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Article

Self-harm in the Australian asylum seeker population: A national records-based study

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ABSTRACT

Background: Systematic research into self-harm in the Australian asylum seeker population is scarce, largely due to the lack of accessible data. The aim of this study was to examine the incidence and characteristics of self-harm across the Australian asylum seeker population, and to ascertain whether self-harm rates and characteristics vary by processing arrangements (i.e. community-based arrangements, community detention, onshore detention, offshore detention (Nauru), and offshore detention (Manus Island)), and gender.

Methods: Data relating to the incidence of self-harm, method(s) used to self-harm, processing arrangements, and gender were extracted from all self-harm incidents recorded as occurring among the Australian asylum seeker population between 1st August 2014 and 31st July 2015. Self-harm episode rates were calculated using the average estimated adult population figures for the 12-month period for each asylum seeker population.

Results: 949 self-harm episodes were included in the analyses. Rates ranged from 5 per 1000 asylum seekers in community-based arrangements to 260 per 1000 asylum seekers in offshore detention in Nauru. Rates were highest among asylum seekers in offshore and onshore detention facilities, and lowest among asylum seekers in community-based arrangements and community detention. The most common methods of self-harm were cutting (37%), self-battery (26%), and attempted hanging (11%), with asylum seekers in held detention using a wider variety of methods than those in community-based arrangements and community detention.

Conclusions: Our findings highlight the exceptionally high rates of self-harm among detained asylum seekers compared to rates observed in the general Australian population, and among asylum seekers in community-based settings. These findings point clearly to the deleterious impact of immigration detention, and warrant urgent attention.

Definitions

Article 1A(2) of the Refugee Convention defines a *refugee* as ‘a person who has a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of (their) nationality, and is unable, or owing to such fear, is unwilling, to avail (themselves) of the protection of that country’. The term ‘*asylum seeker*’ is often used interchangeably with refugee, but it has a different legal definition. An asylum seeker is a person who is seeking protection, but whose claim

for refugee status has not yet been assessed (Phillips & Spinks, 2013). Under international law, however, a person is a *refugee* as soon as they meet the definition of a refugee, whether or not their claim has been assessed. If they are subsequently found to be refugees, then they are ‘recognised refugees’ (Refugee Council of Australia, 2015).

Introduction

Current conflicts are creating an increase in forced migration worldwide, with the number of individuals fleeing persecution, war and

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violence reported to have surpassed 68.5 million (UN High Commissioner for Refugees, 2017). Increasingly restrictive 'policies of deterrence' (Robjant, Hassan, & Katona, 2009) have been established by Australia, as well as many other western countries, in a bid to curtail the entry of asylum seekers. The Australian government has had a policy of mandatory, indefinite immigration detention for asylum seekers arriving by boat, referred to as illegal maritime arrivals (IMAs), since 1992 (Phillips & Spinks, 2013). In late 2012, the Australian government resumed offshore processing for IMAs - a policy successive governments had maintained between 2001 and 2008 - meaning that asylum seekers who arrived by boat were liable to be transferred to the Pacific island nation of Nauru or Manus Island, in Papua New Guinea, for offshore processing. Asylum seekers who arrived via boat on or after 19th July 2013 were all subject to offshore processing, as well as a permanent ban on settlement in Australia if found to be refugees (Karlsen & Phillips, 2014). In December 2014, the Australian government announced a raft of further changes to the way it determines the asylum claims of people who arrived by boat between August 2012 and January 2014 - who had not yet been transferred offshore - referred to as the 'legacy caseload'. These included the re-introduction of 3-year Temporary Protection Visas (TPVs), the introduction of a 5-year Safe Haven Enterprise Visa (SHEV), as well as 'fast-track' processing, and limited legal assistance with restrictions or exclusions on rights of review (Migration and Maritime Legislation and Amendment (Resolving the Asylum Legacy Caseload) Act 2014 (Cth)).

Since that time, depending on mode and date of arrival, there have been five main Australian asylum seeker populations, categorised according to processing arrangements: (a) community-based asylum seekers; (b) those who are held in community detention; (c) those held in onshore immigration detention (which includes centres on the Australian mainland as well as on Christmas Island, a remote island located in the Indian Ocean); (d) those who are held in offshore immigration detention on Nauru and; (e) those held in offshore immigration detention on Manus Island.

The characteristics of each of these processing arrangements varies. Community-based asylum seekers are permitted to live in the Australian community in a place of their own choosing (largely on bridging visas), however they may face a range of (frequently changing) restrictions such as no study or work rights, no access to universal healthcare, and little or no income support, whilst they await the processing of their claims (Australian Human Rights Commission [AHRC], 2014; Kaldor Centre, 2018). Asylum seekers in the onshore population may also be held in a form of detention referred to as Community Detention (CD). Asylum seekers in CD (usually unaccompanied minors, families, and other vulnerable adults) are allowed to live in the community whilst their claims for protection are being processed (known as 'residence determinations') but only in a specified location, and with certain restrictions (such no work or study rights) and other supervision arrangements (AHRC, 2014). In the onshore detention network, asylum seekers are detained in both high security immigration detention facilities (with razor wire fences, surveillance, and other prison-like features and practices), and low-security accommodation (with a more domestic environment than other forms of detention, often used for families with children). Additional places authorised to be used for onshore immigration detention include hotels, hostels, hospitals, foster care and other residential arrangements (AHRC, 2014). The characteristics of offshore processing (outsourced to private contractors by the Australian government, and referred to as 'regional processing') on Nauru and Manus Island have garnered much attention. The offshore processing arrangements have generated controversy because of their questionable compliance with international law; many have argued that the asylum seekers should be processed in Australia, that their detention has been protracted and indefinite, and that physical conditions and access to medical assistance in the centres has been inadequate (AHRC, 2017).

