

# Exposure to Trauma and Mental Health Service Engagement Among Adults Who were Children of the Northern Ireland Troubles of 1968 to 1998

Finola Ferry<sup>1</sup>, Edel Ennis<sup>2</sup>, Brendan Bunting<sup>2</sup>, Samuel Murphy<sup>2</sup>, David Bolton<sup>3</sup>, Siobhan O'Neill<sup>2</sup>

<sup>1</sup>Bamford Centre for Mental Health and Wellbeing, School of Psychology, Ulster University, Coleraine, Northern Ireland

<sup>2</sup>School of Psychology, Ulster University, Coleraine, Northern Ireland.

<sup>3</sup>Initiative for Conflict-Related Trauma, Enniskillen, Northern Ireland

## Author Note

Correspondence concerning this article should be addressed to: Edel Ennis,  
School of Psychology, Ulster University, Coleraine, Northern Ireland, BT52 1SA. Email:  
[e.ennis@ulster.ac.uk](mailto:e.ennis@ulster.ac.uk)

## Abstract

Northern Ireland is an appropriate region to examine the impact of traumatic experiences, owing to the many years of civil violence that have characterised its recent history, known colloquially as the “Troubles.” Given the prominence of traumatic experiences among the ageing population of Northern Ireland (NI), an evidence base is required to inform the planning and provision of effective mental health and other services. We analyzed the follow-up interviews ( $n = 225$ ) of individuals from the Northern Ireland Study of Health and Stress (NISHS), aged 45 years and older, who experienced one or more conflict-related traumatic events. This study demonstrated that in NI, traumatic events, such as being involved in an explosion, seeing someone killed or seriously injured, and living in a region of terror were most likely to be related to the Troubles. However, event types that we had not previously known to be related to conflict (such as the sudden death of a loved one), were also often related to the Troubles. Two-thirds of participants (67.1%) reported exposure to a Troubles-related event, and 57.8% reported being a civilian in a region of terror. The vast majority (85.9%) of participants who experienced a Troubles-related trauma never sought help, despite 59.1% meeting the criteria for a lifetime mental disorder. The reasons for not seeking help and sources of

help are outlined. Policy makers must address Troubles related mental health effects, in terms of how they carry forward into aging and consider ways of improving engagement with services and treatments.

### **Exposure to Trauma and Mental Health Service Engagement Among Adults Who were Children of the Northern Ireland “Troubles” of 1968 to 1998**

Evidence from many countries demonstrates the profound and negative impact war and conflict can have on the population’s mental health (Rugma et al., 2015; Atwoli et al., 2013; Amawi et al., 2014). Northern Ireland (NI) is an appropriate region in which to examine the impact of traumatic experiences, given the many years of civil violence that characterised its recent history, known colloquially as the “Troubles”. Northern Ireland is part of the United Kingdom, and the Troubles may be characterised as the civil conflict between the British security forces and the republican paramilitaries, who supported the return of NI to Ireland. During the 30 year period from 1968 to 1998 there were almost 4,000 deaths, 48,000 physical injuries, 34,000 shootings and 14,000 bombings. In 1998 the “Good Friday Agreement” heralded a period of relative peace, and is regarded as signalling the end of the conflict (Fay et al., 1997; Daly, 1999).

The World Mental Health (WMH) Survey Consortium includes nationally or regionally representative surveys in 27 countries, representing all regions of the world, and with a total eventual sample size in excess of 154,000 (Kessler et al., 2009). Part of the WMH surveys, the NI Study of Health and Stress (NISHS) was conducted as the largest epidemiological study of mental health disorders in NI from 2007 to 2008. In this study the years of conflict-related violence known as “the Troubles” have been shown to have had a substantial adverse impact on the population, with NI having high levels of mental health disorders and suicidal behaviour (O’Neill et al., 2014a).

Posttraumatic stress disorder (PTSD) is one mental disorder that may be precipitated by a traumatic event. The disorder is characterised by three clusters of symptoms or reactions, namely: the reexperiencing of the event such as nightmares or flashbacks; the avoidance of things that remind the person of the event and numbing of emotions and responsiveness; and hypervigilance symptoms such as jumpiness, irritability, and sleep disturbance (American Psychiatric Association, 2013). Northern Ireland had the highest rate of PTSD among the countries surveyed by the WMH Consortium, with estimates of both lifetime PTSD and 12-month rates being 8.8% and 5.1%, respectively (Bunting, Murphy, O’Neill, & Ferry, 2012; Bunting, Ferry, Murphy, O’Neill, & Bolton, 2013a). These figures refer to the percentage of the population that met DSM PTSD criteria during their lifetime and those who met the criteria in the previous 12 months.

