Trauma and PTSD rates in an Irish psychiatric population
A comparison of native and immigrant samples

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Although Western mental health services are increasingly finding themselves concerned with assisting traumatized individuals migrating from other countries, trauma and posttraumatic stress disorder (PTSD) are under-detected and undiagnosed in psychiatric populations. This study examined and compared rates of traumatic experiences, frequency of traumatic events, trauma symptomatology levels, rates of torture, rates of PTSD and chart documentation of trauma and PTSD between (a) Irish and migrant service-users and (b) forced migrant and voluntary migrant service-users in Dublin, Ireland. Data were gathered from 178 psychiatric outpatients using a sociodemographic questionnaire, the Harvard Trauma Questionnaire–Revised Cambodian Version and the SCID-I/P. A substantial number of service-users had experienced at least one lifetime trauma (71.3%), and a high percentage of both the Irish (47.4%) and migrant groups (70.3%) of service-users had experienced two or more events. Overall, analyses comparing rates between Irish, forced migrant and voluntary migrant service-users found that forced migrants displayed more traumatic life events, posttraumatic symptoms, and higher levels of PTSD than their voluntary migrant and Irish counterparts, with over 50% experiencing torture prior to arrival in Ireland. The lifetime rate of PTSD in the overall sample was 15.7% but only 53.57% of cases were documented in patient charts. The results of this study are informative about the nature and extent of the problem of trauma and PTSD among migrant mental health service users as well as highlighting the under-detected levels of trauma among native-born service users.

Literature Review

It is generally acknowledged that relative to community samples, trauma survivors are over-represented in both inpatient and outpatient mental health populations.1 Indeed, existing research evidence suggests that over 80 percent of individuals attending psychiatric services will have experienced at least one traumatic life event that meets diagnostic criteria for PTSD.2,4 Western mental health services are increasingly concerned with assisting traumatized individuals migrating from other countries. Ireland is no exception.5 A significant body of international research evidence suggests that a large percentage of forced migrants (i.e., asylum seekers and refugees) experience trauma both prior to and following arrival in their host country6–7 and go on to develop PTSD.5,7 However, there is a dearth of research investigating the rates of trauma and PTSD among forced migrants accessing mental health services in host countries. There is also a lack of research into the trauma and PTSD rates among voluntary migrants (e.g., economic migrants and international students), and between migrant and native-born individuals accessing such services. Research in these areas is important as mental health service providers need to understand the trauma experiences of migrants in order to develop appropriate services for them.11

It is important to investigate any differences between forced and voluntary migrants in terms of trauma experienced.11 Forced migrants differ from voluntary migrants in that unlike those who choose to emigrate, they are usually unable to plan their move practically, psychologically and systematically over time. Events such as war, imprisonment, torture, rape and murder are some of the potential traumatic experiences that many forced migrants are exposed to.12 The prevalence of specific post-trauma type symptoms within refugee populations varies but rates as high as 86% have been reported.13 It is well established that trauma has a cumulative effect where the risk of developing a posttraumatic disorder increases with the number of lifetime traumatic experiences.14 Research evidence suggests that the traumatic experiences...
sustained by forced migrants increases the risk of developing PTSD. Indeed, refugees resettled in western countries have been shown to be about ten times more likely to have PTSD compared with age-matched general populations in those countries. Torture, for example, is a particularly harrowing form of trauma that many forced migrants have experienced prior to entering the host society. It has been found to be a significant risk factor for the development of PTSD. International research reveals that 30–60% of all refugees in Europe have experienced torture and other forms of serious violence.

In contrast to forced migrants, voluntary migrants choose to relocate in search of better life and work opportunities with the aim of improving their overall quality of life. Research into pre-migration trauma among voluntary migrants is notably absent from international literature and there is a dearth of research comparing forced and voluntary migrants in this area. However, the limited research comparing the two groups has shown that voluntary migrants can also be victims of substantial pre-migration trauma. For example, evidence suggests that exposure to political violence among voluntary migrants may be considerable. Additionally, although forced migrants are understandably more likely to report a history of war-related trauma, reports of other traumatic events among voluntary migrants have been found to be similar. Rasmussen and colleagues also highlight the fact that few studies have compared the onset of PTSD between forced and voluntary migrants. Hence, trauma researchers should not exclude voluntary migrants from research into pre-migration trauma and mental health professionals should be aware that voluntary migrant service-users’ mental health might have been affected by traumatic experiences in their countries of origin.