Whilst a large body of evidence has accumulated over the past two

decades regarding the negative impact of the asylum process on mental health, including in regards to immigration detention (Steel et al., 2006; McLoughlin & Warin, 2008; Coffey, Kaplan, Sampson, & Tucci, 2010; Green & Eagar, 2010; Bull, Schindeler, Berkman, & Ransley, 2012; von Werthern et al., 2018), little systematic research into self-harm across the whole Australian asylum seeker population has been conducted. In 2003, an analysis of official self-harm figures for asylum seekers in the onshore detention network, obtained by the Catholic Commission for Justice, Development and Peace (2001), estimated that self-harm rates for men and women were 12,343 and 10,227 per 100,000, respectively (Dudley, 2003). These self-harm rates were calculated as 41 and 21 times the male and female Australian national average. As these comparison figures were, however, calculated in relation to Australian community rates of suicide attempts, rather than self-harm - as captured by the official asylum seeker figures - the limitations of these comparisons, as well as the likely imprecision of the figures, were acknowledged (Dudley, 2003).

More recently, the first systematic examination of all self-harm episodes reported to the (then-called) Department of Immigration and Citizenship (DIAC) among adult asylum seekers in the Australian onshore detention network found that 22% of asylum seekers self-harmed in the 20-month reporting period to May 2011 (Hedrick, 2017). This represented a self-harm episode rate of 224 per 1000 detained asylum seekers, and included high rates of cutting (47%), attempted hanging (19%), and head hitting (12%) (Hedrick, 2017). Since the resumption of offshore processing, however, there has been no systematic research into self-harm across the Australian asylum seeker population. It remains unknown, therefore, whether or not these trends have continued. It also remains unknown how such rates might compare to those among asylum seekers in community-based arrangements, community detention, or onshore detention.

Asylum seekers possess many of the established risk factors for self-harm (Rosenberg & Rosenberg, 2010), such as previous traumatic experiences (including torture, trafficking, and being detained), social isolation, and having contact with mental health services (often as a consequence of pre-, peri- and post-migration experiences, such as torture and trauma, and detention experiences) (von Werthern et al., 2018). In addition to this, asylum seekers have been found to have an increased vulnerability to poor mental health, with higher rates of post-traumatic stress disorder (PTSD), depression, and anxiety reported across a range of studies, compared with the general community (von Werthern et al., 2018). Furthermore, mental health has been found to deteriorate with length of immigration detention, with the chance of developing a new mental illness increasing significantly from three months (Green & Eagar, 2010). Having an insecure visa status has also been found to impact negatively on mental health, likely due to the raft of significant challenges this brings, such as protracted family separation, housing, food, and employment insecurity (Hartley & Fleay, 2017), which in turn may increase the risk of self-harm.

The personal, social and public health burden associated with self-harm is significant, and increases with repetition (Sinclair, Gray, Rivero-Arias, Saunders, & Hawton, 2011). To assist the government, health services, and clinicians with planning and management, it is important to understand the epidemiology of self-harm among asylum seekers (WHO, 2014). Systematic information regarding the incidence and characteristics of self-harm across the entire Australian asylum seeker population, including the method(s) used to self-harm, and the potential influence of processing or detention arrangements, is therefore urgently needed to inform the evidence-based management and prevention of self-harm in this population.

The lack of systematic research into self-harm across the Australian asylum seeker population is largely due to the monitoring and reporting processes of the Australian government (Joint Select Committee on Australia's Immigration Detention Network, 2012; Commonwealth Immigration Ombudsman, 2013), which limit the accessibility of data. The data the government collect and store from across asylum seeker

population, for example, is not regularly monitored, extracted, analysed or reported on. In 2016, the Australian government was compelled to release de-identified self-harm data for the entire asylum seeker population under the [Freedom of Information Act 1982](#) (Cth) for the 12 months to 31st July 2015. As this was the largest set of self-harm data ever made publicly accessible from across the asylum seeker population – and the first since the resumption of offshore processing – the release of these data represented an invaluable opportunity to examine the incidence and characteristics of self-harm across the entire Australian asylum seeker population. This study represents an examination and analysis of these data, not previously systematically analysed or reported on by the Australian government. The aims of the present study were: (1) to examine the reported incidence of self-harm across the entire Australian asylum seeker population; (2) to outline the method(s) used to self-harm; and (3) to establish whether episode rates and the characteristics of self-harm vary by processing arrangements, and gender.

Method

According to the contractual arrangements the Department of Immigration and Border Protection (DIBP) have with immigration detention and community-based service providers, all self-harm incidents that occur among asylum seekers are required to be recorded on a standard incident report by detention and community-based staff and contractors. The incident reports are then sent to the DIBP where they are archived in a centralised database ([Commonwealth Immigration Ombudsman, 2013](#)). Self-harm in this context includes all forms of intentional self-injury (or self-poisoning), irrespective of motive or suicidal intent. According to the incident report matrix provided to staff and contractors released on the [DIBP's \(2017\)](#) Freedom of Information (FOI) disclosure log, the reports are meant to include a description of the self-harming incident and method used, the location of the incident, the injury inflicted, as well as any action taken.