Previous analyses of NISHS data show elevated levels of both mental (Bunting et al., 2013a) and physical conditions (Ferry et al., 2008) associated with the experience of psychological trauma in NI. However, they also show that low levels of both help-seeking and the securing of effective help for trauma-related conditions have been characteristic of the NI conflict. Individuals who were exposed to trauma are important to consider in view of their vulnerability to the various adverse consequences noted above. However, despite the documented impact of trauma among the general population, several issues highlight the need to specifically focus on the experience and current impact of Troubles-related trauma exposure among people aged 45 years and older in the NI adult population. First, analysis of the NISHS ( $N = 4,340$ ) revealed an elevated level of exposure to traumatic events among people aged 45 years and older (Bunting et al., 2013a). This subpopulation lived through the most violent period of the civil conflict; many of these individuals were in their late teens and early 20's at the height of the violence, thereby having an elevated risk of trauma exposure. Also, current and projected population trends highlighting the increasing ageing population in NI (NISRA, 2012) point to the need for a strong evidence-base to inform social and economic policies and the provision of services for the aging population. This study allows an opportunity for an in-depth understanding of the trauma experiences of this group, as well as their barriers to seeking help and needs.

Second, initial analysis of data from the NISHS revealed important limitations in relation to the study of the experience and impact of Troubles-related trauma. Specifically, it was not possible to determine, with certainty, which trauma experiences were associated with the Troubles. The survey instrument used in the NISHS (the World Mental Health Composite International Diagnostic Interview; WMH-CIDI) limited the ability to identify whether or not traumatic events experienced by participants were Troubles-related. Experience of traumatic events was assessed in a comprehensive PTSD section of the WMH-CIDI. At the beginning of this section, participants were presented with 29 types of traumatic events and asked only about their experience of these events during their lifetime. Full details of methodology including event types are detailed in previous work (Bunting et al., 2013a). To obtain an estimate of the prevalence of traumatic events that were potentially associated with the Troubles, we used previous literature to identify those events from the list of 29 that were likely to be "conflict-related" and those that were not, or which could not be determined as being Troubles-related (Bunting et al., 2013a). However, in previous papers (Bunting et al., 2013a), "unexpected death of a loved one" and "trauma of a loved one" were not categorized as "conflict related," as the research team could not determine definitively if these events were Troubles-related. The follow-up interviews provided an opportunity to explore, in more detail, what proportion of the sample have experienced these traumatic events in association with the Troubles.

These matters provide a strong rationale for the current study. This is a follow-up study that focused on people in NI aged 45 years and older and who experienced conflict-related traumatic events, unexpected death of a loved one, or trauma of a loved one, as indicated in the NISHS. It aimed to examine the extent and nature of the Troubles-related traumatic events to which participants were exposed, and the rates of professional help-seeking among this group. The findings are relevant to general health and social care policy and to the specific challenge of addressing the consequences of the Troubles. They also have the added benefit of informing how individual experiences of conflict-related trauma and their adverse consequences (such as mental illness, and social and relationship problems) are moderated or exacerbated by experiences of service access, and the perceived helpfulness of services. All are based on the self-reported perceptions of the participants.

## **Method**

### **Participants and Procedure**

This was a mixed-methods study, involving both quantitative and qualitative data from a follow-up study to the NISHS amalgamated with NISHS quantitative data. The NISHS was the largest epidemiological study of mental disorders in NI based on validated diagnostic criteria ( $N = 4,340$ ), and part of the WMH Surveys in which trained lay interviewers conducted face-to-face standardized interviews with a representative population sample using the WMH-CIDI. Detailed descriptions of the NISHS methodology have been provided elsewhere (Bunting et al., 2012, Bunting et al., 2013a, Bunting et al., 2013b).

The original NISHS study asked individuals about their lifetime experience of 29 event types which may have been perceived as traumatic (described hereafter as “traumatic experiences”). Based on relevant literature, 12 of the original 29 traumatic experiences were coded as conflict related: (1) purposely killed, injured or tortured; (2) refugee; (3) kidnapped; (4) relief worker in a warzone; (5) combat experience; (6) civilian in a warzone; (7) saw atrocities; (8) man-made disaster; (9) beaten up by someone other than a parent or partner; (10) mugged or threatened with a weapon; (11) witnessed someone being killed or seriously injured; and (12) civilian in a region of terror; (Bunting et al., 2013a). Individuals were eligible for the follow-up study if they (a) were aged 45 years or older at the time of the NISHS interview, (b) agreed to take part in future studies, and (c) reported within the NISHS that they had experienced at least one of the earlier discussed “conflict-related” traumatic experiences, or experienced one or both of the traumatic events “unexpected death of a loved one” or “trauma of a loved one”. The last two categories were included as the follow-up interview gave the opportunity to determine whether or not the experiences were Troubles-related. It should be noted that although these participants all reported within the NISHS that they had experienced at

least one of these potentially traumatic 29 events, the study did not assess whether the individual perceived the event as traumatic. The study was approved by Ulster University ethical committee and written informed consent was obtained by the researcher prior to the interview.

