

Abstract

Background: Individuals with intellectual disability (ID) are at greater risk of exposure to traumatic life events compared to the non-ID population. Yet no study to date has examined the role of multiple traumatisation and subsequent psychopathology in people with ID. The aim of this study was to explore the association between multiple traumatisation and subsequent mental health.

Method: A preliminary cross-sectional study involving 33 participants with DSM-V PTSD completed self-report questionnaires on exposure to traumatic life events and PTSD symptoms, anxiety, depression and general distress.

Results: A proportion of 42.4% of the sample reported multiple traumatisation, including exposure to life events in both childhood and adulthood. Those who reported exposure to life events in childhood and adulthood reported significantly higher risk of harm, depression and general psychological distress compared to those who reported exposure to life events only in adulthood.

Conclusions: Preliminary results indicate that more severe psychopathology is associated with multiple traumatisation in childhood and adulthood compared to trauma experienced solely in adulthood.

Introduction

Individuals with intellectual disabilities (ID) are at greater risk of being exposed to multiple traumatic events, particularly in childhood and more likely to developing severe mental health problems following trauma (Hatton & Emerson 2004; Focht –New *et al.* 2008; Wigham & Emerson 2015). Evidence suggests that individuals with ID are more like than individuals without ID to experience traumatic events such as sexual and physical abuse, life-threatening illness or injury and bereavement (Focht –New *et al.* 2008; Hatton & Emerson 2004). Due to impairments in cognitive and adaptive skills, processing of traumatic events is expected to be more difficult in individuals with ID (Mevissen *et al.*, 2016).

There is an established association between exposure to life events and subsequent psychopathology (Esbensen & Benson 2006; Hatton & Emerson 2004; Hulbert-Williams & Hastings, 2008; Jowett *et al.* 2016). Little is known about the association between multiple traumatisation and severe psychopathology such as DSM-5 Posttraumatic Stress Disorder (PTSD) and symptoms of anxiety and depression in adults with ID. Individuals with ID are at higher risk for developing PTSD compared to people without ID (Mevissen & de Jongh 2010) although PTSD is still largely underdiagnosed and undertreated within this population due to misinterpretation of symptoms (Mevissen *et al.*,2016). Mevissen *et al.*, (2016) suggests PTSD symptoms could incorrectly be interpreted as belonging to ID or features of other psychiatric disorders such as anxiety and mood disorders, autism spectrum disorder, ADHD or psychotic disorder. It has been suggested that PTSD symptoms in adults with mild ID do not differ from those seen in adults without an ID (Tomasulo & Razza 2007).

No previous study has assessed lifetime history of traumatic life events and severity of DSM-5 PTSD anxiety and depression symptomatology in people with ID in a single study. We aimed to preliminary address this gap in the literature and explore the effects of multiple traumatisation on mental health in this population group.

Methods

Design and Participants

Participants in this study were recruited for a trial on psychological therapies for PTSD. Thirty – three adults with mild to moderate IDs ($M=41.9$, $SD=11.9$, 60.6% female) were recruited from Community Learning Disability Teams in UK. The specific inclusion criteria were (1) aged 18 years old or above, (2) a diagnosis of ID, (3) full capacity to give or withhold consent to take part in the study (4) a history of at least one traumatic event as defined within LEC and 5) met the cut off (< 38) for PTSD on the PCL-5. Eligible participants were identified and they were referred onto the study by local community ID teams. The majority of participants had attended primary/secondary education (66.7%), were taking psychotropic medication at the time of assessment (75.8%) and just over half of participants had another co-morbid condition (57.6%). Ethical approval was obtained from the appropriate Ethics Committees in the NHS and Edinburgh Napier University.

[Table 1 about here]

Measures

The following measures were administered orally to all participants by a research assistant at pre-treatment. Minor language adaptations were made to LEC; CTQ and PCL-5 to ease comprehension for adults with ID.

Traumatic events

The Life Events Checklist (LEC; Gray et al. 2004) is a 17-item, self-report measure that screens for potentially traumatic events in the respondent's lifetime and was used to assess adulthood trauma. The measure demonstrates good test-retest reliability and convergent validity (Gray et al. 2004).

