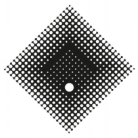
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Prevalence, methods and characteristics of self-harm among asylum seekers in Australia: Protocol for a systematic review

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Prevalence, methods and characteristics of self-harm among asylum seekers in Australia: protocol for a systematic review

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ABSTRACT

Introduction Asylum seekers are at increased risk of self-harm compared with the general population, and the experience of detention may further exacerbate this risk. Despite this, evidence regarding the prevalence, methods and characteristics of self-harm among asylum seekers in Australia (including those detained in onshore and offshore immigration detention) has not been synthesised. Such information is necessary to inform evidence-based prevention initiatives, and effective clinical and governmental responses to self-harm. This review will synthesise findings from the literature regarding the prevalence, methods and characteristics of self-harm among asylum seekers in both detained and community-based settings in Australia.

Methods and analysis We searched key electronic health, psychology and medical databases (PsycINFO, Scopus, PubMed and MEDLINE) for studies published in English between 1 January 1992 and 31 December 2021. Our primary outcome is self-harm among asylum seekers held in onshore and/or offshore immigration detention, community detention and/or in community-based arrangements in Australia. We will include all study designs (except single case studies) that examine the prevalence of self-harm in asylum seekers. Studies published between 1992—the commencement of Australia's policy of mandatory immigration detention—and 2021 will be included. We will not apply any age restrictions. The Methodological Standard for Epidemiological Research scale will be used to assess the quality of included studies. If there are sufficient studies, and homogeneity between them, we will conduct meta-analyses to calculate pooled estimates of self-harm rates and compare relevant subgroups. If studies report insufficient data, or there is substantial heterogeneity, findings will be provided in narrative form.

Ethics and dissemination This review is exempt from ethics approval as it will synthesise findings from published studies with pre-existing ethics approval. Our findings will be disseminated through a peer-reviewed journal article and conference presentations.

PROSPERO registration number CRD42020203444.

Strengths and limitations of this study

- This systematic review uses a comprehensive search strategy including four key academic databases and a grey literature search.
- This review will be reported as per the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines.
- A strength of this review is that only studies that involve asylum seekers and refugees or other immigrant populations, and that distinguish between these populations (ie, consider these populations to be heterogeneous), will be included.
- Studies that examine self-harm and suicide and do not distinguish between these acts will be excluded, as these two outcomes are qualitatively and motivationally distinct from each other.
- A small number of primary studies, and heterogeneity between study populations and/or study design, may preclude meta-analysis or direct comparisons between studies.

INTRODUCTION

According to the United Nations High Commissioner for Refugees,[1] there are now more than 80 million forcibly displaced people around the world as a result of persecution, conflict, violence and human rights violations. In response to increasing numbers of individuals seeking refugee protection from other states, many countries around the world have adopted strict immigration policies.[2] While those seeking asylum in Australia represent only a small fraction of the numbers globally,[3] since 1992 Australia has arguably had one of the most restrictive immigration policies in the world, with all 'unlawful non-citizens' mandatorily and indefinitely held in immigration detention.[4] This policy has also been extended to transferring individuals who arrive by boat to offshore processing centres on the Pacific island nation of Nauru, and Manus Island (Papua New Guinea; PNG), with no prospect of being settled in Australia.[3] Asylum seekers in Australia may be detained in onshore immigration detention, including Alternative Places of Detention

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(APODs),[5] such as hotels. Additionally, asylum seekers may be held in community detention, meaning they are required to reside in a specified location, under supervision and with certain restrictions placed on work or study rights.[5] Asylum seekers may also be permitted to live in community-based arrangements, meaning they may live in a place of their own choosing in the Australian community, though with several restrictions on living, work, and study conditions.[5] If granted refugee protection, this will be in the form of a 3-year or 5-year Temporary Protection Visa, with no eligibility to sponsor family members.[6]