For the present study, all self-harm incidents recorded as occurring between 1st August 2014 and 31st July 2015 were obtained under the [Freedom of Information Act](#), after being found to meet the Public Interest Test ([Office of the Australian Information Commissioner, 2016](#)) and being de-identified and published on the [DIBP's \(2016\)](#) disclosure log. Ethics approval for this study was obtained from the University of Melbourne's Human Research Ethics Committee (#1749949.1).

Each self-harm incident was categorized according to processing arrangement, method(s) of self-harm, and gender. The incident reports available for analysis relate to episodes of self-harm, and do not include suicide. Categorization of processing arrangement was conducted according to the details contained in each incident report. For the purposes of this study, all forms of closed onshore immigration detention (i.e., immigration detention centres, immigration transit accommodation, immigration residential housing, and alternative places of detention (APODs) ([AHRC, 2014](#))), were grouped together and categorized as onshore detention. Methods used to self-harm (including site of injury on body, medication, chemicals and foreign objects ingested, where provided and appropriate) were extracted from the free text in the incident reports. As no gender tick box was included on the self-harm incident reports, gender was coded following a qualitative analysis of the text in each report. Terms such as 'she', 'her', 'hers', 'female' and 'woman' and 'he', 'him', 'his', 'male' and 'man' were, for example, used to categorize gender. Cases where gender was not able to be determined were classified as a separate category of 'gender not known'. As country of origin information was not routinely recorded for each individual self-harm episode, such information could not be extracted from the self-harm incident reports. Country of origin information for each processing arrangement as a whole was instead extracted from publicly available [DIBP \(2015\)](#) statistics, as well as those collated by the [Refugee Council of Australia \(2015\)](#). An independent coder was used to assess the way a sub-sample of 100 incident reports were categorized, as a

Table 1

Average number of adults in the Australian asylum seeker population for the 12 months to 31st July 2015, by processing arrangements and gender.

	Male population	Female population	Total population
Community-based	21,136	2,758	23,894
Community detention	621	563	1184
Onshore detention	1815	361	2176
Nauru	563	159	722
Manus Island ^a	1005	–	1005

^a Manus Island houses only male asylum seekers.

reliability check. The inter-rater reliability was found to be very high ($\kappa = 0.95$) ([McHugh, 2012](#)).

Data were analysed using SPSS version 24. Chi-square tests were used to establish differences between proportions, where cell counts permitted. The annual episode rate of self-harm per 1000 was calculated for each asylum seeker population according to processing arrangement using the average adult population figures for the 12-month period, according to the [DIBP's \(2015\)](#) statistics ([Table 1](#)), with 95% confidence intervals based on Poisson distribution.

Results

Study sample

According to the [DIBP's \(2015\)](#) immigration detention and community statistics, as at 31st July 2015, the top two nationalities of asylum seekers in onshore detention and community detention were Iran and Sri Lanka. Similarly, official [Department of Home Affairs \(previously DIBP\) \(2015\)](#) onshore processing statistics as at 31st June 2015 (the closest reporting period available) indicate that the top two nationalities of community-based asylum seekers were Sri Lanka and Iran. Figures collated by the [Refugee Council of Australia \(2015\)](#) relating to offshore processing show that the largest number of asylum seekers transferred to Nauru and Manus Island were from Iran, the second largest group were stateless. Significant numbers were also from Sri Lanka, Afghanistan, Pakistan and Iraq. During the 12-month study period, 1st August 2014 to 31st of July 2015, there were 949 episodes of self-harm recorded as occurring across the Australian asylum seeker population. [Table 2](#) outlines the descriptive statistics for self-harm episodes, including by processing arrangements and gender.

Episode rates of self-harm by processing arrangements

The total (combined male and female) self-harm episode rates per 1000 (95% CI) for asylum seekers in the Australian asylum seeker population in the 12 months to 31st July 2015 were: community-based, 5 (95% CI 1–9); community detention, 27 (95% CI 17–36); onshore detention, 257 (95% CI 225–288); Nauru, 260 (95% CI 228–291); Manus Island, 54 (95% CI 40–68) (see [Fig. 1](#)).

Self-harm by gender, and processing arrangements

Information relating to gender could be extracted from 590 (62.1%) of the self-harm incident reports. In relation to the total sample, the analysis found that males were involved in 426 (72.2%) of all self-harm episodes where gender was known, and females in 164 (27.8%) ([Table 2](#)). There were no significant differences in self-harm episodes between male and female asylum seekers in onshore detention (χ^2 (1, $N = 590$) = .020, $p = .887$) or community-based arrangements (χ^2 (1, $N = 590$) = 1.30, $p = .254$), in incidents where gender was known, however female asylum seekers in Nauru were significantly more likely to self-harm than male asylum seekers in Nauru (χ^2 (1, $N = 590$) = 8.54, $p = .003$). Manus Island houses only male asylum seekers, so only males were involved in self-harm episodes in that

Table 2

The number and percentage of self-harm episodes in the Australian asylum seeker population in the 12 months to 31st July 2015, by processing arrangements and gender.