The Childhood Trauma Questionnaire (CTQ; Bernstein & Fink 1998) is a 28-item self-report questionnaire that assesses history of childhood emotional, sexual and physical abuse and emotional and physical neglect. The measure demonstrates good internal consistency, test-retest reliability, and convergent validity (Bernstein & Fink 1998).

PTSD

The Post-Traumatic Stress Disorder Checklist (PCL-5; Weathers *et al.* 2013) is a 20-item, self-report questionnaire, which assesses DSM-5 posttraumatic symptoms. The measure has good reliability and validity across a range of non-ID populations (e.g. Bovin *et al.*, 2016) but has not been tested in the ID population.

Anxiety

Glasgow Anxiety Scale for people with an Intellectual Disability (GAD-ID; Mindham & Espie 2003) is a 27-item, self-report scale that comprises the ‘three systems’ of cognitive, behavioural and somatic symptoms which co-present anxiety disorders. The measure has demonstrated good test retest reliability and validity in adults with an ID (Mindham & Espie 2003).

Depression

Glasgow Depression Scale for People with a Learning Disability (GDS-LD; Cuthill *et al.* 2003) is a 20 item, self-report scale to measure depression symptoms in individuals with ID. The measure has demonstrated good test-retest reliability and validity in adults with an ID (Cuthill *et al.* 2003).

Psychological wellbeing

Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE – LD Marshall, et al., 2013) is a 30-item generic measure of psychological distress comprising of five domains: functioning, problems, social/cognitive, well-being and risk. The measure has shown good test-retest reliability and validity in adults with an ID (Marshall & Willoughby-Both 2007; Brooks *et al.* 2013).

Statistical analysis

Two groups were created; one with participants who reported traumatic life events only in adulthood (n= 19) and another with participants who reported traumatic life events in both childhood and adulthood (n= 14). Data was analysed using SPSS (version 23). Comparisons between groups were made by means of independent *t* tests for parametric data and Mann-Whitney U test for comparisons where assumptions of normality were not met (Field 2009).

Results

Nature of life events in childhood and adulthood

All participants reported experiencing at least one traumatic life event. Over half of the participants (n= 19, 57.6%) reported that they had experienced traumatic events during adulthood, and just under half of the sample reported that they had experienced traumatic events in both childhood and in adulthood (n=14, 42.4%). No participants reported exposure to traumatic events only in childhood. Of those who experienced childhood and adulthood trauma, the most severe type of childhood maltreatment reported was physical abuse (78.6 %). The most common life events reported in adulthood was physical assault (81.8 %) followed by sudden, unexpected death of someone close (66.7 %) and life-threatening

injury/illness (60.6%). Nearly all participants (97%) reported experiencing more than one type of traumatic event in adulthood. The mean number of life events experienced was 4.55 (SD = 2.11)

[Table 2 about here]

Multiple traumatisation and mental health

Individuals who experienced childhood and adulthood trauma were significantly more likely to report high levels of risk [$Mdn = 2.50$ ($SD = 2.16$), $U = 65.50$ ($Z = -2.52$), $p < .05$] problems/symptoms of psychological distress [$M = 13.43$ ($SD = 34.00$), $t = -2.54$, $p < .05$] and depression [$Mdn = 19.00$ ($SD = 6.54$), $U = 73.0$ ($z = -2.19$), $p < .05$]. There were no significant differences in scores between those who experienced both childhood and adulthood trauma and only adulthood trauma scores for subscales and total scores of PCL and GAS.

[Table 3 about here]

Discussion

In this preliminary study, it was found that a proportion of 42.4% of the sample reported exposure to life events in childhood and adulthood. Those who reported exposure to traumatic life events in both childhood and adulthood reported significantly higher risk for aggressive or self-injurious behaviours, symptoms of psychological distress and symptoms of depression compared to those who reported exposure to traumatic events only in adulthood. Half of the childhood/adulthood trauma group reported the presence of psychotic symptoms. The finding regarding the association between multiple traumatisation across the lifespan, depressive symptoms and risk of harm to self and others support findings from previous studies in people with ID (e.g. O'Callaghan 2003; Peckham *et al.* 2007). However, it was surprising that multiple traumatisation was not found to be associated with increased PTSD

