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Gender differences in traumatic life events, coping strategies, perceived social support and sociodemographics among postconflict displaced persons in Ethiopia

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Abstract *Background* Towards the end of civil war in Ethiopia leading to Eritrea's independent government in 1991, a large number of persons were displaced from their homes in Eritrea, to reside in shelters in Addis Ababa. We evaluate trauma, coping, social support and sociodemographics among them particularly in relation to gender. *Methods* From each randomly selected household in these shelters, a subject was interviewed, yielding 1200 subjects in all. *Results* Men, compared to women, reported significantly higher physical abuse during childhood in the family, traumatic childhood life events, experience of most traumatic life events related to displacement, and perceived social support. Women reported higher emotion-oriented coping whereas men reported higher task-oriented coping. Traumatic events were associated with higher emotion-oriented coping in both genders, and with higher task-oriented coping in women. Perceived social support was correlated positively with task-oriented coping in both genders, but was not associated with traumatic life events. *Conclusions* Severe trauma is associated with coping and perceived social support in part differently with regards to gender. Long-term help initiatives to alleviate the psychological wounds lasting for years should incorporate these gender-specific aspects.

Key words gender – traumatic life events – displaced persons – coping strategies – social support – Ethiopia

Introduction

Traumatic life events due to war, disasters, torture and mass violence are known to lead to serious psychological consequences and mental disorders [13, 14, 20, 26]. Dose–effect relationships have also been reported between the cumulative trauma and the psychiatric consequences [22, 23].

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 [16, 27].

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 [4, 9, 19], although the underlying physiological mechanisms are not yet fully elucidated [15].

Although both women and men (as well as children) are affected by the 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 [7, 8]. In general, women are more than twice as likely to develop posttraumatic disorder than men as a result of trauma [6, 17, 29].

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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 likely differ in the type of coping strategies employed and the degree of social support perceived.

During the past three decades, Ethiopia has been ravaged by large-scale civil war and famine. A large number of people have suffered traumatic experiences being involved in the lengthy civil war that finally led to Eritrea, which was formerly a part of Ethiopia, becoming an independent state [3]. According to the estimates of the Ethiopian Disaster Prevention and Preparedness Commission, about 1 million Ethiopians 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. Currently, there are 55,000 internally displaced people in the Ethiopian capital Addis Ababa who were forced to leave Eritrea. When this study was commenced in 1997, around 70,000 lived in over 17 shelters, mainly in tents, 6–7 people sharing 4–5 m² sized partitions. These people had left everything behind, had lost friends and relatives, and had gone through exhaustion, lack of water, disease, or had been under cross-fire. They had thus lost their identity and their sense of belongingness and had to depend largely on charity for survival. They have little legal or physical protection and a very uncertain future, since they are not covered by international laws regarding refugees [31].

The overall aim of our survey, a part of which is reported in the present study, was to evaluate the extent of mental disorders and mental distress among these displaced Ethiopians. We also collected information about various related issues like traumatic life events, the coping strategies employed, perceived social support, and quality of life. The long-term goals of such studies are to provide an empirical basis to help policymakers design comprehensive public mental health programmes [11, 24, 25] and multifaceted psychosocial intervention programs, to alleviate the acute and long-term sufferings of displacement [12].

In the present study, where information was gathered retrospectively through interviews, we report the interrelationships among the sociodemographic characteristics, traumatic life events, perceived social support, and the coping strategies employed. We particularly focus on detecting gender differences with regards to these circumstances.

Methods

■ Sample

The displacement of the respondents began from Eritrea around 1990–1991. A majority had followed a central route southwards, whereas some had followed an eastern route through Djibouti and still others had taken a much longer western route through Sudan. They had suffered tremendous hardships during their travel to

Addis Ababa, where they arrived around 1991–1992. The average travelling time was estimated to be 6.7 (±SD 8.4) months, the 50th percentile being 5 months, and the 95th percentile being 18 months.

This study was conducted during 1997–1998. The goal was to interview one randomly selected subject from each household. Due to the poor living conditions of the shelters, there were problems involved in defining a household, as aptly discussed by Aptekar and Giel [3]. A household was characterized by the physical place, with demarcated boundaries, where people slept. Several households thus had more than one family in them. There were some movements among the subjects in and out of the camps, and there were also far too common deaths. Several attempts were made to minimize the sampling biases as much as possible, for example by taking the census twice.