Inclusion criteria for follow-up interviews was met by 508 individuals. Full re-contact details (provided in the original NISHS) were retrieved for 425 of these potential participants, who each received a participant information sheet and study invitation by post. There were 40 participants who contacted the researcher to decline participation (they did not give a reason nor was one elicited, as per the requirements of the ethical approval for this study), leaving a potential sample of 385 participants. Re-contact information was subsequently passed to the professional interviewing company (Ipsos Mori, Belfast, Northern Ireland). The description of final interview status for these 385 participants can be summarised as: successful interview ( $n = 225$ , 58.4%), refused ( $n = 26$ , 6.8%), unable to access block/scheme/gated apartments ( $n = 1$ , 0%), occupied but no contact at address after  $\geq 5$  calls ( $n = 11$ , 2.9%), named respondent deceased ( $n = 15$ , 3.9%), named respondent does not live at address ( $n = 21$ , 5.5%), property vacant ( $n = 3$ , 0.8%), property derelict ( $n = 2$ , 0.5%), too ill ( $n = 4$ , 1.0%), away during fieldwork ( $n = 6$ , 1.6%), other reason ( $n = 64$ , 6.6%), no contact ( $n = 3$ , 0.8%), and unknown ( $n = 4$ , 1.0%). The percentages stated represent the percentage of the final potential sample ( $N = 385$ )

## Measures

Interviews were administered by trained lay interviewers from Ipsos MORI and responses included categories “don’t know”, “not applicable” and “refused”. There was therefore no missing data. The interview schedule included structured questions to elicit information about the experience of Troubles-related traumatic events. Participants were again presented with the 29 event types about which they had been originally been asked in the NISHS, and asked to indicate whether or not the traumatic events were Troubles-related. Individuals who indicated that they had experienced a Troubles-related event were then asked additional structured questions about the impact, whether they sought help following their experience. Subsequent to a general question about help-seeking, participants were asked about their use of a range of professional services in relation to difficulties they had arising from their experience related to the Troubles, including: primary healthcare, mental health specialist services and other services. In addition to these structured questions, more in-depth qualitative information was sought by asking participants open-ended questions about their traumatic experiences, difficulties they had following their experiences, and reasons for seeking help.

## Data Analysis

The prevalence of Troubles-related event types was therefore calculated as the proportion of the follow-up sample ( $n = 225$ ) that responded to the interview question saying that they had experienced each of the relevant event types in association with the Troubles. Responses to these open-ended questions were coded using thematic analysis (Braun and Clarke, 2006), a common approach to the systematic analysis of qualitative mental health data (e.g. Folkard et al., 2016; Spence et al., 2016). The themes were based on the literature on the existing criteria for PTSD, the impact of PTSD. In addition, new themes emerged from the data as a result of the open ended questions. Data from the NISHS were merged with data collected in the follow-up study. For these 225 participants, variables from the NISHS included demographic information and variables indicating whether or not the individual met the criteria for a lifetime mental health disorder.

## Results

### Demographic Description of Participants

This study included 225 individuals aged 45 years and older who experienced at least one traumatic event associated with conflict or the sudden death or trauma to a loved one. Of participants, 51.6% ( $n = 116$ ) were female and 48.4% ( $n = 109$ ) were male. Interviews were obtained for 225 of 508 eligible participants, giving a response rate of 44.3%. Almost two-thirds of participants (64.9%) were married ( $n = 146$ ), one-quarter (25.3%) were previously married ( $n = 57$ ) and one in 10 were never married ( $n = 22$ ). The highest percentage of participants were aged 55 to 64 years (36.0%,  $n = 81$ ), followed by 65 to 74 years (26.7%,  $n = 60$ ), 75 years or older (20.4%,  $n = 46$ ). The group aged 45 to 54 years represented the smallest sample (16.9%,  $n = 38$ ).

### Experience of Lifetime Traumatic Events and Troubles-related Traumatic Events

Participants were asked whether they had ever experienced any of 29 traumatic event types during their lifetime and if they had, whether the event was linked to the Troubles (Table 1). Overall, two-thirds of the sample ( $n = 149$ ) experienced at least one type of Troubles-related traumatic event. The most prevalent lifetime event, reported by 67.1% of respondents, was being a “civilian in a region of terror,” and 57.8% of the sample said they were a “civilian in a region of terror” in the context of the Troubles.

The next most common event types were “unexpected death of a loved one,” which was experienced by almost half of the participants (48.4%), and 5.8% study participants reported an unexpected death of a loved one that was related to the Troubles. One-third of the overall sample (33.3%) reported having “witnessed death or serious injury,” however only one-third of these events (10.3% of the overall sample) were linked to the Troubles. “Man-made disaster” was reported by over one in five participants, with the majority of these cases reported as being linked to the Troubles (17.8%). Other notable Troubles-related exposures among the overall sample included “saw atrocities” (8.9%), “[PubMed](#) ;relief worker in a war

zone” (4.9%), “PubMed ;combat experience” (3.1%), PubMed and “other” traumatic events that were not listed (6.3%). In terms of demographics and trauma reports, almost three-quarters of males (74.8%,  $n = 80$ ) and 58.5% ( $n = 69$ ) of females in the follow-up sample reported any Troubles-related trauma. Analysis by age-group shows that, 76.3% ( $n = 29$ ) of those aged 45 to 54 years; 70.4% ( $n = 57$ ) of those aged 55 to 64 years; 66.7% ( $n = 40$ ); and 50.0% ( $n = 23$ ) of those aged 75 years or more reported any Troubles-related trauma. Group sizes were not considered sufficient to allow comparative statistical analyses.

