BREF and the somatisation (SOM) dimension of SCL-90-R is worth noting. The former asks about how the subject’s physical health prevents him or her from performing the activities of daily living and how much medical treatment is needed, whereas the latter asks about the occurrence of symptoms like pain, nausea, trouble getting breath, numbness or tingling in parts of the body – symptoms that are often associated with the masked forms anxiety and depression.

Mental distress

We found that women had higher GSI levels of the mental distress instrument SCL-90-R compared to men (Figure 1), as has been found in many other studies (Derogatis, 1994; Schmitz et al., 2000; Olsen et al., 2006). Gender differences in each of the nine SCL-90-R dimensions were investigated by ANCOVA, adjusting for the sociodemographic variables. Women had significantly higher mean scores than men on all the dimensions except for paranoid ideation, which showed no significant gender difference. The dimension DEP (depression) had particularly high mean levels in both genders, compared to the other dimensions.
Figure 1: Mean scores and 95% confidence intervals for the nine mental distress dimensions of the SCL-90-R separately for the two genders.

Among women, the GSI increased significantly with age, in contrast to a decrease with age found in general population studies in the west (Derogatis, 1994; Schmitz et al., 2000; Olsen et al., 2006). This suggests that the very poor living conditions existing in the shelters are experienced as still harder by the older women, likely due to deteriorating physical and mental abilities with age and lack of support for the elderly that otherwise prevails in general populations. This is further reflected by our result that essentially each domain of quality of life decreased significantly with age in both genders.

Each of the four trauma variables predicted significantly higher global mental distress GSI in both genders. Traumatic life events related to displacement and mental problems in parents or siblings predicted significantly higher mental distress for essentially all of the SCL-90-R dimensions in both genders.

**Quality of life**
Among men, the status of being married was associated with a higher quality of life in some domain, as compared to being never married, widowed, separated or divorced. This result is in line with the literature. Among women, the quality of life when being widowed, separated or divorced, was not significantly different compared to being married, although for the never married it was associated with significantly lower domain 3 (social relationships). However, surprisingly, we found that never married women had a significantly higher quality of life in the other three domains (physical health, psychological, environment) than married women. A possible reason for this
could be that married women have a larger responsibility to cater for the family and the husband, and thereby sacrifice some quality of life in these domains.

We found that each of the four trauma variables predicted lower quality of life in both genders, significantly for quite a few of the cases. Traumatic life events related to displacement predicted significantly lower quality of life in all the domains for women.

**Mental distress as a mediator between trauma and quality of life**

We explored the pathways underlying the effects of trauma, leading to an increase in mental distress and a decrease in quality of life. For this we use Structural Equations Modelling by AMOS 6.0 (SPSS, 2005) for path analysis. In all the path analyses, we have controlled (adjusted) for the effects for age and gender, but the paths from them to mental distress and quality of life are not shown in the path diagrams.

We compared the following four models of path analysis with each other:

**Model A:** Each of the four trauma variables affects both mental distress and quality of life directly and independently; and mental distress and quality of life affect each other (Figure 2).

**Model B:** Each of the four trauma variables affects mental distress, which in its turn affects quality of life, so that mental distress acts as a mediator. Moreover, traumatic life events related to displacement also have a direct effect on quality of life (Figure 3).

**Model C:** Each of the four trauma variables affects mental distress, which in its turn affects quality of life, so that mental distress acts as a mediator.

**Model D:** Each of the four trauma variables affects quality of life, which in its turn affects mental distress, so that quality of life acts as a mediator.
Figure 2: Model A: Each of the four trauma variables affects both mental distress and quality of life directly and independently; and mental distress and quality of life affect each other. Controlled for age and gender.

We found that Model B (Figure 3) gave a good fit, and was the best fit among the models considered, assessed by various measures of model fit available in the literature. Each of the three measures of childhood trauma as well as trauma during displacement was associated with increased mental distress in the subjects. Mental distress was a mediator for the effects of trauma on quality of life – trauma increased mental distress, which in its turn decreased the quality of life. Trauma during displacement decreased quality of life also directly, particularly in women. Measures of mental distress and quality of life have earlier been employed simultaneously in some studies, but these have only been analysed individually in group comparisons without any investigation of the mediating or moderating roles of the variables (Lev-Wiesel & Amir, 2000; Wang et al., 2000; Carlsson et al., 2006).
Figure 3: Model B: Each of the trauma variables affect mental distress, which in its turn affects quality of life, so that mental distress acts as a mediator. Moreover, traumatic life events related to displacement also have a direct effect on the quality of life. Controlled for age and gender. (The entire given path coefficients and correlations are significant at level p < 0.001).

We found that traumatic life events related to displacement were reported to be considerably higher and more important than trauma before the displacement conditions. This is also reflected by the optimum Model B (Figure 3) – of the paths from each of the four trauma variables to quality of life, only the one from traumatic life events related to displacement was significant.