From the list obtained, consisting of 8909 registered displaced persons from Eritrea in the Kaliti and Kore temporary shelters of Addis Ababa, 1208 randomly selected respondents as above between the ages 18 and 60 years (one from each household) were approached for participation. Because of psychosis ($n = 2$) and lack of registration ($n = 6$), eight interviews were discarded, leaving in all 1200 completed interviews [13].

■ 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 [18] and translated in a 7-step procedure [13]. All the interviewers were given a 3 months training by accredited trainers from Europe, and the instruments were then pre-tested in a pilot study.

In a set of questions, we collected information about the sociodemographic characteristics.

Abuse in childhood (comprised physical abuse only) was evaluated 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 13 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’. The total number of yes-responses obtained was denoted by the variable ‘abuse during childhood in the family’.

There were five questions with ‘yes–no’ responses regarding the family background concerning any mental illness in mother or father or sibling, or alcohol problems in mother or father. A ‘yes’ to one or more of these five questions was recorded as a ‘yes’ to the variable ‘mental problems in parents or siblings’ (Table 2).

Questions about life events were posed separately with reference to each of three periods of life. For each period, the same sequence of 16 questions was put forward with a ‘yes–no’ response to each, about traumatic life events during this period. These questions are listed in Table 2, and are in line with the sort of questions posed in other studies on war trauma and refugees [20, 21, 26]. The first period comprised childhood up to 12 years of age, the second period comprised the 2 years before displacement, and the third period comprised the time during the process of displacement. The total number of yes-responses for the childhood period up to 12 years is denoted by ‘traumatic childhood life events’. We amalgamated the last two periods by recording a ‘yes’ for a specific question if a yes-response was given to this question in either of the last two periods. The total number of yes-responses for this amalgamated variable is called ‘traumatic life events related to displacement’.

Perceived social support was captured in a series of eight statements, listed in Table 4, with the response ‘agree’ or ‘disagree’ to each statement. These statements are partly in line with the Social Provisions Scale [10]: Attachment (the existence of close personal relationships), Reassurance of worth (the presence of relationships which make one feel secure or valued), Reliable

alliance (the existence of social ties with people who can offer practical support) and Guidance (the presence of relationships with people who act as confidants or advisors).

Coping strategies of the respondents were assessed by a list of 10 items, listed in Table 6, that would roughly capture the three coping strategies often described in the literature as task-oriented, avoidance-oriented, and emotion-oriented coping strategies [16, 27]. To each item, the respondent was asked to respond with “this is like me” or “this is not like me”.

Statistical analyses

All the statistical analyses were performed using the SPSS software [30]. Chi-square tests were used when comparing two proportions or when testing independence between two categorical variables. For comparing means of quantitative score variables between female and male respondents, we employed *t*-tests. When relating a quantitative score variable with a set of relevant variables, we calculated partial correlation coefficients between the score variable and each of the relevant variables when controlling for the remaining in the set. This procedure corresponds to employing multiple regression analysis where the score variable is employed as the dependent variable and the relevant variables (predictors) are all entered simultaneously as independent variables; the significance values (*P* values) obtained for the regression coefficients are the same as those obtained for the partial correlation coefficients. However, whereas correlation implies association without any direction of causation, what is usually implicit in regression models is some sort of direction of prediction or explanation. Factor analysis was performed by the method of principal components with varimax rotation.

Results

Sociodemographic characteristics

Most respondents were Christians (95.7% of women and 93.7% of men), and a few were Moslems (2.3% of women and 4.7% of men). Of the women, 57.7% were housewives and 3.7% were unskilled laborers before the war, but after the displacement there were 3.1% housewives and 41.0% unskilled laborers. Among the men, 37.9% were students or skilled laborers and 6.4% were unskilled laborers before the war, but after the war there were 6.7% students or skilled laborers and 56.1% unskilled laborers.