The numbers and countries of origin of people arriving in Australia by boat to seek asylum have fluctuated considerably over the past 30 years in response to different global events.[4] Indeed, the numbers and countries of origin of people seeking asylum at particular points in time have tended to reflect the consequences of war and ongoing ethnic conflict, including in the Middle East (eg, Afghanistan, Iraq, Iran, Syria), Northern Africa (eg, South Sudan and Somalia) and Asia (eg, Sri Lanka, Myanmar and Thailand).[4] Statistics indicate, for example, that the largest number of boat arrivals, also referred to as 'irregular maritime arrivals', transferred to Nauru and PNG from Australia (from 2012) were from Iran.[7] Large numbers of asylum seekers from Afghanistan, Pakistan, Sri Lanka and Iraq were also sent to Nauru and Manus Island.[7] As of 31 December 2021, the main citizenships for asylum seekers who arrived by boat with on hand or at review applications for Temporary Protection Visas were similar: Iran, Afghanistan, Stateless and Sri Lanka.[8] Among those who arrived by boat and were living in the Australian community on Bridging (E) Visas as of 30 June 2021, the top four countries of origin were Sri Lanka, Iran, Bangladesh and Iraq.[9]

The adverse mental health consequences of immigration detention for detained and previously detained asylum seekers from across a range of settings and jurisdictions internationally have been extensively documented.[10] A 2018 global systematic review of the impact of immigration detention on the mental health of asylum seekers by von Werthern *et al*,[10] for example, found that high rates of anxiety, depression, post-traumatic stress disorder, and poor quality of life and social-emotional well-being were consistently reported across a number of studies. As just under half of the studies examined in this review[10] were conducted in Australia, this included several Australian studies[11–17] involving detained and previously detained asylum seekers of all ages. Evidence synthesised by von Werthern *et al*[10] also found that mental health deteriorated with detention duration, with the likelihood of developing a new mental illness while in Australian immigration detention increasing from 3 months onwards.[12]

While previous systematic reviews have largely focused on the impact of prearrival and postmigration stressors on rates of mental health disorders in asylum seekers,[18–20] to our knowledge, no reviews have focused solely on self-harm as a measure of mental health among asylum seekers in Australia. As asylum seekers possess many of the known risk factors for self-harm[21]—such as adverse life experiences, social isolation, and contact with mental health services—and the costs of self-harm to individuals, families and at the public health level are known to be high,[22] synthesising this knowledge could inform evidence-based self-harm prevention initiatives for this population.

The aforementioned review by von Werthern *et al*[10] did include one Australian study examining self-harm among adult asylum seekers in the entire onshore immigration detention network,[23] reporting a self-harm prevalence rate of 22% over a 20-month period to May 2011. Two further Australian studies[24 25] examining the psychiatric status of small subsections of the onshore detention population were also included in the review.[10] These studies reported self-harm prevalence rates in adults and children of between 31%–36% and 25%–80%, respectively over a 6-month period in 2002–2003.[10] However, a preliminary search conducted while developing the search strategy for this review identified several further salient studies in this area[26–32] that have been published both prior to and since the authors'[10] review was conducted in 2018. Some of these studies were likely excluded from von Werthern *et al*'s explicit search strategy for various reasons (eg, studies examining multi-morbidity including both mental and physical health), meaning that they may have been missed.

In addition, no studies reporting on self-harm in the von Werthern *et al* review[10] provided comparisons of the prevalence and characteristics of self-harm (including gender and methods used to self-harm) among asylum seekers held in immigration detention, community detention, as well as in those living in community-based arrangements in Australia. This means that research regarding the prevalence and characteristics of self-harm in *all* Australian asylum seeker populations has not yet been fully synthesised. Importantly, given the increased risk of self-harm in other detained populations,[33] this also means that evidence of any such differential risk among asylum seekers in all forms of immigration detention (which includes community detention, as well as APODs) in the Australian context has not been comprehensively collated. Finally, no research featured in von Werthern *et al*'s review[10] investigated self-harm among asylum seekers detained in offshore immigration detention on Nauru and Manus Island. Concerns are frequently reported regarding the mental health impacts of Australian-run offshore immigration detention[3 34] including, notably, self-harm.[34] Additional concerns have been raised in relation to the difficulty obtaining data regarding the health status of those detained on Nauru and Manus Island.[31] As such, there remains a pressing need to synthesise the findings of studies investigating self-harm as a measure of mental health in offshore detention.