	Number (%)			
	Males (n = 426)	Females (n = 164)	Gender not known (n = 359)	Total (N = 949)
Community-based	32 (7.5%)	8 (4.9%)	73 (20.3%)	113 (11.9%)
Community detention	8 (1.9%)	8 (4.9%)	17 (4.7%)	33 (3.5%)
Onshore detention	231 (54.2%)	90 (54.8%)	239 (66.6%)	560 (59.0%)
Nauru	100 (23.5%)	58 (35.4%)	30 (8.4%)	188 (19.8%)
Manus Island	55 (12.9%)	-	-	55 (5.8%)

particular population. Cell counts were too low to detect significant gendered differences in self-harm among asylum seekers in community detention.

Methods of self-harm by gender

As outlined above, there were 949 episodes of self-harm recorded as occurring in the Australian asylum seeker population in the 12 months to 31st July 2015, including 175 episodes (18.4%) where the method was not recorded. The analysis of episodes of self-harm with known methods indicated that eleven different types of methods were used by the Australian asylum seeker population during the study period.

Details regarding gender were able to be extracted from 552 (71.3%) of the 774 incident reports with known methods of self-harm. Males were involved in 404 (52.2%) episodes with known methods, and women in 148 (19.1%). Gender was not able to be identified in 222 episodes (28.7%) with a known method of self-harm. The most common methods of self-harm for both males and females were: cutting (37.4%), self-battery (26.0%), and attempted hanging (11.0%). There were no significant gender differences in the three most common methods of self-harm, in incidents where gender was known (X^2 (2, $N = 442$) = 4.56, $p = .102$). Table 3 outlines the descriptive statistics for methods of self-harm, including by gender.

Methods of self-harm by processing arrangements

Fig. 2 outlines the methods of self-harm used by the Australian

asylum seeker population, including by processing arrangements (i.e. community-based, community detention, onshore detention, offshore (Nauru), and offshore (Manus)). Of the 774 episodes with known methods, 290 episodes (37.4%) involved cutting (community-based: 43.6%; community detention: 72.0%; Onshore: 35.3%; Nauru: 37.1%; Manus: 34.6%), 199 episodes (26.0%) involved self-battery (community-based: 7.3%; community detention: 4.0%; Onshore: 34.7%; Nauru: 13.7%; Manus: 14.3%), and 83 episodes (11.0%) attempted hanging (community-based: 3.6%; Onshore: 11.1%; Nauru: 10.9%; Manus: 20.4%).

The three most common methods of self-harm varied by held detention (Onshore, Nauru, and Manus) and community-based processing arrangements: asylum seekers in held detention, compared with the two types of community-based processing arrangements, were significantly more likely to self-harm by self-battery (37.1% vs 10.2%) and attempted hanging (15.5% vs 4.1%) (χ^2 (2, $N = 572$) = 26.28, $p < .001$). Asylum seekers in community-based arrangements (χ^2 (2, $N = 572$) = 10.89, $p = .004$), and community detention (χ^2 (2, $N = 572$) = 15.29, $p < .001$), were significantly more likely to self-harm by cutting than those in all other processing arrangements.

Site of injury

The site of injury on body was able to be extracted from 542 (70.0%) of the 774 self-harm episodes where method was known (excluding episodes of self-poisoning by medication, chemicals, as well as by ingesting foreign objects, voluntary starvation, and drowning). The

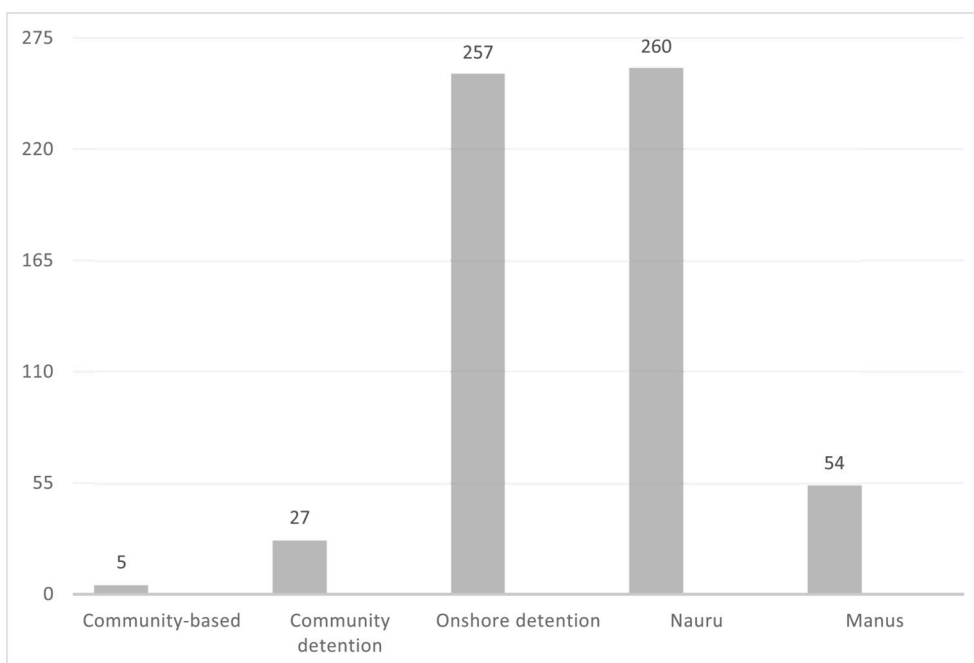


Fig. 1. Self-harm episode rates per 1000 asylum seekers, for the Australian asylum seeker population in the 12 months to 31st July 2015, by processing arrangements.