International research has also failed to address the differences between native-born and migrant service-users in terms of their rates of traumatic events and PTSD within psychiatric

| Characteristic                  | Irish n | Irish % | Migrant n | Migrant % | χ² | p  |
|--------------------------------|---------|---------|-----------|-----------|----|----|
| Gender                         |         |         |           |           |    |    |
| Male                           | 59      | 51.8%   | 32        | 50.0%     | 0.47|    |
| Female                         | 55      | 48.2%   | 32        | 50.0%     |    |    |
| Marital Status                 |         |         |           |           |    |    |
| Single                         | 76      | 65.0%   | 36        | 56.3%     | 0.06|    |
| Married/Cohabitating           | 19      | 18.3%   | 21        | 32.8%     |    |    |
| Separated/Divorced             | 16      | 16.7%   | 7         | 10.9%     |    |    |
| Widowed                        | 3       | 2.6%    |           |           |    |    |
| Relationship Status            |         |         |           |           |    |    |
| In a relationship              | 27      |         | 28        |           | 0.01|    |
| Not in a relationship          | 87      |         | 36        |           |    |    |
| Education Level                |         |         |           |           |    |    |
| No formal education            | 1       | 0.9%    | 3         | 4.7%      | 0.00|    |
| Primary Level                  | 18      | 15.8%   | 8         | 12.5%     |    |    |
| Junior Second Level            | 37      | 32.5%   | 7         | 10.9%     |    |    |
| Final Second Level             | 23      | 20.2%   | 25        | 39.1%     |    |    |
| Third Level Vocational         | 21      | 18.4%   | 5         | 7.8%      |    |    |
| Third Level University         | 14      | 12.3%   | 15        | 23.4%     |    |    |
| Postgraduate University        | 0       | 0.0%    | 1         | 1.6%      |    |    |
| Occupational Status            |         |         |           |           |    |    |
| Managerial and Technical       | 2       | 1.8%    | 0         | 0.0%      | 0.37|    |
| Non-manual                     | 12      | 10.5%   | 3         | 4.7%      |    |    |
| Skilled manual                 | 10      | 8.8%    | 5         | 7.8%      |    |    |
| Semi-Skilled manual            | 7       | 6.1%    | 4         | 6.3%      |    |    |
| Unskilled manual               | 7       | 6.1%    | 5         | 7.8%      |    |    |
| Full-time education            | 7       | 6.1%    | 9         | 14.1%     |    |    |
| Part-time education            | 3       | 2.6%    | 0         | 0.0%      |    |    |
| Unemployed                     | 66      | 57.9%   | 38        | 59.4%     |    |    |
services. Such a distinction is important in trauma research as the migration experience itself means that migrants, and especially asylum seekers and refugees, can experience many traumas not likely to be experienced by those in their host populations. Furthermore, such research would also decipher whether or not the current trauma-focused care provided by mental health services in host societies is adequately meeting the trauma-related needs of migrants. However, it is important to note that trauma experiences among native-born individuals accessing mental health services are not consistently recorded in initial psychiatric histories and, when observed, are rarely reflected in the primary diagnosis and treatment. Indeed, numerous chart review studies have demonstrated that routine clinical practice within mental healthcare settings, assessed by examination of service-user charts, produces significantly lower rates of trauma than those elicited by directly questioning service-users. This is not surprising considering that routine trauma screening is not standard practice in most community mental health settings.

The present study

The present study was designed to address some of the gaps outlined above in the literature on trauma and PTSD among a sample of migrant and native-born adult mental health service users. This study will build on previous research in several ways. First, it will compare rates of trauma and PTSD between native-Irish and migrant adult mental health service-users. Second, it will compare rates between forced and voluntary migrant service-users. Third, the study will look at the effects of multiple traumatic events by comparing posttraumatic symptomatology for single versus multiple traumas experienced. Fourth, it will focus specifically on the traumatic experience of torture to examine rates among service-users. Finally, a chart-review study will be performed to assess whether, according to previous literature, trauma and PTSD rates are under-detected and under-documented by mental health professionals. Overall, the present study will make an important contribution to the growing literature on the significance of addressing trauma and PTSD in the treatment of both migrant and native-born service-users attending adult mental health services. Note, it will be the first to address this issue in an Irish context.