Individuals who had experienced an event from the list and identified this event as being Troubles-related were asked to provide a brief description of their experience. A high proportion of the follow-up sample (57.8%) said that they were a “civilian in a region of terror” linked to the Troubles. Descriptions of individuals’ experience of this type of trauma included both direct exposure to violence and exposure to the effects of the violence. The quotations provided below give an insight into the types of experience described:

*“The times when CS gas was used to control crowds. As a young girl coming home from a night out, I was caught in the crossfire of bullets and completely terrified. How I got home alive I’ll never know”.*

*“As a nurse I was forced to witness broken noses, bomb explosion injuries, eye injuries where people had been shot through the eyes. Explosions where there were multiple injuries. It was horrific.”*

The majority of descriptions of manmade disasters focused on experience of bomb explosions, while some participants spoke about their experience of the burning of businesses and homes during the Troubles.

*“A bomb went off in the house opposite my home. Our home was badly damaged and the other house was also badly damaged. It was a very dramatic time. My baby was only 6 weeks old at the time and I was at home alone with her.”*

*“a bomb exploded in a bar .... as I had just left the premises. My husband and mother were still inside. Two people were killed and 30 people injured.”*

Individuals’ descriptions of being mugged or threatened with a weapon included being held at gunpoint, hijacked, detained, and threatened.

*“Security forces detained us coming over the border and we were held for about 8 hours and we were threatened with murder, assassination.”*

*“I worked in an off-licence in my twenties. We were held up several times and the men were armed with bars, knives and guns. I had a gun held up to my head. We were held up every few months, especially in the dark nights.”*

Just over 6% (6.2%) of individuals experienced another Troubles-related event that was not classified as a “conflict-related” event in the previous analysis of NISHS data (Ferry et al., 2013a). These experiences of “other events” described by participants varied widely from experiences of being shot at or witnessing

shooting during the Troubles, to the experience of eviction from the family home. One participant described how the aftermath of a bomb was particularly traumatic. Another said:

*“I was shot at one night after locking up at work...in Belfast. I was approached by a hooded man. Someone in the car said something to him and he got into their car and drove off. I feel it may have been mistaken identity.”*

*“Shooting the close colleagues and witnessed injuries (details of terrible injuries omitted by research team). I have never forgotten this.”*

Among the overall sample, 5.8% of participants experienced the “unexpected death of a loved one” as a result of the Troubles. This provided important new information on the impact of sudden death arising from the Troubles, that hadn’t been captured in the NISHS. Two of these personal experiences are described below:

*‘My [relative] .... was sitting at his desk when three men .... asked for his name. They shot him [multiple times] and killed him’.*

*‘My [relative] was standing at her front door when a bomb went off in a car; she was killed instantly’.*

### **Use of Mental Health Services and Barriers to Seeking Help**

When participants who had experienced at least one lifetime Troubles-related traumatic event ( $n = 149$ ) were asked if they had ever sought professional help following their experience, 14.1% ( $n = 21$ ) had, while an overwhelming majority 85.9% ( $n = 128$ ) never sought help. Similarly, when participants who had experienced at least one lifetime Troubles-related traumatic event ( $n = 149$ ) were asked if they were ever prescribed medication for emotional problems associated with the Troubles, 14.1% said yes and 85.9% said no.

All of the 21 individuals who sought help met the criteria within the NISHS for at least one mental health condition during their lifetime. Of the 149 total individuals who experienced a Troubles-related traumatic event, 88 (59.1%) met the criteria for at least one lifetime mental health disorder, as indicated by analysis of NISHS data. This means that 67 (76.1%) of those who experienced a Troubles-related event and had an identifiable mental health condition did not seek help.

Participants who sought help following their experience of Troubles-related trauma ( $n = 21$ ) were asked about the types of professionals they had visited and whether they felt this source of help was effective. The responses to this question are detailed in Table 2. Almost all participants who sought any help had visited their general practitioner or family doctor (95.2%,  $n = 20$ ), almost two-thirds visited a psychiatrist (61.9%,  $n = 13$ ), and 42.9% ( $n = 9$ ) saw a psychologist. Small numbers limit interpretation. However, for each type of service provider, the majority of individuals reported that the help that they received had



been effective. The highest proportion, of those participants who sought help reported that they received person-centered counseling (38.1%,  $n = 8$ ), 14.2% received cognitive behavioural therapy, and 9.5% received psychotherapy.

