

# Prevalence of Psychiatric Disorders Among Unaccompanied Asylum-Seeking Adolescents in Norway

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**Abstract:** Unaccompanied asylum-seeking children (UASC) are known to be subjected to several potentially traumatic life events, risking more mental health problems than other populations of same age. In this study, we aimed to explore the prevalence of psychiatric morbidity at an early stage after arrival to the host country. We performed structured clinical interviews (CIDI) with 160 male UASC from different countries (Afghanistan, Somalia, Iran), after four months in Norway. Most of the participants had experienced life threatening events (82%), physical abuse (78%), or loss of a close relative (78%) in their former life. Altogether 41.9% of the participants fulfilled diagnostic criteria for a current psychiatric disorder. The most prevalent diagnosis was PTSD (30, 6%), followed by MDD (9, 4%), Agoraphobia (4, 4%) and GAD (3, 8%). Implications of this vulnerability call for more mental health resources in the early stages of the asylum process. Increased awareness of psychiatric morbidity in UASC may improve the prognosis, give more appropriate care, and ease the integration process on all levels of society.

**Keywords:** Afghan, asylum, mental health, PTSD, refugee children, Somali.

## INTRODUCTION

The number of unaccompanied asylum-seeking children (UASC) arriving in Norway the last ten years has varied between 322 (in 2005) and 2500 (in 2009) [1]. Also, the nationalities represented have differed from year to year. European countries received 13.300 asylum claims from UASC in 2011, which is 75% of the worldwide number [2]. Refugee adolescents are known to encounter numerous risk factors that can cause psychological distress, including exposure to violence, and multiple losses [3-5].

Several studies have examined the rates of psychological distress in different samples of refugee children, using self-report instruments, or instruments filled in by parents, teachers or others [6-10]. A large study from Belgium and the Netherlands has revealed higher levels of PTSD symptoms for UASC in comparison to the host populations, and also compared to refugee minors that migrate together with their caregivers [11]. UASC in the same study also reported higher levels of exposure to physical and sexual maltreatment and higher levels of anxiety and depression.

Most studies in this field have used estimates of diagnostic “caseness” based on self-report instruments filled in by parents, teachers, or the youth themselves; either with “pen and pencil” or with the aid of translators [12]. How to deal with the challenge of whether or not to include illiterate subjects, are usually not discussed in detail. Also, the possible impact of different modes of testing in the same research project; i.e. reading and writing by yourself *versus* having

another person read and write for you, is very seldom discussed [13]. Even a renowned analysis of validity problems in the field of transcultural epidemiology does not address this challenge [14].

Other studies have focused on the cross-cultural validity and context relevance of existing screening instruments, seeking adaptation to new settings, while keeping the internal consistency and the construct validity of the scales [15]. Diagnostic evaluations or validation of the appropriate “cut-off” values are often lacking [16].

There are few prevalence studies focusing on young refugees or UASC and to our knowledge none that have used clinical evaluations or diagnostic interviews shortly after migration. On the other hand there is some research with adults, indicating that post-migrational stressors contribute significantly to the psychopathology of refugees [17]. The precise impact of post-migrational stressors can be difficult to determine due to lack of baseline measures or early diagnosis. In addition, this lack of knowledge gives immigration authorities less possibilities to plan for appropriate care when the young refugees arrive. The prevalence of psychiatric morbidity in UASC boys, within four to five months after their arrival in Norway, will be the focus of this study, in addition to self-report screens and demographic data.

## MATERIALS AND METHODOLOGY

### Participants

The population in this study were male, unaccompanied asylum-seeking children (UASC) arriving in Norway. Shortly after arrival, all UASC between ages 15 to 18, were placed for 3-6 weeks in one transit centre, right outside of Oslo. At the transit centre, a research assistant kept track of

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all new arrivals. Each time our testing capacity allowed us to include some new participants she was instructed to invite the ones who had arrived most recently. Inclusion was restricted to the six largest language groups due to translation costs; Arabic, Dari, Farsi, Pashto, Somali, and Sorani. Because of changes in migration patterns, we ended up with a population consisting mostly of young men from Afghanistan and Somalia. Inclusion was done in 2009 (12 weeks), 2010 (8 weeks), and 2011 (21 weeks).