Table 1 gives the remaining sociodemographic characteristics. There were more women (62.4%) than men (37.6%), which reflects also the gender distribution of the displaced population. Mean age was 34.2 (± 9.4) years in women and 33.7 (± 10.5) years in men. Significantly more of the women were born in Eritrea than in Ethiopia compared to men ($\chi^2(1) = 9.73$, $P = 0.002$), and thus women contained a larger proportion of the Tigre ethnicity ($\chi^2(2) = 180.45$, $P < 0.001$). A higher proportion of men were either married or never married, whereas women contained higher proportions of widowed and separated ($\chi^2(4) = 351.48$, $P < 0.001$). Most men, but only 54.7% of the women, were literate (reading ability) ($\chi^2(1) = 235.12$, $P < 0.001$). A significantly higher proportion of women than men attended religious services regularly ($\chi^2(1) = 21.22$, $P < 0.001$). A

Table 1 Sociodemographic characteristics of the respondents

Characteristic	Women number (%)	Men number (%)	All number (%)
<i>Gender</i>			
Women			749 (62.4)
Men			451 (37.6)
<i>Age</i>			
18–30 years	305 (40.8)	201 (44.6)	506 (42.2)
31–40 years	304 (40.6)	138 (30.6)	442 (36.8)
41–50 years	95 (12.7)	81 (18.0)	176 (14.7)
51–60 years	44 (5.9)	31 (6.9)	76 (6.3)
<i>Country of birth</i>			
Eritrea	378 (50.5)	185 (41.0)	563 (46.9)
Ethiopia	366 (48.9)	261 (57.9)	627 (52.3)
Other	5 (0.6)	5 (1.1)	10 (0.9)
<i>Ethnic group</i>			
Tigre	431 (57.5)	106 (23.5)	537 (44.8)
Amhara	295 (39.4)	234 (51.9)	529 (44.1)
Oromo	22 (2.9)	96 (21.3)	118 (9.8)
Other	1 (0.1)	15 (3.4)	16 (1.4)
<i>Marital status</i>			
Married	202 (27.0)	233 (51.7)	435 (36.3)
Widowed	191 (25.5)	11 (2.4)	202 (16.8)
Separated	211 (28.2)	16 (3.5)	227 (18.9)
Divorced	66 (8.8)	13 (2.9)	79 (6.6)
Never married	79 (10.5)	178 (39.5)	257 (21.4)
<i>Literacy</i>			
Yes	410 (54.7)	435 (96.5)	845 (70.4)
No	339 (45.3)	16 (3.5)	355 (29.6)
<i>Attends religious services regularly</i>			
Yes	420 (56.1)	191 (42.3)	611 (50.9)
No	329 (43.9)	260 (57.7)	589 (49.1)
<i>Route followed during displacement</i>			
Central route	641 (85.6)	293 (65.0)	934 (77.8)
Eastern (Djibouti)	91 (12.1)	92 (20.4)	183 (15.3)
Western (Sudan)	11 (1.5)	57 (12.6)	68 (5.7)
Other	6 (0.8)	9 (2.0)	15 (1.2)
<i>Shelter of residence</i>			
Kaliti	220 (29.4)	179 (39.7)	399 (33.3)
Kore	529 (70.6)	272 (60.3)	801 (66.8)

significantly higher proportion of women took the central route during displacement ($\chi^2(2) = 90.14$, $P < 0.001$), and resided in the Kore shelter rather than the Kaliti shelter ($\chi^2(1) = 13.50$, $P < 0.001$), compared to men.

Trauma versus sociodemographic characteristics

As shown in Table 2, men reported a significantly higher amount of mental problems in parents or siblings, abuse during childhood in the family, traumatic childhood life events, and traumatic life events related to displacement. Examining the individual traumatic life events related to displacement in Table 2, men reported higher occurrence of each of these events except for forced social isolation.

The Cronbach's alpha for the 16 items included in traumatic life events related to displacement was 0.79. Table 3 shows the relationship between the total traumatic life events related to displacement, and each one of the sociodemographic characteristics of Table 1 controlling for the remaining. Among women,

Table 2 Differences between women and men respondents regarding trauma background, and regarding the specific trauma items related to displacement