and anxiety symptomatology considering evidence suggesting this link from research in this population (Bonell- Pascual, *et al.* 1999; Mevissen & de Jongh 2010; Wigham & Emerson 2015) and in the non-disabled population (e.g. Briere *et al.* 2008; Cloitre *et al.* 2001; Cloitre *et al.* 2009; Rytwinski *et al.* 2013). Although this might reflect a unique profile of the traumatic symptomatology in people with ID (McCarthy 2007; Byrne 2017), our results require replication with larger samples. Furthermore, the present study used the PCL-5 scale is not currently standardised in people with ID whereas there have been concerns that the concept of PTSD, and its effect on mental health for the non-disabled population, may be limited when applied to people with ID (Byrne 2017). There is, therefore, a need for further work on the phenomenology and standardisation of instruments that correspond to conditions of traumatic stress as per DSM-V and the forthcoming ICD-11 in people with IDs. The ICD-11 will include a new condition of traumatic stress, Complex – PTSD (CPTSD), which is associated with multiple traumatisation (Karatzias *et al.* 2017) and new instruments for the assessment of CPTSD (Karatzias *et al.* 2016) have emerged in the literature. There is a need for such work to be replicated in people with IDs.

Conclusion

Multiple traumatisation in childhood and adulthood is associated with increased psychopathology in people with ID and PTSD. There is a need to develop appropriate interventions to meet the needs of people with IDs who are traumatised.

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Table 1: Demographic Characteristics (n= 33)

Factor	Level/Units	n (%)	Factor	Level/Units	n (%)
Age	Mean (SD)	41.87 (11.9)	Type of co-morbidity	Mental health	7 (36.8)
	No Response/ prefer not to say	2 (6)		Physical	8 (42.1)
Gender	Male	13 (39.4)	Adulthood only (N=12)	Mental health and Physical	4 (21.1)
	Female	20 (60.6)			
Living arrangements	Alone	6 (18.18)	Physical	Klinefelter syndrome	1 (8.33)
	With others	11 (33.33)		Epilepsy	1(8.33)
	Hospital	1 (3.03)		Cerebral palsy	1(8.33)
	Supported living	11 (33.33)		Asthma , eczema	1(8.33)
	No Response/ prefer not to say	4 (12.12)		Mental	
Education	Basic	22 (66.7)	Mental & Physical	Depression & anxiety	1(8.33)
	Further education	7 (21.2)		Depression	1(8.33)
	Unknown	4 (12.1)		Autistic disorder, ADHD	1(8.33)
				Autistic disorder, ADHD, Tourette's disorder, leukaemia in remission, & asthma	1(8.33)
Medication	Yes	25 (75.8)	Childhood & Adulthood (N=7)	Asthma , sleep disorder	1(8.33)
	No	4 (12.1)		Alcohol dependence , anxiety disorder & chronic pancreatitis	1(8.33)
	Unknown	4 (12.1)			
ID	Mild	24 (72.7)	Physical	Cerebral palsy	1 (14.3)
	Moderate	5 (15.2)		Diabetes	1 (14.3)
	No Response/ prefer not to say	4 (12.1)		Generalised anxiety disorder, panic disorder	1 (14.3)
				Severe depressive episode with psychotic symptoms	1 (14.3)
Co-morbidity	Yes	19 (57.6)	Mental & Physical	Autism , historical psychosis	1 (14.3)
	Yes- unknown details	2 (6.1)		Cerebral palsy , schizoaffective disorder	1 (14.3)
	No	11 (33.3)		Malignant neuroleptic syndrome , paranoid schizophrenia	1 (14.3)
	Unknown	1 (3.0)			

Notes: ADHD, Attention-deficit hyperactivity disorder

Table 2: Childhood and adulthood trauma (N=33)