According to the statistics unit at the Norwegian Directorate of Immigration, 406 male UASCs from the actual language groups arrived in Norway during the inclusion periods. Altogether, 216 UASC were asked to participate, and were given oral information with the aid of a translator. The information stressed the fact that the research had no link to the asylum process. Out of these, 204 UASC decided to participate, and signed the informed consent form (94% response rate). We made only one attempt to contact each individual, without offering any payment. The 204 UASC, who wanted to be in the study, all completed screening instruments at the first testing point, and no later than 3 weeks after arrival in Norway. Of these individuals, 160 completed a second assessment with a Composite International Diagnostic Interview (CIDI) [18] performed by trained clinicians 4-5 months after the first screening, in addition to a second screening for psychiatric symptoms. At the time of the second assessment, the UASC had been moved from transit and placed in asylum centres for young people or adults.

The Regional Medical Ethics Committee, South-East Norway gave this study their written approval.

All participants gave their informed consent.

## Measures

Demographic information included country of origin, number of years in school, age, and whether or not their parents were alive. These data were obtained by semistructured interviews performed with the aid of interpreters. Screening instruments included Hopkins Symptom Checklist-25 (HSCL-25) [19], Harvard Trauma Questionnaire (HTQ) Part IV [20], and Stressful Life Events checklist [21]. Most translations were obtained from the Centrum 45 internet pages, and some from a previous research project by our centre [16]. The Pashto versions had to be translated and back-translated specifically for this project. Spelling control, including some language adjustments were made with the aid of native speaking interpreters for all languages.

The participants filled in the instruments by themselves, using their native languages, on laptops with touch-screen. All three screening instruments were combined into a single questionnaire using a computer program called Multilingual Computer Assisted Self Interview (MultiCASI) [22]. Items of the questionnaire appeared one after the other on the laptop, with answering alternatives as well. A native speaker in each language had already made sound-files for the written text. The sound of the questionnaire could be repeated until the meaning was understood by the participant. This gave all informants, regardless of reading abilities, the possibility of answering the questions without the aid of an interpreter.

The HSCL-25 questionnaire is often used as a measure of emotional distress, and is one of the several HSCL versions that have been used all over the world [12]. It has been used and validated as a self-report screening in both community settings and clinical samples [19, 23]. The HSCL-37A version is built on the HSCL-25. Several refugee studies with minors have used this questionnaire [24-26]. The HSCL-25 asks for 25 symptoms that are considered typical for depression and anxiety during the last week. Each symptom was assessed on a likert scale ranging from 1 (not at all) to 4 (extremely). In clinical refugee samples, the screen is a reliable tool for diagnosing these categories. Other research has demonstrated limited diagnostic validity for the HSCL-25 in non-clinical samples [23, 16].

The Harvard Trauma Questionnaire [20] was developed to assess potentially traumatic experiences, and a rich variety of post-traumatic symptoms in different cultural settings. It was developed and first used with a group of severely traumatized patients, but have also been used in larger community samples, and with asylum seeking adolescents [9].

The HTQ has four parts that can be used separately. The first three parts give descriptions of potentially traumatic events (Part I: different events that are considered potentially traumatic, and often encountered by refugees; Part II: identification of the most difficult traumatic event; Part III: physical trauma directed at the head). Part IV is a list of 30 items, where the first 16 focus on PTSD symptoms that can be used to diagnose this disorder in the DSM-IV [27]. In this paper, we use these 16 items together with the HSCL-25, in order to enable comparison of the participants who completed the diagnostic interviews with the non-participants, as well as comparison of symptom levels at the different testing points.

Stressful Life Events checklist (SLE) was developed by Tammy Bean and colleagues [21] in order to assess if an adolescent meet the criteria A1 (experienced a traumatic event) in the DSM-IV, for a diagnosis of PTSD. The twelve item checklist is used to indicate types of traumatic events to which they may have been exposed. The instrument is scored by answering yes or no on each item, and has been used in several studies with children and youth [11].