Aims

The main aims of this study are to examine and compare the (1) rates of traumatic experiences, (2) frequency of traumatic events, (3) trauma symptomatology levels, (4) rates of torture, (5) rates of PTSD and (6) chart documentation of trauma and PTSD between (a) Irish and migrant service-users and (b) forced migrant and voluntary migrant service-users in an adult mental healthcare sample in Dublin, Ireland.

Method

Participants

Definitions

To be eligible to participate in the study, participants had to be aged between 18 and 65 years and capable of giving informed consent. For the purposes of this study, a migrant service-user is an individual who: (a) was born outside the Republic of Ireland; (b) has been living in Ireland for 10 years or less; (c) is currently living in the catchment area covered by the adult mental health services in this study and (d) is receiving psychiatric or psychological care from local adult mental health services. The migrant group was broken down further into voluntary or forced migrant status. Migrants were allocated a ‘forced migrant’ or ‘voluntary migrant’ status according to their self-reported legal status on the sociodemographic questionnaire. An Irish service-user is a person who was (a) born in the Republic of Ireland; (b) is currently living in the catchment area covered by the adult mental health services in this study and (c) is receiving psychiatric or psychological care from the same local adult mental health services as the migrant group.

Recruitment

Recruitment took place at two adult mental health service outpatient clinics, which are part of a larger hospital system, between February 2007 and March 2009. The services have a combined service-user population of 700 individuals. A total of 122 native-Irish service-users were approached to participate in the study. Of these, 114 volunteered to participate (93% response rate). At the time of data collection, the number of migrant outpatients accessing care from the two services under study was considerably lower than the number of native-Irish individuals accessing the services. Thus, a total of 66 migrant service-users were approached and 64 volunteered to participate (97% response rate).

Instruments

Instruments used included a sociodemographic questionnaire, the PTSD section of the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I/P) and the Harvard Trauma Questionnaire-Revised Cambodian Version.

Sociodemographic questionnaire

An 18-item sociodemographic questionnaire, designed specifically for the study, was administered to all participants in an interview format. The areas covered in the questionnaire included the following: personal details (gender, age, nationality, ethnicity group, first language, marital history, relationship status); family status (number of children, presence of partner/family members in Ireland); length of stay in Ireland; legal status and length of time in the asylum process; employment/welfare status; socioeconomic status; details of pre-arrival education and self-rated English language proficiency.

Structured Clinical Interview for DSM-IV-TR Axis I Disorders

The Structured Clinical Interview for DSM-IV-Axis I Disorders (SCID-I/P) was selected as the diagnostic tool for the study as it was routinely administered within the hospital departments for research purposes. The SCID-I/P includes an introductory overview followed by ten modules, seven of which represent the major Axis I diagnostic classes. Because of its modular construction, it can be adapted for use in studies in which particular diagnoses (e.g., PTSD only) are of interest. Both the inter-rater and test-retest reliability of the SCID-I/P have been found to be adequate. The SCID-I/P PTSD module, a standardized diagnostic interview within the SCID-I/P consisting of 17 items was completed with all 178 participants. All interviews were conducted by the first author following intensive training in administering the instrument under the supervision of the Consultant Psychiatrist at one of the hospitals.
The Harvard Trauma Questionnaire-Revised Cambodian Version

The original Harvard Trauma Questionnaire (HTQ) was designed for use among refugees and individuals from diverse cultural backgrounds. It has been validated and used in multiple ethnic groups including Africans, Asians, Europeans, and groups of mixed ethnicity. The version chosen for this study was the Revised HTQ-Cambodian Version. This version was selected as it was considered to be the most appropriate for the study due to the wide range of trauma experiences included in the instrument. It was hypothesized that there would be a wide range of nationalities in the study and this questionnaire was considered to be the most appropriate to cover all possible types of traumas including combat situations, physical attacks, lack of food or water or murder of family members or friends. The questionnaire also includes a detailed section on torture, allowing for a more accurate description of the types of torture experienced by participants.