The 21 individuals who said they had sought help for their emotional problems associated with the Troubles were asked to comment on their reasons for seeking help. The reasons that most people provided for seeking help centered on problems with anxiety and depression following their experience, while one individual talked about suffering from suicidal thoughts:

*“Apart from the physical damage, I suffered depression for a while.”*

*“Doctors recommending that I attend a psychoanalyst because I had suicidal thoughts.”*

Participants were also asked to describe in more detail the specific emotional problems that they had following their experience. Some individuals talked of being continually distressed and anxious:

*“Crying all the time and depressed, constantly worried about the kids. Always expecting trouble in the area.”*

*“I was uncontrollably upset and emotionally spent I suppose.”*

*“Nervous, afraid. I hated going up the street. I didn’t want to pass where it happened.”*

Others described their experience of flashbacks, a prominent feature PTSD:

*“Flashbacks and thinking ‘it could be me next time’”*

*“I was deeply caught up and got flashbacks to the event of seeing the mutilated body of (the person) after the explosion.”*

Several individuals spoke about physical health problems associated with experience of Troubles-related trauma:

*“Ongoing depression, I was unable to socialise and couldn’t go out of the house for quite some time. I was worried constantly about my family, especially my mother who was hurt at the time and took arthritis out of that. I was pregnant at the time as well.”*

As noted earlier, the majority of participants who experienced Troubles-related traumatic events did not seek help (85.9%,  $n = 128$ ). These individuals were presented with a number of potential reasons for not seeking help and asked whether each was a factor in their decision. The most frequently endorsed reasons for not seeking help were that participants did not think they needed it (66.4%), did not know what was wrong with them (17.2%), and did not know where to get help (16.4%; see Table 3).

## Discussion

As these findings incorporate quantitative and qualitative information, they provide a deeper insight into individual experiences of the Troubles and the nature of the event types discussed. These findings

therefore help us understand more about the traumas experienced by people exposed to the conflict in NI, and possibly for other similar contexts of conflict. They also help us understand the barriers to seeking help and the needs of those affected by the Troubles. The prevalence of events in the Troubles-related event category, such as “civilian in a region of terror,” was higher among the participants in this study than in the main NISHS. This reflects the fact that participants were selected based on their having endorsed trauma experience.

Traumatic event types that were not categorised as “conflict-related” in previous analysis of the NISHS data were identified as being related to the Troubles in this follow-up study (Bunting et al., 2013a; Ferry et al., 2008; O’Neill et al., 2014a). For example, 6.3% of participants said they experienced some other event type that was associated with the Troubles. Similarly, 5.8% of the follow-up study participants experienced an unexpected death of a loved one linked to the Troubles, and 2.7% reported “trauma to a loved one” linked to the Troubles. Although we should be cautious about extrapolating these findings to the larger data set, these two latter findings reinforce conclusions from the earlier assessments (Bunting et al., 2013a; Ferry et al., 2008; O’Neill et al., 2014a) that the initial estimates of adverse impact of the Troubles on the population was probably an underestimate. In addition, the results confirm that more males than females experienced Troubles-related traumatic events. The highest proportion of people experienced Troubles related traumas in the group aged 45 to 54 years, and the lowest proportion was in the oldest age group (participants aged 75 years or older). This again confirms the findings of the earlier studies and suggests that those most affected by the Troubles who would have been in the oldest age group were less likely to report trauma exposure, or were deceased.

No participant reported sexual assault, child abuse, or domestic violence as events associated with the Troubles. This supports the view that such events were not a widespread instrumental means of violence deployed during this conflict. This does not exclude the possibility that such experiences were secondary to Troubles events and their consequences. Indeed there is much evidence suggesting that family violence may be associated with the conflict’s social and economic legacy (O’Neill et al., 2015).

A few specific event types were more prevalent than others. Over half of the overall sample (57.8%) said they were a “civilian in a region of terror” in the context of the Troubles, while 10.3% witnessed death or serious injury linked to the Troubles. In the current study, 7.4% said they had suffered physical ill health as a result of their experience(s) and 4.0% lost their job or business. Additionally, 2.0% were imprisoned, interned, or charged with an offense associated with the Troubles. This profile reinforces the argument for looking at the wider range of impacts on people’s lives and families to take account of the practical impact

and consequences of people's experiences. Of relevance to this age group is the challenge of coping with serious injuries as one ages, and of the need for care and services.

Use of professional services and delays in help-seeking represents a particularly important issue when one considers the adverse physical and mental health consequences of trauma (Bunting et al., 2013a; Ferry et al., 2008). The current findings show that over three-quarters of people who had a mental illness and reported a Troubles-related traumatic event did not seek help, supporting substantial levels of unmet need among this population (Bunting et al., 2013b; O'Neill et al., 2014b). The rates of unmet need in this group are higher than the rates of unmet need in the WMH Surveys generally, which showed rates of 24.2% to 60.9% uptake of services for severe mental disorders in high income countries (Wang et al., 2007).