To our knowledge, the evidence regarding self-harm among asylum seekers detained in both onshore and offshore immigration detention, community detention, as well as in community-based arrangements in Australia, has not been synthesised. The epidemiology of self-harm

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among asylum seekers in Australia is therefore not fully understood. Given asylum seekers' elevated risk of self-harm, Australia's policy of mandatory immigration detention, and the various settings in which asylum seekers are held, such knowledge is needed to inform evidence-based prevention strategies in these populations. We aim to synthesise the evidence regarding the prevalence, methods and characteristics of self-harm among asylum seekers of any age living in community-based arrangements, community detention and/or in Australian-run onshore and offshore immigration detention.

METHODS AND ANALYSIS

This protocol is reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses.[35]

ELIGIBILITY CRITERIA

Participants

We will include studies examining self-harm among asylum seekers of all ages in Australia, including those detained in both onshore and offshore immigration detention, those held in community detention, as well as those residing in community-based arrangements. Studies reporting on refugees and asylum seekers, or other immigrant populations, and that do not distinguish between these populations will be excluded. Studies reporting on suicide or suicide attempts only will be excluded. Where studies refer to suicide and self-harm separately, only findings regarding self-harm will be included.

Outcome measure

Our primary outcome measure will be self-harm. For the purposes of this review, self-harm is defined as any form of self-injury (or self-poisoning) irrespective of suicidal intent or motivation.[36] Self-harm may be measured by self-report, clinical interview or administrative data (eg, emergency department (ED), hospital or incident reports). An additional outcome measure will be method(s) used to self-harm. Methods of self-harm may also be measured by self-report, clinical interview or administrative data, including as the WHO's International Classification of Diseases, 10th Revision codes.[37]

Study design

We will include published cohort studies of asylum seekers which report on the prevalence of self-harm. We will exclude single case studies, dissertations, conference abstracts, letters, book chapters, editorials and study registrations. We will not include previous systematic reviews, as not all included studies may not meet our inclusion criteria. We will, however, identify any peer-reviewed studies related to any dissertations, conference abstracts, study registrations and studies assessed for previous reviews that meet our inclusion criteria but were not identified via our search strategy. Study eligibility will be restricted by year of publication, so that only studies published since 1992—the commencement of Australia's policy of mandatory immigration detention—will be included. Only studies published in English will be included.

Table 1 Medline search strategy

1.	asylum seekers.af.
2.	forced migration.af.
3.	migration.af.
4.	immigration.af.
5.	1 or 2 or 3 or 4
6.	immigration detention.af.
7.	(community detention or residence determination).af.
8.	(offshore detention or offshore immigration detention or offshore processing).af.
9.	(community based or community-based).af.
10.	(onshore immigration detention or onshore detention).af.
11.	6 or 7 or 8 or 9 or 10
12.	(self harm or self injur* or non suicid* or self inflict* or self wound* or parasuicid* or para suicid* or self poison* or overdos* or self mutilat* or self cut* or self batter* or self scratch* or self burn* or self immolat* or DSH or NSSI).af.
13.	5 and 12
14.	11 and 12

INFORMATION SOURCES AND SEARCH STRATEGY

We searched four key health and medical databases (PsycINFO, Scopus, PubMed and MEDLINE) for relevant literature published in English using variants and combinations of search terms relating to self-harm and asylum seekers between 1 January 1992 and 31 December 2021. The initial search was performed on 14 August 2020, and an update was conducted on 31 December 2021. The MEDLINE search strategy is outlined in table 1. The full search strategy used for each database is outlined in Online supplemental appendix 1. The electronic database searches will be supplemented by reviewing the reference lists of eligible articles, as well as searching the website of Médecins sans Frontières (https://msf.org.au/; a non-governmental organisation who has worked in Australian-run immigration detention facilities), for relevant grey literature.