The HTQ-Revised Cambodian Version consists of 5 sections assessing personal characteristics, exposure to traumatic events, brain injury, posttraumatic symptoms and torture experiences. For the current study, the sections on traumatic events, posttraumatic symptoms and torture experiences were used. The trauma event section of the HTQ consists of 40 possible traumatic events and allows respondents to answer “Yes” or “No” to having experienced each listed event. The posttraumatic symptoms section of the HTQ-R contains a checklist of items corresponding to the criteria for PTSD according to DSM-IV, along with 24 additional posttraumatic symptoms. This allows the researcher to calculate a PTSD score and an overall posttraumatic symptomatology score. Frequency is assessed on a Likert scale ranging from 1 = ‘not at all’ to 4 = ‘extremely’. The torture experience section lists 28 different forms of torture and also allows respondents to answer “Yes” or “No” to having experienced each torture listed.

Procedure

Following institutional ethical review and approval, participants were approached by the first author in the waiting rooms of the psychiatric outpatient clinics. Individuals approached were asked if they would like to participate in a study looking at rates of trauma and PTSD among Irish and migrant attending adult mental health services. If service-users agreed, the study was fully described, and written informed consent was obtained. Where migrant service-users were not proficient in the English language, an interpreter was enlisted to ensure informed consent. Participants were assured that they could withdraw from the study at any time and that their care would not be affected if they chose to do so. Participants were either assessed immediately following their scheduled clinic appointment or at a later time of their choosing. The assessments were performed in a private room at the outpatient clinic building used by both hospitals for their psychiatric outpatient services. Due to the variation between participants with respect to literacy and English language proficiency, all self-report measures were obtained by verbal interview. Interviews lasted approximately 90 minutes. All non-English speaking migrants were offered the services of an interpreter for carrying out the assessments. Interpreters were recruited for 10 of the forced migrant and 8 of the voluntary migrant assessments to ensure complete comprehension of the questions asked and of the instruments used.

Chart review

Following completion of the interview assessments, the first author conducted a detailed review of all participants’ charts.

| Traumatic event                                      | Irish | Migrant | Total |
|------------------------------------------------------|-------|---------|-------|
|                                                      | %     | n       | %     | n       | %     | n       |
| Lack of shelter*                                      | 15.8  | 18      | 35.9  | 23      | 23.0  | 41      |
| Lack of food or water*                                | 9.6   | 11      | 40.6  | 26      | 20.8  | 37      |
| Ill health without access to medical care             | 3.5   | 4       | 31.2  | 20      | 13.5  | 24      |
| Beating to the body*                                  | 14.9  | 17      | 39.1  | 25      | 23.6  | 42      |
| Rape*                                                | 14.0  | 16      | 20.3  | 13      | 16.3  | 29      |
| Other types of sexual abuse/humiliation               | 18.4  | 21      | 7.8   | 5       | 14.6  | 26      |
| Torture                                              | 0.0   | 0       | 26.6  | 17      | 10.0  | 17      |
| Imprisonment                                         | 8.8   | 0       | 28.1  | 18      | 15.7  | 28      |
| Other forced separation from family                  | 7.0   | 8       | 26.6  | 17      | 14.0  | 25      |
| Enforced isolation from others                        | 3.5   | 4       | 12.5  | 8       | 6.7   | 12      |
| Murder of family member/friend*                       | 8.8   | 10      | 43.8  | 28      | 21.3  | 38      |
| Witness beatings to the head/body                     | 1.8   | 2       | 28.1  | 18      | 11.2  | 20      |
| Witness torture                                      | 0.9   | 1       | 14.1  | 9       | 5.6   | 10      |
| Witness killing or murder                             | 6.1   | 7       | 29.7  | 19      | 14.6  | 26      |
| Any other trauma not specified                        | 40.4  | 46      | 26.6  | 17      | 35.4  | 63      |

*Top 5 events reported by the overall sample
comparing the results of the HTQ-R traumatic experiences section with each participant’s chart to see if the events described were documented. The charts of all participants who were diagnosed with PTSD using the SCID-I/P were also reviewed to investigate if the diagnosis had been given and also if it was formally documented.