**Perceived social support**

Perceived social support was not associated with mental distress in our study. This implies that perceived social support did not act as a mediator for the effects of trauma on mental distress. A study on torture survivors in Nepal (Emmelkamp et al., 2002) also found that perceived social support was not related to mental distress, although they found a relationship between “received” social support and mental distress.

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Punamäki et al. (2005) found that among traumatized Palestinians, “received” social support was a mediator between trauma and mental distress. A study in post-war Kosovo found that higher social support was associated with lower posttraumatic stress scores (Ahern et al., 2004). Among resettled Sudanese refugees in Australia, perceived social support from their ethnic community, but not from the wider community, was related to lower mental distress (Schweitzer et al., 2006).

In our study, although perceived social support was not related to mental distress, it was associated with higher quality of life instead. We did not find any significant interaction between social support and trauma. However, Kaspersen et al. (2003) found such an interaction; social support had a beneficial effect for UN soldiers with low but not high trauma exposure, and for relief workers with high but not low trauma exposure. So it is likely that the significance of perceived social support is different for different post-trauma circumstances or for different cultural contexts, and the results may also vary depending on how the elements of social support were measured.

**Coping strategies**

Task-oriented coping was found to be beneficial, by reducing mental distress in women and by increasing quality of life in men. Its moderating role for the effect of mental distress on quality of life was beneficial particularly when high mental distress was present. Task-oriented coping has been shown to be of benefit (and emotion-oriented coping has been shown to be detrimental) in the context of mental distress and psychopathology in several studies (Endler & Parker, 1990; Kitaoka-Higashiguchi et al., 2003; McWilliams et al., 2003). Gender differences in the use of coping behaviour have been known (Endler & Parker, 1990; 1994; Rafnsson et al., 2006) such that women score higher on emotion-oriented and avoidance-oriented coping, and men score higher on task-oriented coping. However, the gender specific difference we found regarding the influence of task-oriented coping on mental distress compared to its influence on quality of life, has not been reported earlier.

We found avoidance-oriented coping to be beneficial in women by reducing mental distress and increasing quality of life. Its moderating role was particularly beneficial when mental distress was low. Emotion-oriented coping was in our study related to higher mental distress and lower quality of life in women, consistent with the literature.
Living conditions

Living conditions in the shelters, like the availability of food and water, sleeping comforts, latrines, and support and benefits from the helping organizations, were associated with higher quality of life in several domains, even after controlling for the effects of mental distress and traumatic life events related to displacement.

Mental distress and trauma, on the other hand, were significantly associated with lower quality of life in all domains, even after controlling for the living conditions. In fact, these latter correlations were stronger than those obtained for the living conditions. This suggests that intervention strategies should include both psychosocial and psychiatric help as well as help to improve the material living conditions, since both were beneficial on their own.
Placement in shelters vs. community setting (Paper III)

We compared here the group of displaced persons living in the shelters in Addis Ababa with the group living in the community setting of Debre Zeit, with respect to their quality of life and their mental health. Our goal was to identify the characteristics that contribute to differences between these two groups in these respects. Since most participants from Debre Zeit were women (110 out of totally 120 subjects), we compared only these 110 women with the 749 women participants of the sample of 1200 subjects from the shelters.

We found that compared to the shelters, the subjects from Debre Zeit contained a higher proportion born in Ethiopia, a higher proportion married, reported higher traumatic life events, employed more task-oriented coping, and perceived higher social support. Also, the subjects from Debre Zeit had significantly better living conditions in all aspects except as regards reporting having good or very good health, where they did not differ from the shelters.

Mental distress, as assessed by the GSI, did not differ significantly between Debre Zeit and the shelters, although the subjects of Debre Zeit had reported significantly higher trauma, and higher trauma has earlier been shown to be associated with higher mental distress (Ager, 1991; Paper II). This may be due to Debre Zeit subjects having significantly higher task-oriented coping. We have found in an earlier study that higher task-oriented coping was associated with significantly lower mental distress among women, and that task-oriented coping was a moderator by attenuating the effect of trauma on mental distress (Paper II).

However, the subjects of Debre Zeit reported significantly higher quality of life in all the four domains. To investigate which of the characteristics accounts for the difference in quality of life between Debre Zeit and the shelters, we performed binary logistic regression with the group membership as the dependent variable, and controlling for various groups of characteristics in turn, as shown in Table 4. Controlling for all the characteristics except for the living conditions did not remove the significantly better quality of life for the Debre Zeit subjects. However, after controlling for the living conditions alone, there was no longer any significant difference between the groups in the three quality of life domains 1, 2 and 4, but the difference remained for domain 3. Also, controlling for all the characteristics including the living conditions resulted in lack of significant difference in quality of life between the groups for all the domains.
We performed further analyses to identify the individual characteristics that account for the difference between the groups in each domain of quality of life. For a given quality of life domain, we performed binary logistic regressions, employing group membership as the dependent variable. Among the independent variables, we first entered this given quality of life domain, and then employed the (likelihood ratio) stepwise forward selection method to select from all the characteristics excluding the remaining three quality of life domains. At each stage of the forward selection, we examined the significance level of the difference between the groups as regards this given quality of life domain.