STUDY SELECTION

All studies identified through the database search will be downloaded to Endnote[38] and duplicates removed. The remaining studies will be imported into Covidence[39] for screening. All titles and abstracts will be screened for inclusion by the primary author (KH), with 20% screened by the second author (RB). After 20% of the

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papers identified in the search strategy have been double screened, we will reassess our eligibility criteria to ensure that they are relevant to the studies that are identified. The reassessment process will involve a discussion with both reviewers, with any differences or uncertainty resolved by consensus. The overall inter-rater reliability for the title and abstract screening will be calculated using Cohen's kappa statistic.[40] After title and abstract screening is complete, all remaining full-text articles will be independently screened by KH, with any conflicts related to study inclusion resolved through discussion with RB. Where clarification is needed to determine eligibility, we will make a maximum of three attempts to contact the original study authors.

DATA EXTRACTION

Data extraction will be conducted by KH using a standardised extraction form developed by the researchers and checked by a second reviewer (RB). The following data will be extracted from each study: author(s), study year, study design, setting, sample size, sample characteristics (eg, gender, age, country of origin, length of detention, where possible), reported prevalence of self-harm, method(s) used to self-harm, outcomes measure(s) used, characteristics of findings including incidence or episode rates, 95% CIs, p values and effect sizes (where relevant). We will contact study authors for further information if any of the required data are missing, incomplete or unclear.

RISK OF BIAS

The Methodological Standard for Epidemiological Research (MASTER)[41] scale will be used to assess the quality of included studies. The quality and risk of bias will be assessed by KH, with any uncertainty resolved through discussion and consensus with the second author (RB). The MASTER scale[41] provides a single consolidated tool to assess the risk of bias across different types of study design. This is done by assessing each study for the presence of several methodological standards aimed at addressing the risk of bias across six potential bias domains (selection, information, design-related, analytic, confounding, external validity).[41] Using the approach taken in previous systematic reviews,[42 43] we will discuss the possible risk of bias and study quality in text, as well as generate a score summarising each study's quality by using the proportion of safeguards against bias that each study incorporated.

DATA SYNTHESIS

We will provide a descriptive overview of the included studies, including the study year(s), design, size and location of the study sample, as well as detention type, measure(s) used to report self-harm and any associated characteristics.

If a sufficient number of studies report on the rates of self-harm, we will conduct meta-analyses. Heterogeneity will be assessed using the I^2 statistic.

If the number of included studies is sufficient, we will use meta-regression[44] to investigate the influence of gender, age, country of origin, length of detention, closed detention, community-based settings, immigration detention type and detention facility on rates of self-harm. To investigate the impact of study quality on risk of bias, we will conduct a sensitivity analysis which includes only papers rated as high-quality (papers assessed as scoring above the median in the MASTER[41] scale).

If meta-analyses are not possible due to insufficient data on the rates or associated characteristics of self-harm, or if there is substantial heterogeneity, a narrative synthesis will be provided. The narrative synthesis will provide information in both text and tables to summarise and explain the included study findings. It will also explore relationships in the data, the development of a theoretical framework (if relevant) and assess the strength of the evidence for the conclusions drawn from the synthesis, as per formal guidelines on the conduct of a narrative synthesis.[45]

PATIENT AND PUBLIC INVOLVEMENT

There was no patient or public involvement in the design of this study.

ETHICS AND DISSEMINATION

As this is a review of studies that have already obtained ethics approval, this study is exempt from ethics approval. The findings of our review will be disseminated in a peer-reviewed journal article and via presentations at relevant national and international conferences.

Twitter Kyli Hedrick @kyli_hedrick

Contributors KH developed the original research proposal. KH and RB both contributed to the design of the project. KH developed the search strategy, with input from RB. KH wrote the initial draft of the manuscript, and RB contributed significantly to drafting and editing the manuscript. All authors approved the final manuscript.