**Results**

**Characteristics of the sample**

One hundred and 78 individuals were included in the study, comprising 114 native Irish individuals (64.0%) and 64 migrants (36.0%) (Table 1). Eighty-seven (48.9%) were female. Mean age was 39.65 years (SD = 12.64, range: 18–65). One hundred and twelve participants (62.9%) were single (i.e., never married); 40 (22.5%) were married or cohabiting; 23 (12.9%) were separated or divorced; 3 (1.7%) were widowed. Mean number of years in education was 12.46 (SD = 3.99, range: 0–24). A comparison of the sociodemographic characteristics of the two groups was performed using independent *t* tests and chi-square analyses. Migrants (*M* = 32.05, *SD* = 3.57) were significantly younger than Irish individuals (*M* = 43.91, *SD* = 12.18) but the two groups did not differ significantly in terms of gender, marital status or occupational status level. Migrant (*M* = 12.03, *SD* = 4.64) and Irish (*M* = 12.70, *SD* = 3.57) participants also did not differ in the number of years spent in education.

Migrants originated from 35 different countries and had 29 different first languages. Fifty-one participants (79.7%) in the migrant group had no other family members in Ireland. Of the migrants in a relationship, 10.9% did not have their partner present with them in Ireland. The mean length of time in Ireland for migrants was 50.95 months (SD = 30.69, range: 1–96). In terms of legal status, the largest groups among the migrants were EU nationals (31.3%) and refugees (28.1%).

**Rates of traumatic events**

The first aim of the study was to investigate the rates of traumatic experiences within the overall sample of service-users and between (a) the Irish and migrant groups and (b) the forced and voluntary migrant groups. The distribution of major categories of such experiences reported by 10 per cent or greater of the sample population is presented in Table 2.

| | Irish | % | Migrant | % |
|---|---|---|---|---|
| 1 | Sexual abuse/humiliation | 18.4% | Murder of family/friend | 43.8% |
| 2 | Lack of shelter | 15.8% | Lack of food/water | 40.6% |
| 3 | Beatings to the body | 14.9% | Beatings to the body | 39.1% |
| 4 | Rape | 14.0% | Lack of shelter | 35.9% |
| 5 | Lack of food/water | 9.6% | Imprisonment | 28.1% |

The results of reported traumatic events indicate that the degree of trauma exposure among participants was high. Overall, 71.3% of service-users (n = 127) had experienced at least one major lifetime traumatic event that would meet the DSM-IV stressor criteria for PTSD and a significant percentage of both the Irish (67%) and migrant (80%) groups of service-users had experienced at least one traumatic life event. Interestingly, three of the five most common events reported by both groups were similar (see Table 3).

Analysis of the data between the forced and migrant groups revealed some interesting findings. As anticipated, an overwhelming majority of the forced migrants (93.7%) had experienced a traumatic event. A large percentage of the voluntary migrants had also experienced a traumatic event (65.6%). However, the types of trauma experienced differentiated between the two groups with many war-related or torture-related events only experienced by forced migrants (e.g., kidnapping, forced labor, forced to find and bury bodies, forced to witness rape/sexual abuse). A high percentage of forced migrants reported trauma, where the top five traumatic events were experienced by over half of all forced migrant participants (see Table 4).

| | Irish | % | Migrant | % |
|---|---|---|---|---|
| 1 | Sexual abuse/humiliation | 18.4% | Murder of family/friend | 43.8% |
| 2 | Lack of shelter | 15.8% | Lack of food/water | 40.6% |
| 3 | Beatings to the body | 14.9% | Beatings to the body | 39.1% |
| 4 | Rape | 14.0% | Lack of shelter | 35.9% |
| 5 | Lack of food/water | 9.6% | Imprisonment | 28.1% |