The results are given in Table 5. We found that for domain 1 and domain 2, already the first item that was selected, namely “Do you have protection against animals/insects?” removed the significance of the difference between the groups. For domain 4, two items of living conditions were needed further to be selected before the significant difference between the groups was removed. For domain 3, still seven more items were needed to be selected (two regarding living conditions and five from the rest) before the significant difference between the groups was removed.

It is interesting that the living condition that constitutes protection from animals (rodents) and insects, turned out to be of major importance for quality of life. A study from refugee camps in West Africa showed that the infestation of rodents, and consequently the risk of Lassa fever, was highly increased for the residents of dwellings with poor quality housing and poor external hygiene (Bonner et al., 2007). Several studies have shown that the quality of the shelters (or dwellings) contributes significantly to the well-being of the internally displaced or the refugees (Ashmore et al., 2003). In a country like Ethiopia, where malaria is endemic, measures that give protection from this disease are important. These measures include mosquito proofing of night shelters which reduce the exposure to mosquito biting (Medlock et al., 2007), or employing insecticide-treated plastic tarpaulins that kill high proportions of mosquitoes (Graham et al., 2002).

In summary, placement and rehabilitation of displaced persons in the context of a community setting thus seem to be better than in the shelters. Community settings seem more conducive to task-oriented coping, higher perceived social support and a favourable marital life. Moreover, community settings seem to offer much better living conditions, and these account for significantly higher quality of life. If it is not possible to find placement opportunities in community settings, our study suggests that measures to improve specific living conditions in the shelters are likely to lead to a considerable increase in quality of life. These measures include especially protection from animals (rodents) and insects, but also include accommodating for private.
facilities and offering a bed or a mattress to sleep on. Such measures may yield high benefits for relatively low costs and efforts.
Table 4: Comparisons between Debre Zeit and the shelters for each the quality of life domain, when controlling in turn for various groups of characteristics by binary logistic regression.

<table>
<thead>
<tr>
<th>Group of characteristics that is controlled for*</th>
<th>Quality of life (WHOQOL-BREF)</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domain 1 (physical)</td>
<td>Domain 2 (psychological)</td>
<td>Domain 3 (social relations)</td>
<td>Domain 4 (environment)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beta</td>
<td>P value</td>
<td>Beta</td>
<td>P value</td>
<td>Beta</td>
<td>P value</td>
<td>Beta</td>
</tr>
<tr>
<td>None</td>
<td>0.136</td>
<td>0.003</td>
<td>0.134</td>
<td>0.001</td>
<td>0.241</td>
<td>0.000</td>
<td>0.363</td>
</tr>
<tr>
<td>Socio-demographics</td>
<td>0.119</td>
<td>0.014</td>
<td>0.128</td>
<td>0.005</td>
<td>0.188</td>
<td>0.000</td>
<td>0.362</td>
</tr>
<tr>
<td>Trauma background</td>
<td>0.210</td>
<td>0.000</td>
<td>0.184</td>
<td>0.000</td>
<td>0.263</td>
<td>0.000</td>
<td>0.423</td>
</tr>
<tr>
<td>Coping strategies</td>
<td>0.158</td>
<td>0.001</td>
<td>0.153</td>
<td>0.001</td>
<td>0.255</td>
<td>0.000</td>
<td>0.388</td>
</tr>
<tr>
<td>Perceived social support</td>
<td>0.100</td>
<td>0.030</td>
<td>0.091</td>
<td>0.036</td>
<td>0.207</td>
<td>0.000</td>
<td>0.318</td>
</tr>
<tr>
<td>Living conditions</td>
<td>-0.040</td>
<td>0.565</td>
<td>-0.058</td>
<td>0.361</td>
<td>0.142</td>
<td>0.010</td>
<td>-0.026</td>
</tr>
<tr>
<td>Mental distress</td>
<td>0.189</td>
<td>0.000</td>
<td>0.134</td>
<td>0.001</td>
<td>0.252</td>
<td>0.000</td>
<td>0.400</td>
</tr>
<tr>
<td>All the above except living conditions</td>
<td>0.182</td>
<td>0.003</td>
<td>0.188</td>
<td>0.001</td>
<td>0.193</td>
<td>0.000</td>
<td>0.420</td>
</tr>
<tr>
<td>All the above including living conditions</td>
<td>-0.009</td>
<td>0.922</td>
<td>-0.032</td>
<td>0.712</td>
<td>0.124</td>
<td>0.103</td>
<td>0.041</td>
</tr>
</tbody>
</table>

Positive beta values indicate that Debre Zeit has higher quality of life; negative beta values indicate that the shelters have higher quality of life.
Table 5: Binary logistic regression comparing quality of life domains among Debre Zeit vs shelters, controlling for characteristics added by stepwise selection until the difference is no longer statistically significant.