The Composite International Diagnostic Instrument (CIDI) was developed by the World Health Organization, a collaboration with the US Mental Health Administration Task Force that started in 1979. Good validity and reliability of this structured diagnostic interview has already been reported [18]. In this study, the modules for depression, anxiety, and PTSD was presented to each informant in the same sequence. The health professionals had received certification in the use of CIDI, and performed the diagnostic interview with the aid of interpreter, either in person or on telephone, during the whole interview. In cases of doubt, the professionals discussed the individual cases until consensus were reached.

## RESULTS

### Characteristics

The 160 youth that completed the diagnostic psychiatric interview (CIDI) had similar age, background and psychological distress level compared with the youth who did not

participate. No significant differences in registered characteristics of participants and non-participants were found (Table 1). Participants' self-reported age were in average 2.3 yrs (95% CI = 1.9-2.6) lower than age assessed by health care professionals using radiographs of skeleton and teeth at a later stage ( $p < 0.001$ ). These age tests were used by the immigration authorities to estimate an official chronological age for the young asylumseekers. The result was an increase from 5(3%) to 99(62%) regarding the number of participants considered to be more than 18 years old. The ages of the non-participants were in a similar range.

A slight majority reported that they were able to read and write in their own language. Less than half of the participants reported education of 5 years or more.

### Life events

Table 2 show self-reported, stressful life events. Most of the participants (96.3%) had experienced at least one of the stressful life events listed. The most frequently reported experiences were life threatening events, physical abuse, and loss of a close relative. The average number of different experiences from the scale were 6.2 (SD=2.2). Almost half of the young men had war related experiences. Loss of father was the most frequent bereavement, and a considerable part had lost both their parents (Table 1).

**Table 1. Characteristics of participating and non-participating male unaccompanied refugee minors at arrival in Norway. Figures are given as number (%) when others not specified.**

	Participants N = 160	Non-participants N = 44
Age, self reported		
Mean years (SD)	16.23 (0.83)	16.09 (0.77)
Range	14 - 20	15 - 17
Age, assessed by authorities		
Mean years (SD)	18.48 (2.28)	18.32 (2.95)
Range	15 - 28	15 - 27
Nationality		
Afghan	122 (76.3)	34 (77.3)
Somalian	35 (21.9)	9 (20.5)
Iran	3 (1.9)	1 (2.3)
Literacy, selfreported	60 (37.8)	12 (27.3)
Years of education $\geq$ 5	73 (45.8)	15 (34.1)
Loss of parent		
Father	104(65.0)	27 (61.4)
Mother	38(23.8)	9 (20.5)
Both	35(21.9)	8 (18.2)
HCL-25, mean (SD)	1.75 (0.44)	1.76 (0.36)
PTSS-16, mean (SD)	34.60 (9.31)	35.33 (9.37)

**Table 2. Self reported negative life events in male unaccompanied refugee minors (N = 160) at arrival in Norway.**

Drastic changes in family during the last year	94 (62, 3%)
Separated from family against will	82 (54, 7%)
Loss of close relative	120 (77, 9%)
Life threatening medical problem	43 (27, 9%)
Serious accident	33 (21, 9%)
Natural disaster	81 (53, 6%)
War related experiences	74 (48, 7%)
Physical abuse	120 (77, 9%)
Witnessing violence against others	87 (57, 2%)
Sexual abuse	15 (9, 8%)
Life threatening events	125 (81, 7%)
Witnessing life threat of others	76 (49, 7%)
Any negative life event	154 (96.3%)

### Selfreported Symptoms

Measurements of general psychological distress (HSCL-25) and posttraumatic stress (PTSS-16) were obtained shortly after arrival, and after four months (Table 3). There was no significant change in score during this time period.