Childhood Trauma (CTQ)	N (%)	Adulthood Trauma (LEC)	N (%)
Emotional Abuse			
<i>None or Minimal</i>	20 (60.6)	Natural disaster	1 (3.0)
<i>Low to Moderate</i>	3 (9.1)	Fire/Explosion	12 (36.4)
<i>Moderate to Severe</i>	3 (9.1)	Motor vehicle accident	10 (30.3)
<i>Severe to Extreme</i>	7 (21.2)	Other serious accident	12 (36.4)
		Exposure to toxic substance	1 (3.0)
Physical Abuse		Physical assault	27 (81.8)
<i>None or Minimal</i>	20 (60.6)	Weapon assault	11 (33.3)
<i>Low to Moderate</i>	0 (0)	Sexual assault	16 (48.5)
<i>Moderate to Severe</i>	2 (6.1)	Other unwanted sexual experience	12 (36.4)
<i>Severe to Extreme</i>	11 (33.3)	Captivity	11 (33.3)
		Life-threatening injury/illness	20 (60.6)
Sexual abuse		Severe human suffering	10 (30.3)
<i>None or Minimal</i>	21 (63.6)	Witness violent death	3 (9.1)
<i>Low to Moderate</i>	3 (9.1)	Sudden, unexpected death of someone close	22 (66.7)
<i>Moderate to Severe</i>	1 (3.1)	Caused serious injury/death of another	3 (9.1)
<i>Severe to Extreme</i>	8 (24.2)		
		Any Life Event	33 (100)
Emotional neglect		Multiple Life Events (2-12)	32 (97.0)
<i>None or Minimal</i>	20 (60.6)	Adulthood Trauma only	19 (57.6)
<i>Low to Moderate</i>	4 (12.1)		
<i>Moderate to Severe</i>	3 (9.1)		
<i>Severe to Extreme</i>	6 (18.2)		
Physical neglect			
<i>None or Minimal</i>	15 (45.4)		
<i>Low to Moderate</i>	7 (21.2)		
<i>Moderate to Severe</i>	5 (15.2)		
<i>Severe to Extreme</i>	6 (18.2)		
Any Childhood Trauma	19 (57.6)		
Multiple abuses (>2)	14 (42.4)		
Childhood Trauma only	0		
Childhood and Adulthood Trauma	14 (42.4)		

Table 3: Trauma group differences in psychological wellbeing, PTSD symptomology, anxiety and depression (N=33)

Measures of psychopathology	Overall sample (N=33) Mean or Median (SD)	Childhood & Adulthood (N=14) Mean or median (SD)	Adulthood only (N=19) Mean or median (SD)	<i>t</i> or U(Z)	Sig.
CORE-LD					
<i>Functioning</i>	4.00 (2.47)	6.00 (2.46)	4.00 (2.25)	80.0 (-1.95)	.051
<i>Problems</i>	11.52 (3.92)	13.43 (34.00)	10.11 (3.30)	-2.54	.018
<i>Risk</i>	1.00 (1.83)	2.50 (2.16)	1.00 (1.13)	65.50 (-2.52)	.012
<i>Social/cognitive</i>	7.00 (2.23)	7.50 (2.34)	7.00 (2.21)	121.50 (-.43)	.670
<i>Wellbeing</i>	3.00 (1.29)	3.50 (1.29)	3.00 (1.30)	114.0 (-.71)	.477
<i>Total</i>	27.00 (9.28)	29.00 (10.43)	24.00 (7.02)	79.5 (-1.96)	.051
PCL-5					
<i>Intrusion</i>	13.42 (4.38)	15.14 (3.51)	12.16 (4.61)	-2.03	.051
<i>Avoidance</i>	5.00 (1.57)	5.00 (1.03)	5.00 (1.90)	133.0 (.00)	1.000
<i>Cognition and mood change</i>	15.42 (6.14)	17.29 (3.87)	14.05 (7.18)	-1.66	.107
<i>Arousal and reactivity</i>	12.88 (4.93)	13.50 (5.71)	12.42 (4.38)	-.62	.543
<i>Total</i>	46.64 (12.57)	50.79 (10.99)	43.58 (13.01)	-1.67	.104
GAS					
<i>Behavioural (specific fears)</i>	8.00 (3.58)	9.00 (3.66)	7.00 (3.56)	114.0 (-.70)	.486
<i>Somatic (physiological symptoms)</i>	10.03 (3.15)	10.86 (2.74)	9.42 (3.36)	-1.31	.200
<i>Cognitive (worries)</i>	13.30 (3.41)	13.86 (2.96)	12.89 (3.74)	-.80	.432
<i>Total</i>	30.91 (7.94)	32.86 (6.74)	29.47 (8.61)	-1.22	.232
GDS					
	17.00 (6.19)	19.00 (6.54)	15.00 (5.04)	73.0 (-2.19)	.028

Note: U(Z):U Mann Whitney U test statistic, Z standardised test statistic.