<table>
<thead>
<tr>
<th>Characteristics that are cumulatively controlled for in forward stepwise selection</th>
<th>Quality of life (WHOQOL-BREF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain 1 (physical)</td>
<td>Domain 2 (psychological)</td>
</tr>
<tr>
<td>Beta</td>
<td>P value</td>
</tr>
<tr>
<td>None</td>
<td>0.136</td>
</tr>
<tr>
<td>Do you have protection against animals/insects?</td>
<td>0.058</td>
</tr>
<tr>
<td>Are there private facilities or private places?</td>
<td></td>
</tr>
<tr>
<td>Is there a bed/mat/mattress available?</td>
<td>0.158</td>
</tr>
<tr>
<td>Traumatic life events related to displacement</td>
<td>0.185</td>
</tr>
<tr>
<td>Is there sufficient food/water?</td>
<td>0.152</td>
</tr>
<tr>
<td>Avoidance-oriented coping</td>
<td>0.171</td>
</tr>
<tr>
<td>Are there toilets/latrines?</td>
<td>0.160</td>
</tr>
<tr>
<td>Country of birth</td>
<td>0.159</td>
</tr>
<tr>
<td>Marital status</td>
<td>0.131</td>
</tr>
<tr>
<td>Ethnic group</td>
<td>0.119</td>
</tr>
</tbody>
</table>

Positive beta values indicate that Debre Zeit has higher quality of life; negative beta values indicate that the shelters have higher quality of life.
Comparing PTSD in Algeria, Cambodia, Ethiopia & Gaza
(Paper IV)

The purpose of this study was to establish the prevalence rates of and risk factors for posttraumatic stress disorder (PTSD) in four postconflict, low-income countries, namely two from Africa (Algeria and Ethiopia), one from Asia (Cambodia), and one from the Middle East (Gaza).

In an epidemiological survey conducted between 1997 and 1999 among survivors of war or mass violence (aged over 16 years), samples were selected randomly from community populations in Algeria (n=653), Cambodia (n=610), Ethiopia (n=1200), and Gaza (n=585).

We found that except for the Algerian sample, the remaining three samples contained significantly more women than men. Also, the mean ages of the four samples differed from each other significantly. The distributions of marital status, number of children, education, and religion were also significantly different across the four samples.

The prevalence rate of assessed PTSD was 37.4% in Algeria, 28.4% in Cambodia, 15.8% in Ethiopia, and 17.8% in Gaza (de Jong JTVM et al., 2001)

Table 6 shows the main results regarding risk factors for lifetime PTSD. Conflict-related trauma after age 12 years was the only risk factor for PTSD that was present in all the four samples. Torture was a risk factor in all the samples except Cambodia. Psychiatric history and current illness were risk factors in Cambodia and Ethiopia. Poor quality of camp was associated with PTSD in Algeria and in Gaza. Daily hassles were associated with PTSD in Algeria. Youth domestic stress, death or separation in the family, and alcohol abuse in parents were associated with PTSD in Cambodia.

Thus, we found that using the same assessment methods, a wide range of rates of symptoms of PTSD were found among four low-income populations who have experienced war, conflict, or mass violence. We identified specific patterns of risk factors per country. Our findings indicate the importance of contextual differences in the study of traumatic stress and human rights violations.
Table 6: Lifetime PTSD and Adjusted Odds Ratios of Lifetime Domains Adverse Events in Algeria, Cambodia, Ethiopia, and Gaza