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REFERENCES

1 United Nations High Commissioner for Refugees (UNHCR). *2020 Mid-year trends report*. Geneva, Switzerland: UNHCR, 2020. https://data2.unhcr.org/en/documents/details/84158
2 McAdam J, Chong F. *Refugee rights and policy wrongs*. Sydney, Australia: UNSW Press, 2019.
3 Australian Human Rights Commission [AHRC]. Asylum seekers, refugees and human rights. snapshot report. 2nd edition, 2017. Available: https://reliefweb.int/sites/reliefweb.int/files/resources/AHRC_Snapshot%20report_2nd%20edition_2017_WEB.pdf [Accessed 8 Aug 2021].
4 Phillips J, Spinks H. Immigration detention in Australia, 2013. Available: http://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BN/2012-2013/Detention [Accessed 8 Aug 2021].
5 Australian Human Rights Commission [AHRC]. Immigration detention and human rights, 2016. Available: https://humanrights.gov.au/our-work/asylum-seekers-and-refugees/projects/immigration-detention-and-human-rights
6 Migration and Maritime Legislation Amendment (Resolving the Asylum Legacy Caseload) Act 2014 (Commonwealth [Cth]). Available: https://www.legislation.gov.au/Details/C2014A00135
7 Refugee Council of Australia. Offshore processing statistics, 2022. Available: https://www.refugeecouncil.org.au/operation-sovereign-borders-offshore-detention-statistics/3/ [Accessed 8 Feb 2022].
8 Department of Home Affairs. IMA legacy case load, 2021. Report on processing status and outcomes. Available: https://www.homeaffairs.gov.au/research-and-stats/files/ima-legacy-caseload-december-2021.pdf [Accessed 8 Feb 2022].
9 Department of Home Affairs. Illegal maritime arrivals on bridging E visa, 2021. Available: https://www.homeaffairs.gov.au/research-and-stats/files/illegal-maritime-arrivals-bve-30-jun-2021.pdf [Accessed 8 Feb 2022].
10 von Werthern M, Robjant K, Chui Z, *et al*. The impact of immigration detention on mental health: a systematic review. *BMC Psychiatry* 2018;18:382.
11 Steel Z, Silove D, Brooks R, *et al*. Impact of immigration detention and temporary protection on the mental health of refugees. *Br J Psychiatry* 2006;188:58–64.
12 Green JP, Eagar K. The health of people in Australian immigration detention centres. *Med J Aust* 2010;192:65–70.
13 Coffey GJ, Kaplan I, Sampson RC, *et al*. The meaning and mental health consequences of long-term immigration detention for people seeking asylum. *Soc Sci Med* 2010;70:2070–9.
14 Young P, Gordon MS. Mental health screening in immigration detention: a fresh look at Australian government data. *Australas Psychiatry* 2016;24:19–22.
15 Mares S. The mental health of children and parents detained on Christmas island: secondary analysis of an Australian human rights Commission data set. *Health Hum Rights* 2016;18:219–32.
16 Steel Z, Momartin S, Silove D, *et al*. Two year psychosocial and mental health outcomes for refugees subjected to restrictive or supportive immigration policies. *Soc Sci Med* 2011;72:1149–56.
17 Zwi K, Mares S, Nathanson D, *et al*. The impact of detention on the social-emotional wellbeing of children seeking asylum: a comparison with community-based children. *Eur Child Adolesc Psychiatry* 2018;27:411–22.
18 Steel Z, Chey T, Silove D, *et al*. Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. *JAMA* 2009;302:537–49.
19 Turrini G, Purgato M, Ballette F, *et al*. Common mental disorders in asylum seekers and refugees: umbrella review of prevalence and intervention studies. *Int J Ment Health Syst* 2017;11:51.
20 Porter M, Haslam N. Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: a meta-analysis. *JAMA* 2005;294:602–12.
21 Cohen J. Safe in our hands?: A study of suicide and self-harm in asylum seekers. *J Forensic Leg Med* 2008;15:235–44.
22 Sinclair JMA, Gray A, Rivero-Arias O, *et al*. Healthcare and social services resource use and costs of self-harm patients. *Soc Psychiatry Psychiatr Epidemiol* 2011;46:263–71.