Table 3
Methods of self-harm used by the Australian asylum seeker population in the 12 months to 31st July 2015, including by gender.

	Number (%)			
	Male (n = 404)	Female (n = 148)	Gender not known (n = 222)	Total (n = 774)
Cutting	152 (37.6%)	64 (43.2%)	74 (33.3%)	290 (37.4%)
Self-battery ^a	126 (31.1%)	32 (21.6%)	41 (18.4%)	199 (26.0%)
Hanging	48 (12.0%)	20 (14.0%)	15 (7.0%)	83 (11.0%)
Self-poisoning by medication	16 (4.0%)	13 (8.7%)	50 (22.6%)	79 (10.0%)
Self-poisoning by chemicals	18 (4.4%)	9 (6.0%)	30 (13.5%)	57 (7.3%)
Ingesting foreign object	20 (5.0%)	1 (0.6%)	7 (3.1%)	28 (3.6%)
Burning	14 (3.5%)	7 (4.7%)	-	21 (2.7%)
Lip sewing	8 (2.0%)	-	1 (0.4%)	9 (1.1%)
Jumping off high structures	2 (0.4%)	1 (0.6%)	3 (1.3%)	6 (0.7%)
Voluntary starvation ^b	-	-	1 (0.4%)	1 (0.1%)
Drowning	-	1 (0.6%)	-	1 (0.1%)

^a Self-battery is defined as striking or beating oneself heavily and repeatedly in order to cause injury. It may also involve striking one's body against hard objects, such as walls, floors or other heavy, immovable objects.

^b Voluntary starvation is usually recorded under another category of notifiable incidents, which likely accounts for the single incident reported as self-harm here.

head was the most common site of injury (194 episodes, 36.0%), followed by the arm and wrist (191 episodes, 35.2%), the neck (78 episodes, 14.3%), hand and fingers (40 episodes, 7.4%), the chest and upper torso (12 episodes, 2.2%), the stomach (10 episodes, 1.8%), the leg (10 episodes, 1.8%), and the lower body (7 episodes, 1.3%).

Types of medication used for self-poisoning

Of the 79 episodes of self-poisoning by medication, there were 45 episodes (56.9%) where the type of medication was not recorded. Given the small numbers, and the high proportion of episodes of self-poisoning where medication type was not known, results are presented for the total population, rather than by processing arrangements. Of the 34 episodes with known medication, 10 (29.4%) involved prescription

medication (not otherwise stated), 7 episodes (20.5%) a combination of prescription (not otherwise stated) and over the counter medication (not otherwise stated), 4 episodes (11.7%) sleeping tablets, 4 episodes (11.7%) anti-depressants, 4 episodes (11.7%) paracetamol, 3 episodes (9.0%) over the counter medication (not otherwise specified), 1 episode (3.0%) anti-angina medication, and 1 episode (3.0%) antibiotics.

Types of chemicals used for self-poisoning, by processing arrangements

There were 57 episodes of self-poisoning by chemicals, with the chemical type recorded in all episodes. Of the 57 episodes, 20 (35.0%) involved insect repellent (called Rid) (Onshore: 8.0%; Nauru: 62.0%), 16 episodes (28.0%) washing powder (Onshore: 40.0%; Nauru: 17.2%; Manus: 100%), 13 episodes (23.0%) shampoo (Onshore: 36.0%; Nauru:

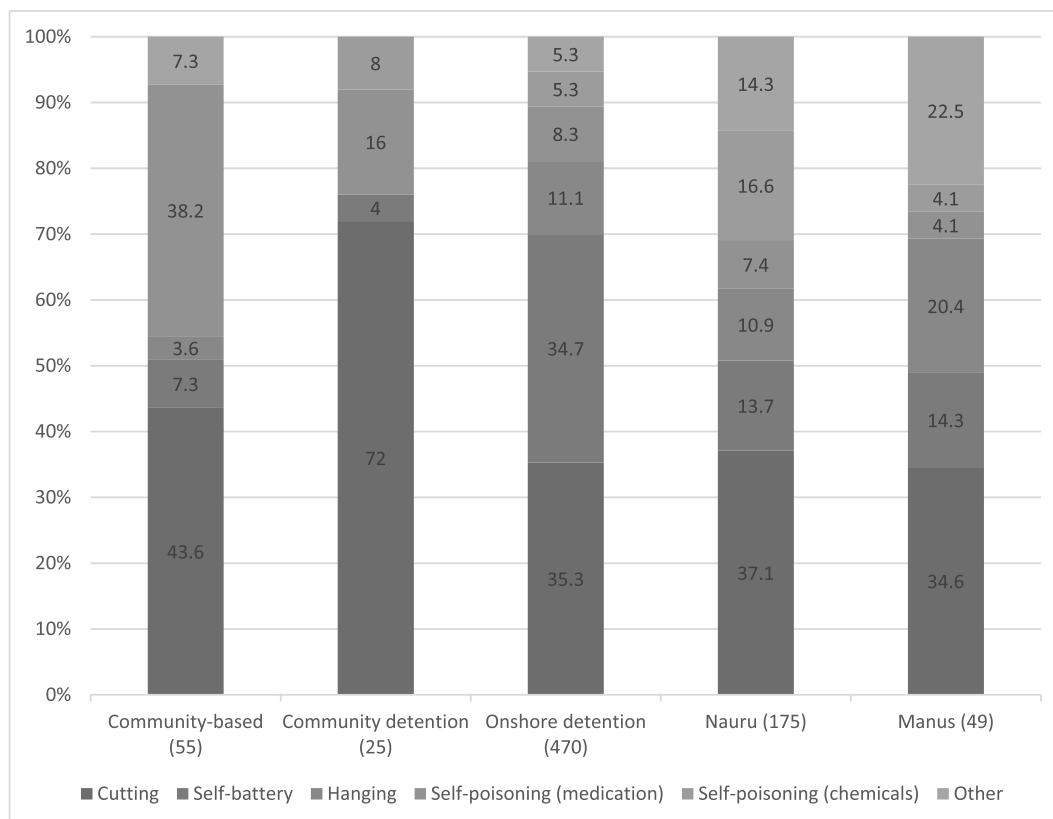


Fig. 2. Methods of self-harm used by the Australian asylum seeker population in the 12 months to 31st July 2015, according to processing arrangements.

14.0%), 4 episodes (7.0%) cleaning products (Onshore: 16.0%), 2 episodes (3.6%) alcohol (Nauru: 3.4%; community-based: 100%), 1 episode (1.7%) lice treatment (community detention: 100%), and 1 (1.7%) Milton sterilising tablets (Nauru: 3.4%).

Types of foreign objects ingested, by processing arrangements

There were 28 episodes of self-harm involving the ingestion of foreign objects, including one episode where the type of foreign object was not recorded. Of the 27 episodes where the foreign object type was known, 15 (55.6%) involved swallowing razor blades (Onshore: 8 episodes; Manus: 4 episodes; Nauru: 3 episodes), 3 episodes (11.1%) swallowing pieces of metal (Manus: 1 episode; Onshore: 1 episode; Nauru: 1 episode), 2 episodes (7.4%) swallowing rocks (Nauru: 2 episodes), 2 episodes (7.4%) swallowing metal screws (Nauru: 2 episodes), 2 episodes (7.4%) swallowing nail clippers (Manus: 2 episodes), 1 episode (3.7%) swallowing a plastic medication cup (Nauru: 1 episode), 1 episode (3.7%) swallowing tea bags (Nauru: 1 episode), and 1 episode (3.7%) swallowing a blood sugar testing strip (Onshore: 1 episode).

Discussion

This study was the first to examine the incidence and characteristics of self-harm across the entire Australian asylum seeker population, including by processing arrangements. Between 1st August 2014 and 31st July 2015, 949 self-harm incidents were reported to have occurred across the Australian asylum seeker population. As highlighted elsewhere (Joint Select Committee on Australia's Immigration Detention Network, 2012; Commonwealth Immigration Ombudsman, 2013; Australian National Audit Office [ANAO], 2017; Legal & Constitutional Affairs Reference Committee, 2017), it is likely that self-harm incidents among the Australian asylum seeker population are under-reported. For community-based asylum seekers, as well as those in community detention, contact with DIBP-appointed case managers or contractors can be limited (Refugee Council of Australia, 2018), meaning that self-harm incidents may instead be identified and managed by general practitioners in the community and/or emergency departments and thus not reported to the DIBP. Differing levels of support from non-government organisations (NGOs) and service providers on Nauru and Manus Island, as well as the timing of the roll-out and use of the new centralised data base for recording incidents (known as the Planning and Operational Management System (POMS)) during this period, may have also contributed to inconsistent reporting and recording of incidents for these populations (ANAO, 2017). Furthermore, recent research has highlighted the methodological limitations of using only one data source to identify self-harm, including among incarcerated adults (Borschmann et al., 2011, 2017). The self-harm figures for the Australian asylum seeker population recorded here, based on the incidents reported to the DIBP in the 12 months to 31st July 2015, are likely to reflect an under-ascertainment of the true number of incidents. The rates we have calculated are likely an under-estimate of the true incidence of self-harm in this population.

Rates of self-harm

Self-harm episode rates were highest among asylum seekers in offshore detention (Nauru, 260 per 1000, Manus, 54) and onshore detention (257), and lowest among asylum seekers in community-based arrangements (5) and community detention (27). Calculated rates of self-harm among asylum seekers in Nauru (followed closely by rates in onshore detention) – the highest episode rates identified in the present study – were therefore 52 times higher than the lowest recorded self-harm episode rates; those among community-based asylum seekers. To put these rates in context, the overall incidence of hospital-treated self-harm events (not individuals) in the Australian community during 2012–13 was 1.2 per 1000 (Pointer, 2015). This means that self-harm

episode rates among asylum seekers in offshore detention in Manus and Nauru were 45 and 216 times the Australian community rates for hospital-treated self-harm, respectively. Furthermore, rates among asylum seekers in onshore detention were 214 times the community rates for hospital-treated self-harm, whilst rates among asylum seekers in community detention were 22 times these community rates. By comparison, self-harm episode rates among asylum seekers in community-based arrangements were four times the Australian community rates for hospital-treated self-harm. Our findings highlight the extraordinarily high rates of self-harm among detained asylum seekers compared to rates observed in the general Australian population, and among asylum seekers in community-based settings. This almost certainly reflects the deleterious effects of immigration detention, and warrants urgent investigation.