The second aim of the study was to compare the frequency of traumatic events between (a) the Irish vs. migrant sample and (b) the Irish, forced migrant and voluntary migrant groups. The mean number of traumatic events experienced in the overall group (n = 178) was 3.29 (SD = 4.72; range: 0–31). A comparison of the Irish and migrant groups revealed that 47.4% of the Irish and 70.3% of the migrants experienced two or more events. The number of traumatic events experienced ranged from 0–12 in the Irish group (M = 1.72, SD = 2.08) and from 0–31 in the migrant group (M = 6.08, SD = 6.52) with 17.2% of the latter group experiencing 13 or more traumatic events. An independent-samples *t* test was conducted to compare the number of traumatic events for Irish vs. migrant participants, where migrant service-users were found to experience significantly more traumatic events than Irish service-users, *t* (70.24) = -6.56, *P* < 0.05. Chi-Square tests indicated a significant association between Irish/migrant status and traumatic event for 34 out of 40 items on the HTQ-R, where the Irish sample was significantly less likely to experience the traumatic events. No significant associations between migrant/Irish status were reported for sexual trauma including rape or other sexual abuse or humiliation.

Using a one-way non-repeated ANOVA differences between groups (i.e., Irish, forced migrant or voluntary migrant) on the number of traumatic events experienced were observed, *F* (2, 175) = 1701.40; *P* < 0.05. Post hoc tests using Dunnett C post-hoc multiple comparisons indicated that the forced migrant group (*M* = 9.88, 95% CI [7.41, 12.34]) reported a significantly higher
number of traumatic events compared with the Irish group (M = 1.72, 95% CI [1.33, 2.10]) or the voluntary migrant group (M = 2.28, 95% CI [1.14, 3.43]). The means for the Irish and voluntary migrant groups did not differ significantly.

HTQ-R PTSD symptomatology
The third aim of the study was to compare HTQ-R PTSD symptomatology levels for both the DSM-IV score on the HTQ-R items 1–16, which correspond to the DSM-IV diagnostic criteria for PTSD, and for the total score on the HTQ-R items 1–40 between the Irish, forced migrant and voluntary migrant groups. Using a one-way ANOVA to test for differences between the Irish, forced migrant and voluntary migrant groups, a statistically significant difference was observed $F (2, 175) = 22.14, P < 0.05$. Post-hoc comparisons using the Dunnett’s C found that the forced migrant group (M = 2.04, SD = 1.05) had significantly higher DSM-IV PTSD scores than the voluntary migrant (M = 1.10, SD = 1.05) or the Irish groups (M = 0.86, SD = 0.76). Once again, the Irish and voluntary migrant groups were not found to differ. Post hoc analyses following the finding of a significant difference between groups in overall HTQ scores $F (2, 175) = 19.08$, $P < 0.05$ also revealed that the mean score for the forced migrant group (M = 1.76, SD = 0.85) was significantly different from the voluntary migrant group (M = 1.01, SD = 0.96) and the Irish group (M = 0.82, SD = 0.67). The Irish and voluntary migrant group mean scores did not differ.

Torture
The fourth aim of this study was to investigate the rates of torture experienced by participants and to investigate if participants that had experienced torture reported higher levels of overall PTSD symptomatology than participants who had not experienced it. Results found that 17 (53.1%) forced migrant participants reported experiencing this severe form of trauma, which was not reported by any voluntary migrant or native-Irish participants. Table 5 reveals the top five most commonly experienced forms of torture.

| Forced Migrant | % | Voluntary Migrant | % |
|----------------|---|-------------------|---|
| 1 Murder of family/friends | 71.9% | Beatings to the body | 25.0% |
| 2 Lack of food/water | 65.6% | Lack of shelter | 18.8% |
| 3 Witness murder/killings | 56.3% | Rape | 15.6% |
| 4 Beatings to the body | 53.1% | Murder of family/friends | 15.6% |
| 5 Ill health w/out medical care | 53.1% | Lack of food/water | 15.6% |

The final aim of the study was to carry out a chart review to ascertain if (a) the traumatic events reported by participants in the study were documented in their charts and (b) if individuals diagnosed with PTSD on the SCID-I/P had the formal diagnosis in their charts. All 178 charts were reviewed for any traumatic events reported on the HTQ-R by participants. This chart review study revealed a marked under-reporting of traumatic events in service-users’ charts. For example, one participant reported 31 traumatic events to the first author. However, only 14 of these events were noted in their chart. Additionally, although the results of the study found that 15.7% of the service-users who were interviewed with the SCID-I/P met criteria for PTSD, these rates were not reflected in the clinic charts. Among the 28 service-users diagnosed with PTSD, only 15 out of the 28 charts (53.57%) listed a diagnosis of PTSD, suggesting a marked under-detection of PTSD in this sample of adult mental health service-users.