<table>
<thead>
<tr>
<th>Adverse Event</th>
<th>Algeria (n=653)</th>
<th>Cambodia (n=610)</th>
<th>Ethiopia (n=1200)</th>
<th>Gaza (n=585)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adjusted OR (95% CI)</td>
<td>P value</td>
<td>Adjusted OR (95% CI)</td>
<td>P value</td>
</tr>
<tr>
<td></td>
<td>2.0 (1.1-3.5)</td>
<td>.02</td>
<td>1.6 (0.8-3.0)</td>
<td>.15</td>
</tr>
<tr>
<td>Youth domestic stress</td>
<td>NA</td>
<td>NA</td>
<td>1.7 (1.1-2.6)</td>
<td>.01</td>
</tr>
<tr>
<td>Death or separation in family</td>
<td>NA</td>
<td>NA</td>
<td>1.7 (1.0-2.8)</td>
<td>.049</td>
</tr>
<tr>
<td>Conflict events</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before age 12 y</td>
<td>1.4 (0.9-2.0)</td>
<td>.09</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>After age 12 y</td>
<td>3.0 (1.3-6.8)</td>
<td>.01</td>
<td>4.0 (2.0-7.9)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>During flight</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Psychiatric history</td>
<td>2.4 (0.9-5.9)</td>
<td>.07</td>
<td>3.6 (2.3-5.4)</td>
<td>.001</td>
</tr>
<tr>
<td>Parent</td>
<td>NA</td>
<td>NA</td>
<td>0.8 (0.5-1.3)</td>
<td>.29</td>
</tr>
<tr>
<td>Sibling</td>
<td>NA</td>
<td>NA</td>
<td>1.9 (0.9-3.9)</td>
<td>.09</td>
</tr>
<tr>
<td>Alcohol abuse of parent(s)</td>
<td>NA</td>
<td>NA</td>
<td>2.2 (1.1-4.4)</td>
<td>.03</td>
</tr>
<tr>
<td>Current illness</td>
<td>1.0 (0.7-1.4)</td>
<td>.89</td>
<td>1.6 (1.0-2.7)</td>
<td>.05</td>
</tr>
<tr>
<td>General health (good)</td>
<td>0.4 (0.2-0.9)</td>
<td>.047</td>
<td>0.7 (0.5-1.2)</td>
<td>.17</td>
</tr>
<tr>
<td>Quality of camp (poor)</td>
<td>1.8 (1.3-2.5)</td>
<td>.001</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Daily hassles</td>
<td>1.6 (1.1-2.4)</td>
<td>.04</td>
<td>1.1 (0.7-1.7)</td>
<td>.61</td>
</tr>
</tbody>
</table>

PTSD, posttraumatic stress disorder; OR, adjusted odds ratio; CI, confidence interval; NA, not applicable;
Discussion and conclusions

This study is the first of its kind in the country to look into the psychosocial problems and needs of the displaced persons after a conflict. The study is justified because out of the 11 countries with significant number of internally displaced populations in the world, six are from Africa and this number fluctuates from year to year. The extent of the problem continues until the escalation of conflicts in Darfur, Somalia, Democratic Republic of Congo etc. becomes extinct. And this is achieved when: border conflicts and scramble for the African riches stop; more attention is given to good governance; peaceful conflict resolution and sharing of available resources in equity are in place. Africa has no alternative but win the war against poverty, illiteracy, HIV/AIDS, vector-borne disease and environmental degradation.

Over 50% of the continent’s population is below 18 years of age that needs proper attention and care. And yet, young women and children are susceptible to all forms of human-made misery. Therefore, necessary attention should be given to the most vulnerable and affected groups of the society.

In a male dominated hierarchical society like Ethiopia, where the burden of carrying most of the responsibility at home is on women’s shoulder, emphasis should be given to empowering the latter. Female genital mutilation, early marriage, abduction, poor birth control, economic dependence, illiteracy, domestic violence and many more basic human right violations affect the physical and emotional well being of most females in low-income countries.

It was with this notion in mind that we wanted to see the resultant effect of organized violence and coping styles/mechanisms adopted for survival.

In a highly religious rural Ethiopia where most ill-fate occurrences are attributed to the anger of the deity, people mostly women would say.. "Ersu yametawn Ersu eskimelisew", literally meaning, [while He is the Cause, He is also the Remedy] and thus adopting avoidance-oriented form of coping strategy. On the other hand, the existing social network which is no more seen (unfortunately) in the better off world is an asset where intervention workers should focus on. Perceived social support along with strengthened task-oriented coping strategy and improved living condition are factors that can revert emotional well being and hence improve quality of life of traumatized displaced individuals.
While the primary focus should be on preventing conflicts before they develop into a full scale skirmishes or wars, proper intervention programs should also be designed for those millions victims of organized violence world-wide in general and poverty stricken Africa in particular.

Relocating the displaced from isolated shelters to the community has dual advantages, i.e. the host community can look after unnecessary resource wastage and protect the environment as well as a feeling of belongingness and acceptance in the displaced enhances quicker emotional rehabilitation and hence less mental distress and better quality of life.

Continental and International Institutions like the AU and the UN bodies should thus give priority to psychosocial intervention programs alongside the provision of material support and protection of shelters from further physical attacks by the victors/persecutors. Within the United Nations Peacekeeping Mission deployed in many hotspots in the world, incorporating a qualified psychosocial intervention team is highly advisable.