Family and trauma background	Women (n = 749)	Men (n = 451)	P-value ^a
Age at interview (mean years)	34.15	33.74	0.497
<i>Trauma background</i>			
Mental problems in parents or siblings (% with yes)	10.1	16.6	0.001
Abuse during childhood in the family (total)	0.31	0.67	<0.001
Traumatic childhood life events (total)	0.26	0.86	<0.001
Traumatic life events related to displacement (total)	2.57	4.31	<0.001
<i>Traumatic life events related to displacement (% with yes)</i>			
Lack of food and water	66.4	81.8	<0.001
Ill health without medical care	17.4	30.2	<0.001
Lack of shelter	48.4	61.6	<0.001
Imprisonment	4.1	16.2	<0.001
Serious injury	2.8	10.9	<0.001
Combat situation	26.5	35.8	0.001
Sexual abuse or rape	1.9	3.1	0.169
Forced social isolation	10.8	3.1	<0.001
Being close to death	8.0	17.1	<0.001
Forced separation from family	9.1	11.6	0.169
Witnessed death of family/friend	20.6	46.2	<0.001
Lost/kidnapped	2.7	7.6	<0.001
Witnessed murder of family/friend	5.7	18.2	<0.001
Torture	15.6	29.1	<0.001
Witnessed torture of family/friend	7.4	19.1	<0.001
Murder of stranger	9.8	40.4	<0.001

^a For the variables displaying total, *t*-tests were used; otherwise chi-square tests were used

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$

Table 3 Relationships between total traumatic life events related to displacement and sociodemographic characteristics^a

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

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

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$

being widowed or attending religious services regularly were associated with significantly more traumatic life events during displacement. In a separate analysis, we found that women who attended religious services regularly reported significantly higher forced

social isolation than those who did not (14.5% vs. 6.1%, $\chi^2(1) = 13.54$, $P < 0.001$).

Among men, being older or residing in the Kaliti shelter rather than in Kore was associated with significantly more traumatic life events during displacement. In both genders, the western route through Sudan during displacement was associated with significantly higher trauma than the central route, and among women, also the eastern route was significantly more traumatic than the central route.

■ Perceived social support versus sociodemographic characteristics

Women reported significantly less perceived social support than men for each of the eight items, as shown in Table 4. The total number of “yes” among these eight items constituted the overall perceived social support. The Cronbach’s alpha for this set of items was 0.86.

The relationship between this overall perceived social support and each one of the sociodemographic characteristics of Table 1 controlling for the remaining, is displayed in Table 5. Among women, being separated rather than married was associated with significantly less perceived social support. Literacy, or attending religious services regularly, or living in the Kaliti shelter rather than in Kore, were associated with significantly higher perceived social support among women. Among men, we did not find any statistically significant relationships between perceived social support and sociodemographics.

Table 4 Differences between women and men respondents for each of the perceived social support items

Social support items	Women (<i>n</i> = 748) % with yes	Men (<i>n</i> = 450) % with yes	<i>P</i> -value ^a
There are people I can depend on to help me if I really need it.	17.2	35.8	<0.001
I have close relationships that provide me with a sense of emotional security and well-being.	38.4	70.7	<0.001
There is someone I could talk to about important decisions in my life.	38.4	67.6	<0.001
I have relationships where my competence and skills are recognized.	30.5	60.7	<0.001
There is a trustworthy person I could turn to for advice if I were having problems.	46.5	74.9	<0.001
I feel strong emotional bond with at least one other person.	47.7	76.6	<0.001
There are people who admire my talents and abilities.	23.5	60.7	<0.001
There are people I can count on in an emergency.	30.6	59.6	<0.001

^a Chi-square tests were used

Table 5 Relationships between perceived social support and sociodemographic characteristics^a

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

^a The table gives partial correlation coefficients between perceived social support, and each sociodemographic characteristic when controlling for the remaining sociodemographics

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$

■ Coping versus sociodemographic characteristics

As regards coping, a confirmatory factor analysis with varimax rotation into three factors was performed on the responses of the 10 coping items as listed in Table 6, which also gives the obtained factor loadings. The three factors explained totally 50.2% of the variance. The first factor (task-oriented coping) explained 22.8%, the second factor (avoidance-oriented coping) explained 14.4%, and the third factor (emotion-oriented coping) explained 13.0% of the total variance. The Cronbach's alpha for the three coping strategies were 0.65, 0.58 and 0.42, respectively. It may appear surprising that the coping item G3 ("some people would avoid other people until the gossip died down") loaded significantly on emotion-oriented coping rather than on avoidance-oriented coping. However, whereas avoidance-oriented coping implies denying or minimising the seriousness of the

situation and consciously suppressing of stressful thoughts, emotion-oriented coping contains negative emotions and efforts to control the emotions, as is involved in the coping item G3.