**Table 3. Self reported general psychological distress and posttraumatic stress in male unaccompanied refugee minors (n=149) at two time points: at arrival and after 4 months in Norway.**

	At Arrival	After 4 Months	p-Value
HCL-25	1.75 (0.37)	1.77 (0.37)	0.66
PTSS-16	34.64 (9.35)	35.12 (9.42)	0.51

### Psychiatric Morbidity at 4 Months

Table 4 show psychiatric morbidity according to DSM-IV [27] diagnoses. As much as 41.9% of the participants fulfilled the diagnostic criteria for a current psychiatric disorder. The most prevalent diagnosis was Posttraumatic Stress Disorder (PTSD), followed by Major Depressive Disorder (MDD), Agoraphobia and Generalized Anxiety Disorder (GAD).

### Worst Incident in Relation to PTSD

The participants had to choose a "worst incident" from their trauma history, and think of this incident when asked about the related PTSD symptoms, in order to be diagnosed. The most common incidents among those 49 youth who were diagnosed with PTSD were: "a life threatening episode", given by 16 (32, 6%); next came "witnessing cruelty

against others” 11 (22, 4%); followed by “experiences in prison” 10 (20, 4%).

**Table 4. Psychiatric morbidity among male unaccompanied refugee minors (n=160) 4 months after arrival in Norway. All diagnoses according to the DSM-IV [ref].**

Psychiatric Disorder	Current Prevalence N (%)
Major depressive disorder	15 (9.4)
Dysthymic disorder	7 (4.4)
Mood disorder with depressive features due to general medical condition	4 (2.5)
Panic disorder	1 (0.6)
Agoraphobia	7 (4.4)
Generalized anxiety disorder	6 (3.8)
Social anxiety disorder	3 (1.9)
Specific phobia	5 (3.1)
Post Traumatic stress Disorder	49 (30.6)
Any psychiatric disorder	67 (41.9)

## DISCUSSION

This study demonstrates that unaccompanied refugee minors are a very vulnerable group with a high prevalence of psychiatric morbidity. The young men that we interviewed had experienced numerous threatening, horrible and potentially traumatic events, and the most prevalent psychiatric disorder was PTSD. A majority of the youth was bereaved, and lacked the protection and social stability that parents could have offered. In addition to PTSD, high prevalence of depressive and anxiety disorders were found.

To our knowledge, this is the first study on refugee minors that has applied clinical interviews soon after arrival to the host country. Compared to studies that have used this methodological approach in a later phase [28, 29], our findings suggests considerable higher prevalence of both depression and PTSD. Servan-Schreiber, Le Lin and Birmaher, found that 11,5% of Tibetan refugee children (n=61) suffered from PTSD, and the same proportion met criteria for major depression (MDD). Tousignant *et al.* did not measure PTSD in a group of 203 adolescent refugees from 35 countries, but diagnosed simple phobia in 21%, overanxious disorder in 13% and MDD in 5%. Plausible explanations are different diagnostic approaches as well as refugee populations with different backgrounds. Participants from our study were young men, mainly from Afghanistan and Somalia, parts of the world with a history of war and a corresponding weakening of the social fabric. Low levels of literacy, frequent exposure to loss and trauma, and limited access to health facilities underscores the impact of psychosocial adversities in their upbringing. In that respect, our findings are similar to previous studies using estimates of “caseness”

according to self-report instruments [8-11]. In general, studies on refugee minors show higher prevalence of psychopathology than studies on youth from the main population. In a comparable study with adolescents from different racial and ethnic groups in the USA, they found a prevalence of PTSD from 7,4% (Latino) to 3,4% (Non-Latino Black) [30].

The burden of psychosocial problems and postmigrational events for adult asylumseekers and refugees in their new host countries, are well documented [31, 32]. Our finding that symptom levels of general psychological distress and posttraumatic stress were stable from arrival to the time of the diagnostic interviews, indicate that the psychiatric morbidity was present when the youth arrived, and therefore probably not an effect of the stressors connected to life as an asylum seeker *per se*. Psychiatric morbidity related to psychosocial problems later in the refugees lives may also be compounded by the presence of a considerable number of traumatic experiences from their former lives [9]. An illustration of this may be the experiences chosen as the “worst incident” related to the PTSD diagnoses with this research population. Life-threatening experiences dominated together with witnessing cruelty against others, and severe prison events. Many of these young men told us that their worst experience happened while they were imprisoned in transit countries, such as Lebanon, Greece and Italy.