Finally, we encourage similar studies supplemented by in-depth qualitative surveys that focus on long term effects of trauma resulting from organized violence with special emphasis on long term and short intervention programs in low-income countries be conducted.
(Summary in Amharic)

ከግርግሩበኋላየተከሰተመፈናቀልበጥዮጵያ፣የAEምሮቀውስናጥራትያለውሁይወትንችግር。
ከመቋቋም、ማህበራዊድጋፍናየመኖርያሁኔታዎቹAንፃርሸግመምጠጣቸው。
ከላይየተጠቀመባቸውየምርምርርEስመሠረተኃሳቡየሚያጠntagንወገኖችበቀጥታበዋናውAሥመራ-ዲስበባመንገድ፣በሱዳንበኩል፣ለበለዚያምEጅግበረሃማበሆነውAሰብበኩልወደጂቡቲናየመንበመሄድAዲስAበባሌሎችየገሪቱክፍሎችለመታደምበበቁወገኖችዙርያነው፡፡የዚህጥንትዋናውዓላማ！ማህበራዊድጋፍናችግርንየመቋቋምነባርዘዴምንያህልAዎንታዊምሉታዊፋይዳEንደሚኖራቸውበማስተዋልናከሌሎችAገሮችተመሳሳይየምርምርግ鲭ትጋርበማጣቀስምንምEንኳመሠረታዊየመፈናቀልምክንያቶችንማስወገድዋናውተመራጭቢሆንምየችግሩሰለባለሆኑግንተገቢውንመፍትሔለመጠቆምየመነሻመረጃለማግኘትነው፡፡በ1984ዓምመጨረሻበAዲስAበባከ17በላይበሚሆኑመጠለያዎቹከሰባ RCSውስጥሁለቱንማለትምየቆሬንናየቃሊቲንበEጣበመምረጥናበተመሳሳይሁኔታበነኚሁቦታዎችከተመዘገቡት8908Eድሜያቸውከ18ዓመትEስከ60ዓመትEማስገኝ1208ሰዎችንየጥናቱተሳታፊበማድረግየちょረመፈናቀልሁይወትከAካባቢጋርያለውንየሁለትዮሽጎን。
የምርምርውጤትለማመላከትሞክሯል፡፡የጥናትየተጠቀመባቸውመጠይቆችበበለፀጉትAገሮችናበAንዳንድበመልማትላይበሚገኝAገሮችጥቅምላይይዋሉናበዓለምጤናድርጅትታዋቂነትይላቸውሲሆኑ、ወደAማርኛበመተርጎምየመልEክትየዘታቸውናከAካባቢያዊባህልናትውፊትጋርመዛመዳቸውንፍተሻበማድረግሥራላይEንዲውሉከመደረጉበፊትA-51-.
ሰላሳ ከክርፋ እስከ እር በያከፋ ያቀረባቸው ዓታም ያሸጆች ከለው በመቶ ስብጥራቸው ይሁናት ያትምህርት ያትምህርት ጋር ሳታዎች ᷆ትቡር ከሚ ይህ ተፈናቃዮች ይህ በመፍጠር ሲሆን የልኝ የል የጋፍ ይህ የደብረዘይት ከንደነበሩ ይህ የተፈናቃዮች ይህ በተለይ ያለው የታች ይሁን ያትል ከማና በማነስ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የስደተኛና የሆና የስደተኛ ስብጥ ይህ በሚገባ የሚቀጥ የከፍተኛ በሆነ የሚያደርስው ያሚ ይህ በትውልድ ያገለጠ ይህ ከመጣጥ የሽብጥ ያቀጥ የሚችሉ የከፍተኛ በህብረተሰብ ይህ በወጥ የሚችሉ የከፍተኛ ከክርፋ ጊዜ ከሚ ይህ ስብጥ ያቀጥ የሆና የስደተኛ ስብጥ ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብጥ ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብጥ ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብጥ ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብጥ ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብጥ ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብጥ ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብጥ ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብጥ ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብጥ ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያዩ ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያوصف ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያوصف ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያوصف ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያوصف ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያوصف ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያوصف ያሸን ይለ የሚስጠው የተፈጥሮ የሆና የስደተኛ ስብ皙 ይህ ከሚ ይህ በሚለ ሲታች ይሁን ተፈጥሮ በተለያوصف ያሸን ይለ የሚስጠwald:

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Appendix A

HISTORY OF MODERN PSYCHIATRIC SERVICES IN ETHIOPIA

History:

Before the occupation of Ethiopia by the Italians in 1936, there were already few hospitals for a population of less than hundred thousand inhabitants of Addis Ababa. Menelik II, l’Hopital Lambe and the Dejazmatch Balcha Russian Red Cross hospitals were among them. While the first was run by the Ministry of Interior, the second belonged to a private firm the last belonged to the Russian Red Cross Society. During the occupation the Italians had managed to establish an additional new hospital for the indigenous Ethiopians on what was then the outskirts of Addis Ababa (now Amanuel Hospital) to alienate the blacks from the occupiers. When the Italians opened Hemanuel Ospedale per Indigini de Tecla Haimanot, they did not anticipate that it would be in the center of one of the largest open markets in Africa (Pankhurst, 1990; Fekadu D, 2007). Although the name of the hospital is taken from the neighboring Ethiopian Orthodox Church of Amanuel, the existence of the two institutions has always remained not as warm as it should be.