We found that women employed significantly more of emotion-oriented coping ($F = 5.83$, $P = 0.016$, ANCOVA adjusting for the sociodemographics of Table 1), whereas men employed significantly more of task-oriented coping ($F = 74.30$, $P < 0.001$), and both genders employed avoidance-oriented coping to a similar extent ($F = 0.03$, $P = 0.875$).

As seen in Table 7, residing in the Kaliti shelter rather than in the Kore shelter was associated with significantly more use of avoidance-oriented and emotion-oriented coping strategies both in women and men. Being a divorced woman and a never married man was associated with significantly less of the task-oriented coping strategy than being married. For women, literacy or attending religious services regularly were associated with significantly higher use of the task-oriented coping strategy, whereas for men, attending religious services was associated with significantly lower use of the avoidance-oriented coping strategy.

■ Trauma, coping strategies, and perceived social support

To examine the relationship between perceived social support and coping strategies, we calculated the partial correlation coefficients between perceived social support and each of the three coping strategies, controlling for the sociodemographic characteristics of Table 1. Perceived social support was significantly positively correlated with task-oriented coping strategy, both in women ($r = 0.119$, $P = 0.001$) and in men ($r = 0.231$, $P < 0.001$).

Table 8 shows how the coping strategies and perceived social support were related to the family background variables and trauma background variables, when controlling for the sociodemographic characteristics of Table 1. Traumatic life events related to displacement were correlated significantly with higher task-oriented and emotion oriented

Table 6 Factor loadings obtained from confirmatory factor analysis into three factors of the responses of the 10 items on coping strategies

Coping items	Factor loadings		
	Factor 1 (task-oriented)	Factor 2 (avoidance-oriented)	Factor 3 (emotion-oriented)
<i>Imagine that someone is spreading damaging gossip about you</i>			
G1. Some people would try to find the person who began the gossip and discuss it with him/her.	0.64	0.09	-0.05
G2. Some people would get angry with the person who told them about the gossip.	0.32	-0.15	0.51
G3. Some people would avoid other people until the gossip died down.	-0.08	0.02	0.78
G4. Some people would provide facts which show that the gossip is false.	0.71	0.05	0.16
<i>Imagine that some property of yours, money, food or object of value is lost or stolen</i>			
L1. Some people would avoid thinking about the loss or theft.	0.06	0.82	-0.04
L2. Some people would discuss the problem with a person.	0.59	-0.18	0.14
L3. Some people would ignore the loss or theft.	-0.03	0.83	0.03
L4. Some people would try to get their property back.	0.67	-0.16	-0.03
L5. Some people would replace the loss or theft.	0.57	0.09	0.03
L6. Some people would wish they had never left their home country.	0.04	0.06	0.70

The response to each item consisted of 'this is like me' or 'this is not like me'

Table 7 Relationships between each of the coping strategies and sociodemographic characteristics^a

Sociodemographic characteristic	Task-oriented coping		Avoidance-oriented coping		Emotion-oriented coping	
	Women (n = 740)	Men (n = 426)	Women (n = 740)	Men (n = 426)	Women (n = 740)	Men (n = 426)
<i>Age</i>	-0.051	-0.025	-0.007	0.034	-0.008	-0.023
<i>Birth country</i>						
Ethiopia (versus Eritrea)	-0.013	-0.008	0.062	-0.017	0.001	0.007
<i>Ethnic group</i>						
Amhara (versus Tigre)	0.024	0.057	-0.073*	0.025	-0.026	-0.068
Oromo (versus Tigre)	-0.010	-0.005	0.037	0.035	-0.039	-0.044
<i>Marital status</i>						
Widowed (versus Married)	0.008	-0.034	0.002	-0.010	-0.038	-0.032
Separated (versus Married)	-0.060	-0.058	-0.022	0.077	-0.054	0.001
Divorced (versus Married)	-0.109**	-0.028	-0.056	-0.023	-0.047	0.016
Never married (versus Married)	-0.030	-0.118*	-0.044	0.054	-0.031	0.033
<i>Literacy</i>						
Yes (versus No)	0.105**	0.072	-0.012	-0.034	-0.006	-0.027
<i>Attends religious services</i>						
Yes (versus No)	0.095*	0.059	-0.004	-0.132**	0.048	-0.042
<i>Route taken</i>						
Eastern (versus Central)	0.037	0.085	0.029	0.003	0.055	-0.066
Western (versus Central)	0.062	0.008	0.009	0.068	-0.006	-0.049
<i>Shelter of residence</i>						
Kaliti (versus Kore)	-0.058	-0.044	0.230***	0.193***	0.118***	0.153**