The higher rates of self-harm found in asylum seekers detained in offshore detention on Nauru compared with those held on Manus Island could reflect the fact that Nauru had an NGO operating on the island and providing welfare services for some of this period, whereas Manus did not (ANAO, 2017). This means that there were more staff on Nauru at this time, particularly those operating from a welfare perspective, able to detect (and report) episodes of self-harm. Difficulties and delays in recruiting and retaining staff to work on Manus were also reported at this time (ANAO, 2017). In addition to this – as further highlighted by the ANAO's (2017) performance audit of garrison support and welfare services in Manus and Nauru – the record keeping and data management processes used by those in a position to detect and report self-harm (and other) incidents, was found to contribute to the under-reporting of incidents during the study period, as well as the inconsistency in incident reporting identified across service providers in Nauru and Manus. A greater range of services, with higher levels of staffing, offered in the onshore detention network may also account for some of the differences in rates of self-harm identified in asylum seekers there, compared with on Manus. A report into the incident reporting (largely from a Work, Health and Safety perspective) in Australian immigration detention during the same period offers further corroborating evidence for this: the level of under-reporting of notifiable incidents (including self-harm) on Manus was found to be highly likely (Australian Lawyer's Alliance, 2016).

The higher rates of self-harm still found among community-based asylum seekers in the current study compared to Australian community rates could reflect the pre-migration trauma and flight histories of the asylum seekers, as well as an increased vulnerability to poor mental health (Robjant et al., 2009). This includes, for example, having experienced torture and trauma, and an elevated risk of developing PTSD, depression, and anxiety, compared with the general community or host country (von Werthern et al., 2018). As many permanent residents with similar histories go on to enjoy good psychological health (Coffey, 2011), however, this explanation cannot fully account for these higher rates. The findings might instead, then, point to the restrictive conditions and characteristics associated specifically with community-based processing – already known to cause mental distress among asylum seekers – such as denial of work rights (only granted to many community-based asylum seekers in December 2014), limited or no welfare assistance, difficulties finding and securing appropriate accommodation, inconsistent access to healthcare, and no study rights, amongst others (Correa-Velazquez et al., 2008; Hartley, Fleay, Baker, Burke, & Field, 2018; Hartley & Fleay, 2017). They might also speak to other – largely modifiable – factors shared more broadly across all processing arrangements, such as family separation, length of claim processing times, and access to adequate legal support, previously found to precipitate self-harm episodes among asylum seekers in Australia (Hedrick, 2017). In addition to this, the findings may point to the previous experiences of detention that the asylum seekers may have had prior to being released into the community for processing, as research indicates that the impact of detention may be enduring (Coffey et al., 2010). These government policies and practices need to be urgently re-

evaluated. The limitations of the comparisons between hospital-treated self-harm and the types of self-harm presented in the current study - which may or may not have involved hospitalisation - are acknowledged. Episode rates of self-harm from the Australian prison population, which may have provided better comparison data, were not available. The limitations in potential comparisons between self-harm in prisoners and asylum seekers are also acknowledged - seeking asylum is not a crime, it is a human right, and yet many asylum seekers are treated similarly to prisoners, with serious consequences to their mental health.

Methods of self-harm

Cutting was the most common method of self-harm across the entire Australian asylum seeker population, in episodes with known methods, followed by self-battery, and attempted hanging; the three most common sites of injury on the body were the head, the arm and wrist, and the neck. The three most commonly reported methods of self-harm amongst males and females, in episodes where gender was known, were the same. The most frequently reported methods of self-harm found in the present study for the whole population were closely aligned with those identified in the previously mentioned study (Hedrick, 2017) into self-harm among asylum seekers in the onshore detention network. This indicates both a continuing trend in methods used by asylum seekers in the onshore detention population, as well as some consistency in the use of methods across the Australian asylum seeker population. Whilst high rates of hanging were identified in the earlier study, the small number of females identified in that study made meaningful comparisons between male and female rates difficult to make. The trend in high rates of attempted hanging now clearly identified for both males and females differs from those in the general Australian community (Pointer, 2015), and is of concern.

This pattern of findings contrasts with what has been previously established about gendered dimensions to self-harm - that whilst women may be over-represented in self-harm incidents, males are more likely to choose more violent (and potentially lethal) methods of self-harm than women (Canner, Guiliano, Selvarajah, Hammond, & Schneider, 2016). A possible explanation for these high rates of hanging among both genders might relate to the cultural backgrounds of those in the Australian asylum seeker population during the study period. Research does highlight that gendered differences in self-harm may vary according to country of origin (Goosen et al., 2011; Sundvall, Tidemalm, Titelman, Runeson, & Bäärnhielm, 2015). As details regarding country of origin were not recorded in the individual self-harm incident reports - country of origin information was only available for each processing arrangement as a whole - it was not possible to establish whether self-harm methods varied according to cultural background and gender. Further research, as well as improved self-harm data monitoring and collection processes, are needed to better understand the cultural and gendered dimensions to self-harm among asylum seekers.

Methods of self-harm by processing arrangements

Asylum seekers in held detention were found to use a greater variety of self-harm methods (an average of 9), in incidents with known methods, compared with asylum seekers in community-based arrangements and community detention, who were using on average just over half the number of methods (5). Concerningly, rates of attempted hanging were significantly higher among asylum seekers in held detention, compared with those in community-based settings. As hanging is strongly associated with an increased risk of suicide (Runeson, Tidemalm, & Dahlin, 2010), these findings highlight the urgent need for the use of held immigration detention to be re-evaluated.