Discussion
The goal of this study was to establish the rates of trauma and PTSD in a sample of adult mental health service-users in Dublin and to compare the rates established between Irish and voluntary migrant populations.
migrant service-users. To our knowledge, this is the first study to screen for trauma exposure and PTSD in a psychiatric setting in Ireland, as well as the first international study to directly compare rates of trauma and PTSD between a diverse group of first-generation migrants and native-born adult mental health service users. A secondary objective of the study was to further compare results between forced and voluntary migrants.

Consistent with other research, in which a high prevalence of traumatic events in psychiatric populations had been reported, we found that 71.3% of service-users reported at least one lifetime traumatic event. Moreover, 55.6% of service-users reported multiple traumatic events. The fact that over half of all service-users reported experiencing multiple traumatic events supports the findings from previous studies in which multiple traumatisation was prevalent among adult mental health service-user samples. A comparison between the migrant and native-Irish service-users found that migrant service-users experienced significantly more traumatic events than their native-Irish counterparts. This result is not surprising, considering the pre-migration experiences that many migrants endure before starting the migration process. However, the rates of some traumatic experiences, such as the murder of a family member or friend (43.8%), lack of food or water (40.6%) and torture (26.6%) were surprisingly high for this relatively small sample of migrants. Furthermore, the finding that a considerable percentage of migrants had experienced between 13 and 31 traumatic events further highlights the volume of trauma experienced within migrant adult mental health service-user groups. Overall, these results highlight the significant levels of trauma that migrants have experienced prior to arrival in host societies and mental health professionals need to be aware of the potentially high rates of severe traumatic events experienced by their migrant client populations.

A more specific focus on the differences in rates of traumatic experiences between the Irish, forced and voluntary migrant groups found that the forced migrant group experienced significantly higher rates of traumatic events than the other two groups, with the majority of events relating to war-related traumas. Indeed, the voluntary migrants and the native-Irish participants were found to be quite similar in both the nature and rates of traumatic events. In the case of trauma research, it is well known that forced migrants are likely to have experienced substantial pre-migration trauma that placed their lives at risk and forced them to flee. Thus, as found in this study, their trauma-related needs are quite unique as a service-user group. Nevertheless, it is also important to factor in the possible pre-migration and indeed, post-migration traumatic experiences that voluntary migrants may have experienced as there is a danger of mental health services overlooking the mental health needs of the larger community of voluntary migrants accessing care by only focusing on the extreme pre-migration experiences of forced migrant service-users.

An investigation into the rates of torture among participants revealed that more than half of the forced migrants had experienced this particularly severe form of trauma and indeed, a wide range of different forms of torture were reported by this group. In line with previous findings; those that had experienced torture were found to be more susceptible to developing PTSD. These results have clinical implications for all mental health professionals working with asylum seekers and refugees as they highlight the importance of particular awareness of the possibility of high rates of torture among this service-user group. The results of the present study contribute to this critically understudied phenomenon at both a national and international level.

Although rates of traumatic events were similar to those reported in past research, the rate of current PTSD (13.5%) was lower than what has previously been reported in the literature for diagnostically heterogeneous groups of service-users with mental illness (29–43%). As no prevalence study of PTSD has been conducted in Ireland it is not possible to make comparisons to the general population. Service-users diagnosed with PTSD reported significantly more traumas than non-PTSD sufferers. This result is in line with previous studies identifying the number of traumatic events as a powerful predictor of PTSD development.