In this study two-thirds of participants did not seek help because they thought they did not need any help. This proportion is higher than the proportion of those in the main NISHS with a serious mental disorder who reported a low perceived need for treatment, and also higher than the proportions of unmet need in the WMH surveys generally (Andrade et al., 2014). The other reasons given for not seeking professional help mirrored barriers to help-seeking in other mental health surveys, and included lack of information about services; clinical, disorder or symptom related issues (e.g. avoidance); practical and financial barriers; and stigma (Leavey, Galway, Mallon, Hughes, Rondón-Sulbarán & Rosato, 2016). Similar barriers have been demonstrated in other studies of PTSD service access, specifically (Davis et al., 2008) with Ghafoori et al. (2014) having reported the fear of discussing the trauma or fear of the effects of treatment as a barrier. A sizeable proportion of this population reported that they did not access support because they were afraid for their own or their family's safety or that they did not know whom to trust. This distinctive barrier is a consideration for policymakers and service providers seeking to address the needs of a population affected by civil conflict.

The barriers to seeking and securing help in this high-risk population need to be addressed. We recommend that efforts be made to target stigma, and to increase the awareness of the treatments in order to increase treatment uptake. For example, raising awareness of PTSD symptoms and the success rates of PTSD treatments may improve uptake, as may anti-stigma campaigns that highlight the high proportions of individuals affected by this disorder. The distinctive problems of providing services in which people can place their confidence is an additional challenge for those charged with responding to the needs of a divided community that is in violent conflict. Structural and practical barriers can be overcome through the provision of appropriate evidence-based treatments for trauma related disorders that are readily accessible and secure the trust of those who have been affected by conflict.

Whilst these findings provide evidence of the impact of trauma on the NI population there are limitations to the study that should be acknowledged. The study is based on self-reported experiences and whilst cumulative trauma exposure is associated with poorer outcomes (Karam et al., 2014), this is not examined in the current analyses. In addition, the study does not differentiate between the impact of type 1 and type 2 traumas which again have implications for the development of mental disorders (Terr, 1991). Finally, we have only limited information about the life trajectory of the participants and whether the family environment was secure or insecure. It was not possible to adjust for these variables in the current study. Nonetheless, the results from this study illustrate the high proportions of the population aged 45 years and older who were affected, revealing that the adverse impacts of trauma exposure have been carried forward into aging. The qualitative information illustrates the nature of the events that have impacted on these individuals' lives. The majority of these people have not sought assistance and the barriers to help seeking remain relevant targets for policy makers and service providers.

### References

- Amawi, N., Mollica, R.F., Lavelle, J., Osman, O., & Nasir, L. (2014). Overview of research on the mental health impact of violence in the Middle East in light of the Arab Spring. *Journal of Nervous and Mental Disease*, 202, 625-629. doi: 10.1097/NMD.0000000000000174.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Andrade, L.H., Alonso, J., Mneimneh, Z., Wells, J.E., Al-Hamzawi, A., ... Kessler, R.C. (2014). Barriers to mental health treatment: results from the WHO World Mental Health (WMH) surveys. *Psychological Medicine*, 44, 1303-1317. doi: 10.1017/S0033291713001943. Epub 2013 Aug 9.
- Atwoli, L., Stein, D.J., Williams, D.R., McLaughlin, K.A., Petukhova, M., Kessler, R.C., & Koenen, K.C. (2013). Trauma and posttraumatic stress disorder in South Africa: analysis from the South African Stress and Health Study. *BMC Psychiatry*, 13, 182. doi: 10.1186/1471-244X-13-182
- Benson, T., O'Neill, S., Murphy, S., Ferry, F., & Bunting, B. (2015). Prevalence and predictors of psychotropic medication use: results from the Northern Ireland study of health and stress. *Epidemiology and Psychiatric Sciences*, 24, 542-552. doi: 10.1017/S2045796014000547. Epub 2014 Sep 15.
- Bunting, B.P., Ferry, F.R, Murphy, S.D., O'Neill, S.M., & Bolton, D. (2013a). Trauma associated with civil conflict and Posttraumatic Stress Disorder: evidence from the Northern Ireland study of health and stress. *Journal of Traumatic Stress*, 26, 134-141. doi: 10.1002/jts.21766.