^a For each coping strategy, the table gives partial correlation coefficients between it, and each sociodemographic characteristic when controlling for the remaining sociodemographics

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$

Table 8 The relationship of each of the three coping strategies and perceived social support, with each trauma variable^a

Family and trauma background	Task-oriented coping		Avoidance-oriented coping		Emotion-oriented coping		Perceived social support	
	Women (n = 740)	Men (n = 426)	Women (n = 740)	Men (n = 426)	Women (n = 740)	Men (n = 426)	Women (n = 740)	Men (n = 426)
Mental problems in parents or siblings	0.084*	-0.027	-0.034	0.083	0.103**	0.073	0.022	-0.136**
Abuse during childhood in the family	-0.049	-0.068	0.033	-0.060	-0.023	0.065	-0.099**	-0.072
Traumatic childhood life events	-0.013	-0.087	-0.030	-0.050	0.011	0.027	0.045	0.007
Traumatic life events related to displacement	0.129***	-0.035	-0.017	-0.021	0.167***	0.109*	-0.013	-0.048

^a For each coping strategy or perceived social support, the table gives partial correlation coefficients between it, and each trauma variable when controlling for the remaining trauma variables as well as the sociodemographics

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$

coping strategies in women, whereas only with higher emotion-oriented coping strategy in men. More of mental problems in parents or siblings was in women correlated with higher use of task-oriented and emotion-oriented coping strategies, whereas in men it was correlated with less perceived social support. In women, abuse during childhood in the family was correlated significantly with lower perceived social support.

Discussion

To get to the Ethiopian capital Addis Ababa from Eritrea, many of the subjects of our study were forced to trek through the hostile Danakil Depression, arguably the most inhospitable place on earth, where temperatures reached 50°C (122 Fahrenheit), and where there was absolutely no water. Because they were forced to leave with only what they could carry in their hands, they made this march with insufficient water. Almost everyone witnessed relatives and friends who perished from thirst. Nor was this the end of their tribulations. When they arrived in Ethiopia they found that the Derg government (meaning military council) that had supported them when they were in what became Eritrea was no longer in power. The new government, the Ethiopian People's Revolutionary Democratic Front (EPRDF) had overthrown the Derg. The EPRDF were not happy to have these former Derg supporters back in town [3].

At the time we began to work with them, they had already spent six and a half years in camps for the displaced where their shelter had been primitive, and where health care had been inadequate. They were allowed to work in the public domain, earning 3 kg of wheat per day per family. Most families had as many as eight people. This meant that they not only lived near starvation, but because the ration did not always come on time, they lived with the fear of starvation [3].

On the whole, the subjects had gone through major changes in their professions, life-styles, and social roles as a result of displacement. Most of them were now unskilled laborers (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 laborers were housewives among women and students or skilled laborers 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 3), and separated women reported significantly less perceived social support than married women (Table 5).

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 favored 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 environment. 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 (Table 3). Thus, these alternative routes were taken by a considerably higher proportion of men than women (Table 1).

The shelters in Kaliti consisted of former warehouses and similar structures with mud-walls and tin-roofs; upto 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 2 m × 2 m) 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.

Studies in the literature on postwar 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 [28], and in a study among Somali refugees in the UK, men reported significantly higher experience of a majority of trauma items [5]. However, in a study in Kosovo 2 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 [1]. Also, a study among Kosovar refugees in the USA did not find any relationship between gender and trauma [2].

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 6 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 postwar 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 Tigre ethnicity, while most men had been transferred to Eritrea as civil servants from other provinces, 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.

A limitation of the present study is that it has not employed extensive instruments for measuring coping strategies or perceived social support. The reason for this was that the interviews already contained a very large number of items, covering a wide spectrum with the items of the present study as well as those regarding mental and physical illnesses, quality of life, and peritraumatic dissociative experiences. Also, the summing of the 16 trauma variables into one overall variable does not give us information about eventual relationships between specific types of trauma items and coping or perceived support.

In conclusion, the respondents of our survey had to flee their homes, leaving everything behind, and travel through hardships, to another parts of the country without obtaining the status of a refugee. 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. These strategies should include efforts to reduce emotion-oriented coping particularly among women, and to increase perceived social support.

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