Our study demonstrated a gap between self reported age and the official age estimates given by the immigration authorities, on the basis of x-rays and dental examinations performed after some months. This reflects a considerable uncertainty about the participant’s true chronological age. Birth registration services are often nonfunctioning in the countries the UASC come from, and the scientific basis for age assessment is controversial, since the tests have their greatest uncertainty in the ages with the greatest natural variation, e.g. ages 15 to 21[33]. The uncertainty with skeletal and dental age assessment is considered to be large, i.e. between two and five years [34]. This could have crucial consequences for a large part of the young asylum seekers, since they no longer are considered minors and in need of special protection according to UNHCR [35]. The increase from 5 to 99 in the numbers of asylum seekers over 18 years in our population, due to age testing later on, may impact our claim that we have conducted a prevalence study on unaccompanied refugee minors. In that respect, our study population should be considered to be more representative for UASC according to self report, since this was the only source of age determination available on arrival.

## METHODOLOGICAL CONSIDERATIONS

Strength of this study is the use of structured diagnostic interviews with trained health professionals, and unlimited use of time and interpreters. We also argue that the recruitment procedures gave a representative sample of UASC from the chosen countries.

The self-report instruments were filled in by the informants themselves, regardless of literacy, because of the MultiCASI method [22]. There was no need to exclude illiterate subjects, or treat them differently than the other informants. We believe that this improved the validity of the testing procedure.

The life situation of the informants, together with the distance, both physically and culturally to their countries of origin, gave us limited access to objective data concerning their backgrounds. The informants themselves were the only source of information, and the clinical assessments may have been influenced by inaccurate data. The health professionals performing the CIDI interviews were all experienced clinicians, who had worked extensively with refugees, using interpreters. We argue that this has improved the validity of the diagnostic procedures.

The study sample was recruited from young asylum seekers that arrived Norway in a period of two years. UASC areas of origin vary over time and thus, our results may not be representative for populations of UASC from other parts of the world.

## CONCLUSION

Unique to this study is that these high numbers of unaccompanied minor asylum seekers with a psychiatric diagnosis were found a relatively short time after the UASC arrived, and thus in the early stages of their stay in the country where they apply for asylum. As far as we know, this has not been the focus of any previous study, and contrasts earlier findings that most refugees experience a period of wellbeing and hopefulness shortly after arrival in the host country [36, 37], with lower mental health problems, and clearly illustrates the overall vulnerable situation of UASC.

The manifest presence of severe symptoms presents a challenge for the host country as it may be difficult to meet the complex needs for support UASC have in this specific phase of their lives. Therefore, expanded and multi-disciplinary professional staff in the reception centres for UASC who recently arrived is needed in order to give appropriate physical and emotional support, and to create a safe living environment for all UASC [3, 38]. This involves ensuring basic needs, and sufficient time to support all UASC in developing a sense of stability, safety and trust [39].

Forced migration is part of a global process where populations from different corners of the world interact because of war and natural catastrophes. Increased trade, mass media, the internet, and improved communications are also factors related to the movement of people [40]. These developments affect public health in the host countries, and pose a challenge to the systems responsible for treatment and follow up of psychiatric health problems.

We believe that the prognosis may be better if traumatized children are threatened in an early phase. This would also ease the integration process on all levels of society.

## CONFLICT OF INTEREST

The authors confirm that this article content has no conflict of interest.

## ACKNOWLEDGEMENTS

This study was partially funded by the Norwegian directorate of Immigration.

Special gratitude to Liv Berit Løken for her care and assistance with all aspects of the data collection, Lars Erik

Eide Johansen for his assistance with the diagnostic interviews, to our very skilled interpreters, and to all the young participants.

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Received: October 03, 2013

Revised: February, 17, 2014

Accepted: March 20, 2014

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