- Bunting, B.P., Murphy, S.D., O'Neill, S., & Ferry, F. (2013b). Prevalence and treatment of 12 month DMS-IV disorders in the Northern Ireland study of health and stress. *Social Psychiatry and Psychiatric Epidemiology*, 48, 81-93. doi: 10.1007/s00127-012-0518-5. Epub 2012 May 17.
- Bunting, B.P., Murphy, S.D., O'Neill, S., & Ferry, F. (2012). Lifetime prevalence of mental health disorders and delay in treatment following initial onset: evidence from the Northern Ireland study of health and stress. *Psychological Medicine*, 42, 1727-1739. doi: 10.1017/S0033291711002510. Epub 2011 Nov 25.
- Daly, O.E. (1999). Northern Ireland: The victims. *British Journal of Psychiatry*, 175, 201-204.
- Davis, R.G., Ressler, K.J., Schwartz, A.C., Stephens, K.J., & Bradley, R.G. (2008). Treatment barriers for low income, urban African Americans with undiagnosed posttraumatic stress disorder. *Journal of Traumatic Stress*, 21, 218–222. doi: 10.1002/jts.20313.
- Fay, M.T., Morrissey, M. & Smyth, M. (1997). Mapping Troubles-related deaths in Northern Ireland 1969-1998. Initiative on conflict resolution and ethnicity. Belfast: University of Ulster.
- Ferry, F., Bolton, D., Bunting, B., Devine, B., McCann, S., & Murphy, S. (2008). *Trauma, Health and Conflict in Northern Ireland. A Study of the Epidemiology of Trauma Related Disorders and Qualitative Investigation of the Impact of Trauma on the Individual*. NI Centre for Trauma and Transformation and University of Ulster Psychology Research Institute: Londonderry.
- Folkard, S.S., Bloomfield, T.D., Page, P.R., Wilson, D., Ricketts, D.M., & Rogers, B.A. (2016). Factors affecting planned return to work after trauma: a prospective descriptive qualitative and quantitative study. *Injury*, 47, 2664-2670. doi: 10.1016/j.injury.2016.09.040.
- Ghafoori, B., Barragan, B., & Palinkas, L. (2014). Mental health service use after trauma exposure: a mixed methods study. *Journal of Nervous and Mental Disease*, 202, 239-246. doi: [10.1097/NMD.0000000000000108](https://doi.org/10.1097/NMD.0000000000000108)
- Karam, E.G., Friedman, M.J, Hill, E.D., Kessler, R.C., McLaughlin, K.A., Petukhova, M., ... Koenen, K.C. (2014). Cumulative traumas and risk thresholds: 12-month PTSD in the World Mental Health (WMH) surveys. *Depression and Anxiety*, 31, 130-4. doi: 10.1002/da.22169.
- Kessler, R.C., Aguilar-Gaxiola, S., Alonso, J., Chatterji, S., Lee, S., Ormel, J., ... Wang, P.S. (2009). The global burden of mental disorders: an update from the WHO World Mental Health (WMH) surveys. *Epidemiologia Psichiatra Sociale*, 18, 23-33.
- Leavey, G., Galway, K., Mallon, S., Hughes, L., Rondón-Sulbarán, J., & Rosato, M. (2016). Understanding Suicide and Help-seeking in Urban and Rural Areas in Northern Ireland. HSC R&D Division of the

Public Health Agency. Retrieved from:

<http://www.research.hscni.net/sites/default/files/EXECUTIVE%20SUMMARY.pdf>

NISRA (2012). 2012-based Northern Ireland population projections. Retrieved from;

<http://www.nisra.gov.uk/demography/default.asp20.htm>

O'Neill, S., Ferry, F., Murphy, S., Corry, C., Bolton, D., Devine, B. ... Bunting, B. (2014a). Patterns of behaviour in Northern Ireland and associations with conflict related trauma. *PlosOne*, 9, e91532. doi: 10.1371/journal.pone.0091532. eCollection 2014.

O'Neill, S., Corry, C.V., Murphy, S., Brady, S., & Bunting, B.P. (2014b). Characteristics of death by suicide in Northern Ireland from 2005 to 2011 and use of health services prior to death. *Journal of Affective Disorders*, 168, 466-471. doi: 10.1016/j.jad.2014.07.028. [PubMed](#) Epub 2014 Jul 29.

O'Neill, S., Armour, C., Bolton, D., Bunting, B., Corry, C., Devine, B. .... Murphy, S. (2015). *Towards A Better Future: The Trans-generational Impact of the Troubles on Mental Health*. Commission for Victims and Survivors; Belfast, N. Ireland.

Spence, R., Owens-Solari., M., & Goodyer, I. (2016). Help-seeking in emerging adults with and without a history of mental health referral: a qualitative study. *BMC Research Notes*, 9, 415. doi: 10.1186/s13104-016-2227-8

Terr, L. (1991). Childhood traumas: an outline and overview. *American Journal of Psychiatry*, 148, 10-20. doi: 10.1176/foc.1.3.322

Wang, P.S., Aguilar-Gaxiola, S., Alonso, J., Angermeyer, M.C., Borges, G., Bromet, E.J., ..... Wells, J.E. (2007). Use of mental health services for anxiety, mood, and substance disorders in 17 countries in the WHO world mental health surveys. *Lancet*, 370, 841-850. doi: [10.1016/S0140-6736\(07\)61414-7](https://doi.org/10.1016/S0140-6736(07)61414-7)

Table 1.