Finally, efforts to examine trauma and PTSD in mental health settings are especially critical because there is some indication that PTSD may remain undiagnosed or inadequately treated by mental health professionals. Indeed, the under-detection of trauma and PTSD reflected by the results of the chart review study is consistent with findings from other studies. However, the detection rate for PTSD of 53.5% in this study is considerably higher than rates reported in these studies, where PTSD diagnoses were not documented in any charts, even though current rates of PTSD in their samples were 34% and 29%, respectively. Nevertheless, the finding that just over half of PTSD cases in the present study were formally documented is a concern. It is possible that the under-detection of trauma and under-diagnosis of PTSD are the case not only in the outpatient mental health clinics represented in this study but also in services nationwide. Overall, it is evident that more research is needed to investigate the reasons behind the failure of mental health professionals to document traumatic experiences and to diagnose PTSD. Perhaps it is due to the reluctance of the service-user to volunteer their trauma history or due to the reluctance of the mental health professional to discuss trauma. Research assessing this area from the mental health professionals’ perspectives may prove especially helpful in determining the perceived barriers to treating trauma for this professional population.

Findings of the present study must be considered in light of a few limitations. First, we studied a convenience sample, rather than a randomly selected sample, limiting conclusions that can be

| Type of Torture                      | %    | n   |
|-------------------------------------|------|-----|
| Beating, kicking, striking with objects | 100.0 | 17  |
| Threats or humiliation              | 100.0 | 17  |
| Exposed to unhygienic conditions    | 64.7  | 11  |
| Being chained to others             | 52.9  | 9   |
| Isolation/solitary confinement      | 47.1  | 8   |

Table 5. Top five types of torture reported by tortured forced migrants
Table 6. Forced migrant group comparisons of PTSD symptomatology for torture v. non-torture survivors

| HTQ Symptomatology   | Torture (n = 17) | No Torture (n = 15) | Sig, p |
|----------------------|------------------|---------------------|--------|
|                      | M                | SD                  | M      | SD    |        |
| DSM-IV PTSD Score    | 2.51             | 0.85                | 1.58   | 1.06  | 0.01   |
| HTQ-R Total Score    | 2.15             | 0.73                | 1.38   | 0.82  | 0.01   |

drawn about the prevalence of trauma and PTSD in the general population of patients with psychiatric disorders. Second, while we set out to establish equal numbers in the Irish and migrant groups, there was a lower than expected frequency of migrants accessing the services. This led to a comparatively higher number of Irish participants. However, research has shown that ethnic minorities are less likely to utilize mental health services than ethnic majorities. Third, the validity of our study instruments may be influenced by language and ethnocultural differences. As observed by many cross-cultural researchers the validity of Western mental health constructs and standardized instruments is often unknown when applied to non-Western populations. However, due to the extremely diverse range of languages represented in the study, it would have been impossible to translate the HTQ into the 29 first languages represented. A related issue concerns the sensitivity of the SCID. Although the SCID is considered to be a valid measure of PTSD, it is possible that a more trauma-focused, sensitive measure, such as the Clinician-Administered PTSD Scale, may have yielded somewhat different findings. Thus, our results are limited by the sensitivity of the SCID. Regarding the chart review study, it is also important to acknowledge that inter-rater reliability was not performed and as the review was conducted following the initial assessment interviews, the researcher may have been primed to identify the absence of trauma in the patient charts. Finally, distressing events were retrospectively assessed, therefore, recollection biases must be considered.

In conclusion, this study addresses the dearth of international research looking at the differences between migrant and native-born adult mental health service-users in terms of their rates of trauma experienced, levels of posttraumatic symptomatology and PTSD. The major clinical implications of the findings are that mental health professionals must be alert to the symptoms of PTSD in service-users who have suffered either past or recent trauma, or service-users who have comorbid disorders, to offer appropriate treatment options. Despite the apparent prevalence of PTSD in this service-user sample, experienced clinicians rarely diagnosed it. Of particular importance, the data are informative about the nature and extent of the problem of trauma and PTSD among migrant adult mental health service-users—a population that has remained virtually invisible in trauma research and thus, likely to be misunderstood and ineffectively treated.

 Disclosure of Potential Conflicts of Interest

No potential conflicts of interest were disclosed.

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