Whilst asylum seekers in community-based arrangements and community detention used a range of more traditional methods (for

example cutting, self-poisoning by medication, and self-battery), asylum seekers in held detention used both traditional methods, coupled with other less common methods. These included, for example, self-poisoning by chemicals, largely involving insect repellent (35.0%) (90% of these episodes occurred among asylum seekers on Nauru), as well as ingesting foreign objects, largely involving swallowing razor blades (55.5%), metal (11.1%), and rocks (7.4%) (whilst numbers were very small, 100% of episodes involving swallowing rocks occurred on Nauru).

This is consistent with evidence that individuals in detained populations often improvise in their choice of self-harm methods and devices - perhaps as more common or traditional means become no longer accessible to them - and that these means often relate to the environment or setting in which they are housed (Tartaro & Lester, 2010; D'arcy, 2017). These findings further highlight the increased risk of self-harm for asylum seekers in held detention compared with those in community-based arrangements and community detention. They also highlight the urgent need for a more upstream approach to self-harm prevention among asylum seekers in held detention, such as community-based processing - in the Australian community - to be implemented. Indeed, based on the study's findings, the most informed and reasonable self-harm prevention strategy is to introduce community-based processing for all asylum seekers. Clearly, such an approach would need to address the characteristics associated with community-based processing, previously established to cause psychological distress among asylum seekers, and to precipitate episodes of self-harm, as highlighted above.

It must be noted that since these data were found to meet the Public Interest Test and released under FOI laws in 2016, there has been no official release of more recent or detailed data regarding self-harm across the entire Australian asylum seeker population. There has also been no systematic monitoring of self-harm among asylum seekers (including by gender, age, country of origin, method(s) used to self-harm, precipitating factors, processing arrangements, or held detention type) by the Australian government over this three year period, in order to better understand and prevent self-harm among this population. Asylum seekers have now been held in offshore immigration detention on Nauru and Manus Island for six years. Given the rates of self-harm found among the Australian asylum seeker population in the current study, including rates in Nauru and onshore immigration detention that are more than 200 times the Australian community hospital-treated rates, it is clear that the health of asylum seekers remains at risk without urgent changes to government policy regarding mandatory immigration detention.

Limitations

There were a number of limitations to our study. Firstly, the number of unreported self-harm incidents across the Australian asylum seeker population is unknown, meaning that the rates reported here should be considered conservative figures at best. Secondly, as some of the data we sought to extract from the self-harm incident reports were not routinely reported, or required to be reported by the DIBP, the amount of data we were able to collect was limited. Thirdly, and in a similar vein, information relating to gender was only able to be extracted from approximately two-thirds of the incident reports. Some asylum seeker populations, therefore, had higher proportions of missing data pertaining to gender, than other populations, limiting our ability to calculate reliable male and female self-harm rates. Fourthly, whilst country of origin information was available from the DIBP for each processing arrangement as a whole, the individual self-harm incident reports did not contain such information. This limited our ability to establish whether self-harm rates and method(s) used to self-harm varied according to country of origin and/or cultural background, and gender. Lastly, in some instances, cell sizes limited our ability to detect statistically significance differences.

Conclusions

Self-harm episodes among the Australian asylum seeker population, particularly for asylum seekers detained in offshore and onshore detention, were found to occur at exceptionally high rates compared with those in the wider Australian community. Our analysis of the Australian government's own self-harm data provides evidence of the lowered self-harm risk for both asylum seekers living in community-based arrangements and community detention, compared to held detention. These findings clearly illuminate the deleterious impact of immigration detention on the health of detained asylum seekers; the extremely high self-harm rates identified in the present study are cause for considerable concern and warrant urgent attention. Furthermore, as self-harm is often reflective of broader mental health concerns, it is highly likely that there are significant, additional negative mental health consequences of immigration detention for the Australian asylum seeker population, although the present study cannot directly account for these. Our findings also demonstrate that rates of self-harm among community-based asylum seekers are closer to hospital-treated self-harm rates in the wider Australian community, compared to the very high levels of self-harm in detention settings. Based on our findings, then, the most informed course of action would be to swiftly introduce community-based processing (in the Australian community), to address the largely modifiable precipitants of distress and self-harm associated with these arrangements, and to institute the independent monitoring and reporting of self-harm among asylum seekers.

Ethical approval

Ethics approval for this study was obtained from the University of Melbourne's Human Research Ethics Committee (#1749949.1). The research was therefore performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments.

Declaration of interest

GC is employed at the Victorian Foundation for Survivors of Torture (Foundation House), an organisation which receives funding from the Australian government to provide psychological assistance to asylum seekers, including those in immigration detention. KH was employed at Foundation House for some of the time during which this research was conducted. GC has been contracted by the Australian government's Department of Home Affairs to provide training in relation to the psychological aspects of refugee status determination. KH has been contracted by the Australian government's Department of Home Affairs to conduct independent mental health assessments and write psychological reports for the purposes of refugee status determination for asylum seekers who have been detained in offshore detention. This research was conducted, however, in KH's capacity as a PhD Candidate at the University of Melbourne, and the views expressed here are her own, and those of her co-authors. RB and GA declare that they have no conflicts of interest.

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