*The Northern Ireland "Troubles" and the Prevalence of Traumatic Events Among the Follow-up Sample*

Traumatic Event	Experienced Traumatic Event (n = 225)	Rated Trauma as Troubles- Related (% among
-----------------	--	--

	<i>n</i>	%	those who experienced)
<b>Purposely caused death or serious injury</b>	2	0.9	50.0
<b>Refugee</b>	6	2.7	83.3
<b>Kidnapped</b>	6	2.7	66.7
<b>Relief worker in a warzone</b>	16	7.1	68.8
<b>Combat experience</b>	10	4.4	70.0
<b>Civilian in a warzone</b>	13	5.8	84.6
<b>Saw atrocities</b>	20	8.9	90.0
<b>Man-made disaster</b>	49	21.8	81.6
<b>Beaten up by someone else</b>	25	11.1	36.0
<b>Mugged or threatened with a weapon</b>	44	19.6	63.6
<b>Witnessed death or serious injury</b>	75	33.3	30.7
<b>Civilian in a region of terror</b>	151	67.1	86.1
<b>Unexpected death of a loved one</b>	109	48.4	11.9
<b>Traumatic event to a loved one</b>	15	6.7	40.0
<b>Life threatening illness</b>	47	20.9	0
<b>Child with a serious illness</b>	43	19.1	0
<b>Some other event</b>	26	11.6	53.9
<b>Car accident</b>	25	11.1	0
<b>Other life threatening accident</b>	17	7.6	17.7
<b>Private event</b>	17	7.6	17.7
<b>Stalked</b>	17	7.6	29.4
<b>Sexually assaulted</b>	16	7.1	0
<b>Toxic chemical exposure</b>	14	6.2	50.0
<b>Witnessed domestic abuse</b>	12	5.3	0
<b>Beaten up by parents</b>	12	5.3	0
<b>Beaten up by spouse/partner</b>	11	4.9	0
<b>Raped</b>	11	4.9	0
<b>Natural disaster</b>	3	1.3	n/a

<b>Accidentally caused death or serious injury</b>	2	0.9	0
--	---	-----	---

Note. n/a = nonapplicable.

Table 2.

*Providers Availed of by Participants who Experienced “Troubles”-Related Trauma and Sought Professional Help*

Type of Service Provider	Participants who Engaged in Professional Health Services		% Who Sought Any Professional Help ( <i>n</i> = 21)	Felt that the Source of Help was Effective <sup>a</sup>	
	Total ( <i>n</i> )	% who Experienced Troubles-Related Trauma ( <i>n</i> = 149)		<i>n</i>	%
<b>Psychiatrist</b>	13	8.7	61.9	10	76.9
<b>General Practitioner or family doctor</b>	20	13.4	95.2	14	70.0
<b>Any other medical doctor<sup>b</sup></b>	6	4.0	28.6	4	66.7
<b>Psychologist</b>	9	6.0	42.9	7	77.8
<b>Social worker</b>	2	1.3	9.5	2	100
<b>Counsellor</b>	8	5.4	38.1	8	100
<b>Any other mental health</b>	6	4.0	28.6	5	83.3



<b>professional<sup>c</sup></b>					
<b>A religious or spiritual advisor<sup>d</sup></b>	3	2.0	14.3	2	66.7
<b>Any other healer<sup>e</sup></b>	1	0.7	4.8	1	100
<b>Other source of help</b>	1	0.7	4.8	1	100

*Note.* <sup>a</sup>Of participants who sought services. <sup>b</sup>Examples include a cardiologist, gynecologist, or urologist.

<sup>c</sup>Examples include a psychotherapist or mental health nurse. <sup>d</sup>Examples include a minister, priest, or rabbi.

<sup>e</sup>Examples include an herbalist, chiropractor, or spiritualist.

Table 3.

*Reasons for Not Seeking Professional Help*

<b>Reason</b>	<b>Total (n)</b>	<b>% of Participants who experienced Troubles- related trauma (n = 149)</b>	<b>% of Participants who did not seek help (n = 128)</b>	<b>% of participants who experienced Troubles- related trauma and met criteria for lifetime mental health disorder (n = 88)</b>
<b>I did not think I needed help</b>	85	57.0	66.4	96.6
<b>I did not know what was wrong with me</b>	22	14.8	17.2	25.0
<b>I was concerned with what people would think if they knew I was in treatment</b>	10	6.7	7.8	11.4

<b>I did not know where to get help</b>	21	14.1	16.4	23.9
<b>I did not know who to trust</b>	15	10.1	11.7	17.0
<b>I was afraid for my own family's safety</b>	19	12.8	14.8	21.6
<b>I could not afford to pay for service</b>	6	4.0	4.7	6.8
<b>I could not afford to take time off work</b>	13	8.7	10.2	14.8
<b>I was afraid that if I sought help, things would get worse</b>	10	6.7	7.8	11.4
<b>Other</b>	13	8.7	10.2	14.8

---