When the Italian fascists were chased out of the country after their five years of occupation, the city found itself surrounded by too many hospitals while there were only half of that number in the rest of the country (Alem et al 1995; Fekadu D 2007) Therefore, after the liberation of the country, the administration was left with a choice of either closing some of the hospitals or use them for other treatment purposes. Since Amanuel Hospital was in the outskirts of the city and the area was inhabited by the urban poor, the government then decided to use it as an asylum for mentally disturbed vagrant patients Giel R. (1986, 1999).

This continued for many years until the Ministry of Public Health was established in mid fifties and took over the management from the Ministry of Interior after which the Ministry of Public Health started “modern” treatment for the mentally ill.

Currently there are 25 psychiatrists, 251 psychiatric nurses, one social worker and no practicing clinical psychologist in the country. A psychiatrist population ratio is 1:32 million. Therefore, the burden of seeing acutely disturbed mentally ill lies on the psychiatric nurses throughout the country. Currently there are 71 psychiatric units in the regional and district hospitals, each unit operated by 1-2 psychiatric nurses. The only mental hospital in the country with a bed capacity of 250 is located in the capital (Alem et al; Araya et al 2007). In addition to the crowded outpatient service, alleged
offenders who claim insanity or who are judged unfit to stand trial by courts are referred to this hospital from all over the country. At any given time, there are over 50 patients and 100 offenders on a waiting list for admission to the psychiatric hospital (Alem et al 1995).

The Department of Psychiatry which is located both at Amanuel Specialized Mental and at St Paul’s Specialized General Hospitals has started a Postgraduate program for medical doctors in January 2003 and the third batch of trainees are expected to graduate by 2008. The number of psychiatrists has now risen by three fold since the establishment of the graduate program. Bachelor’s as well as master’s degree in clinical psychology, psychiatric social work and psychiatric nursing are the programs the department is hoping to embark soon.

**To generate further interest in looking in depth to the history of Ethiopian Psychiatry, I have divided five historical periods.**

*Period I: Post liberation-(1941-1952)*

This is the time when the hospital was still under the Ministry of Interior (*Ager Gizat Ministier*) of which little is known.

*Period II-(1953-1962)*

The Amanuel Hospital was handed over to the newly established Ministry of Public Health (now Federal Ministry of Health) where physicians and psychiatrists from Italy, UK, Yugoslavia and Argentina, etc. (Drs Capotta, Williams, Otto, Pavicevic, to mention the few) were in service at different times.

*Period III-(1963-1972)*

This is the time when the then young doctors who in one way or the other helped the country change its image either by establishing or improving the existing mental health service. These names include Drs Robert Giel (The Netherlands), Fikre Workneh (Ethiopia), Fuller Torrey (USA), Lars Jacobsson (Sweden) and Marco Pavicevic (Yugoslavia).

It was at this period that despite the stiff resistance he faced from the newly established School of Medicine, Dr Robert Giel (now Professor Emeritus) managed to start the Department of Psychiatry at the then Haile Sellassie I Hospital (later Yekatit XII Hospital).
Dr Fikre Workneh develops interest to pursue his career in psychiatry and become the first Ethiopian in the profession. While Drs Torrey and Jacobsson, one working for the American Peace Corps Clinic and the other in Nekemte General Hospital in Wolega/Ethiopia also decide to pursue in similar field and become vanguards of Mental Health as well as right-hand men in supporting mental health in the developing world. While Dr Marco Pavicevic single handedly struggled to manage the overwhelming needs of the mental asylum at Amanuel and Dr Giel settles at his general hospital the rest three leave for the US and Sweden to pursue for their career.

*Period IV-(1973-1982)*

The once invincible Solomonic Dynasty is deposed by the Popular Revolution. The country declares socialism as its path to social justice and sustainable development. “Ethiopia First” becomes the motto of the day!! Gradually the military takes over the spontaneous-student-led-revolution and the ruling military group becomes known as the “Dergue”.

The country obtains its first Ethiopian Psychiatrist and the Department is relocated to Menelik II Hospital. Amanuel Hospital gets additional psychiatrists from the newly brotherly socialist nations. And it was at this time that an official was quoted saying ”..there will not be a need for psychiatric institution for the country is in the direction of removing all social evils in that all emotional disturbances will become non-existent.”!

Ironically it was at this time that the country went into a full scale war with its neighbour and declared red-terror against its own citizens mainly the promising youth. It is worth to note here that the repeated efforts by the Ethiopian Psychiatrist to improve the mental health service were not welcomed by the then official for probably the reason quoted earlier.