23 Hedrick K. Getting out of (self-) harm's way: a study of factors associated with Australian immigration detention. *J Forensic Leg Med* 2017;49:89–93.
24 Mares S, Jureidini J. Psychiatric assessment of children and families in immigration detention--clinical, administrative and ethical issues. *Aust N Z J Public Health* 2004;28:520–6.
25 Steel Z, Momartin S, Bateman C, *et al*. Psychiatric status of asylum seeker families held for a protracted period in a remote detention centre in Australia. *Aust N Z J Public Health* 2004;28:527–36.
26 Bull M, Schindeler E, Berkman D, *et al*. Sickness in the system of long-term immigration detention. *J Refug Stud* 2013;26:47–68.
27 Deans AK, Boerma CJ, Fordyce J, *et al*. Use of Royal Darwin Hospital emergency department by immigration detainees in 2011. *Med J Aust* 2013;199:776–8.
28 Rivas L, Bull M, Gender BM. Gender and risk: an empirical examination of the experiences of women held in long-term immigration detention in Australia. *Refug Surv Q* 2018;37:307–27.
29 Dudley M. Contradictory Australian National policies on self-harm and suicide: the case of asylum seekers in mandatory detention. *Australas Psychiatry* 2003;11:S102–8.
30 Hedrick K, Armstrong G, Coffey G, *et al*. Self-Harm among asylum seekers in Australian onshore immigration detention: how incidence rates vary by held detention type. *BMC Public Health* 2020;20:592.
31 Hedrick K, Armstrong G, Coffey G, *et al*. Self-Harm in the Australian asylum seeker population: a national records-based study. *SSM Popul Health* 2019;8:100452.
32 Médecins Sans Frontières. Indefinite despair. The tragic mental health consequences of offshore processing on Nauru, 2018. Available: https://www.msf.org.au/sites/default/files/attachments/indefinite_despair_4.pdf [Accessed 8 Aug 2020].
33 Hawton K, Linsell L, Adeniji T, *et al*. Self-Harm in prisons in England and Wales: an epidemiological study of prevalence, risk factors, clustering, and subsequent suicide. *Lancet* 2014;383:1147–54.
34 The Senate Legal and Constitutional Affairs Reference Committee. *Final report of the inquiry into serious allegations of abuse, self-harm and neglect of asylum seekers in relation to the Nauru regional processing centre, and any like allegations in relation to the manus regional processing centre*, 2017. https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Legal_and_Constitutional_Affairs/NauruandManusRPCs/Report
35 Moher D, Shamseer L, Clarke M, *et al*. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Syst Rev* 2015;4:1.
36 Hawton K, Harriss L, Hall S, *et al*. Deliberate self-harm in Oxford, 1990-2000: a time of change in patient characteristics. *Psychol Med* 2003;33:987–95.
37 World Health Organization. Classification of diseases (ICD), 2018. Available: http://www.who.int/classifications/icd/en/
38 Clarivate Analytics. Endnote X8, 2018. Available: https://endnote.com/ [Accessed 8 Aug 2020].
39 Covidence. Available: https://www.covidence.org/ [Accessed 8 Aug 2020].
40 McHugh ML. Interrater reliability: the kappa statistic. *Biochem Med* 2012;22:276–82.
41 Stone JC, Glass K, Clark J, *et al*. A unified framework for bias assessment in clinical research. *Int J Evid Based Healthc* 2019;17:106–20.
42 Borschmann R, Janca E, Carter A, *et al*. The health of adolescents in detention: a global scoping review. *Lancet Public Health* 2020;5:e114–26.
43 Willoughby M, Young JT, Spittal MJ, *et al*. Violence-related deaths among people released from incarceration: systematic review and meta-analysis of cohort studies. *E Clin Med* 2021;41:101162.
44 Baker WL, White CM, Cappelleri JC, *et al*. Understanding heterogeneity in meta-analysis: the role of meta-regression. *Int J Clin Pract* 2009;63:1426–34.
45 Popay J, Roberts H, Sowden A. Guidance on the conduct of narrative synthesis in systematic reviews: a product from the ESRC methods program, 2006. Available: https://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/fhm/dhr/chir/NSsynthesisguidanceVersion1-April2006.pdf

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