*Period V-(1983-Present)*

An official visit by Professor Halfdan Mahler the then Director General of WHO to Ethiopia was soon followed by his deputy, Professor Adeoye Lambo, a prominent African Psychiatrist who kindly added psychiatry to his priority list in his travel schedule. Upon arrival the professor came to Amanuel Hospital where the author was then the Director of the institution and had the honour to show him and his entourage the neglected medieval-like-asylum. Flabbergasted by what he saw, Dr Lambo humbly suggests to the escorting Minister of Health to “..Bombard the whole place..”!
His Excellency’s visit was then followed by Dr Norman Sartorius (now Professor) Head of the Mental Health Division at WHO HQ, who became a close friend of Ethiopian Psychiatry ever since, advises the policy makers on possible collaboration with WHO and local stake holders, as the result of which a workshop was conducted in December 1985, in Nazareth/Ethiopia. The workshop facilitated by Drs Workneh, Giel and a WHO consultant from Mauritania brought more than thirty stakeholders from different governmental and nongovernmental institutions together. The gathering came up with long and short term strategic plans to enhance the service.

Soon after, a multidisciplinary Mental Health Action Group chaired by the then State Minister of Health (Dr Getachew Tadesse) was established. Training nurses in Psychiatry and sending young doctors abroad to train in psychiatry were among the short term plans while planning for own postgraduate program in psychiatry as well as exerting effort towards the goal of decentralizing and integrating the mental health service in to the general health service were part of the long term objectives.

Since 1987 the psychiatric nursing program has trained 319 (199 men and 120 women) for all over the country. (Araya M., Mamuye., Jacobsson L.).

Amanuel becomes affiliated to the department. Undergraduate as well as postgraduate trainings are given at Amanuel and St Paul’s General Hospitals.

In 2003 with the help of the Department of Psychiatry, University of Toronto/Canada, the postgraduate program in Psychiatry commences. UoT also arranges a subspecialty training in Old-age and Child and Adolescent Psychiatry. One psychiatrist is already in Toronto undergoing training in Old age while others are in the pipeline.

With the help of Umeå University, Department of Psychiatry and Stanley Foundation (USA) community oriented mental health research programs were launched in Butajira and Addis Ababa.

The Department of Psychiatry in Umeå University has kindly enrolled eight Ethiopian candidates in its PhD program and thus helping with the capacity building program.

Out of the eighteen doctors sent for training abroad, ten are back to the country and are working to improve the mental health of their compatriots while some of the colleagues in the diaspora have been collaborating with the department and hopefully the remaining will follow their examples as well.
Researches outcomes on schizophrenia, suicide, child labour, substances of abuse, domestic violence, bipolar disorders, and traditional healing practices have already been published in internationally reputable journals worldwide. International collaboration has reached a stage whereby the country is not only a cofounder of African Psychiatric Association but has also managed to organize a conference where African psychiatrists and mental health professionals from Europe and the USA participated.

While Army Hospital is staffed by a psychiatrist, Police Hospital and few medical schools outside the capital will soon have their own psychiatrist for the first time. This will not only enable patients to get the service as close to their own community as possible, but also improve the training service in the area and promote mental health in the country.

The establishment of mental health societies as well the new initiative by the high government officials to establish rehabilitation programs for the chronically mentally ill and substance abusers is a very encouraging development.

While a BSc degree program for psychiatric nurses is pending, the need for programs in clinical psychology, occupational and different forms of psychotherapy is equally crucial.

The mental health policy which is already submitted to the council of ministers is awaiting ratification; In general the last period is a very encouraging time for both professionals and the beneficiaries alike.

References to Appendix A:

Appendix B

TPO_AAU STAFF

1. Dr Mesfin Araya (MD) Ethiopia-------------------Program Director

2. Ms Meseret Shiferaw (MA) Ethiopia---------------Administrator

3. Dr Behailu Abebe (MA, PhD) Ethiopia-------------Research Coordinator

4. Professor Lewis Aptekar. PhD (USA)---------------Field program coordinator

5. Mr Mark-jan Trapman. MA. (The Netherlands)------Playwright/Sociologist.
Field-program coordinator/Administration Organizer

6. Ms Tizita Gabru (Sweden)-------------------------Psychologist

7. Ms Jose Netten MSc (The Netherlands)------------Psychologist

8. Sr Teamir Addis-----------------------------------Psychiatric Nurse

9. Mr Aschenaki Kifle--------------------------------Youth Coordinator

10. Ms Berhane Kebede--------------------------------Attendant
Appendix C

Instruments used in the study

1. Composite International Diagnostic Interview Version 2.1 (Sections C, D, E, J, K, L)
2. Coping Style Scale
3. DES-NOS
4. Life Events and Social History Questionnaire
5. Peritraumatic Dissociative Experience Questionnaire
6. SCL-90_R
7. Social Support
8. Symptom Checklist-90-R
9. WHO Disability Scale
10. WHO Quality of Life Bref