# A suicide research agenda for people from immigrant and refugee backgrounds

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**Abstract**

**Objective:** The aim of this study was to establish mental health and suicide research priorities for people from immigrant and refugee background in Australia. This paper focuses on the data relevant to the development of the suicide research agenda.

**Method:** This study was conducted using Delphi consensus method with two rounds of online questionnaires. A total of 138 and 86 participants, respectively, completed the first and second rounds of survey. Participants were policy makers, service providers, academics, service users and carer advocates in Australia with expertise in mental health and/or suicide among people from immigrant and refugee backgrounds.

**Results:** Of the total 268 research questions included in the questionnaires, 70 questions about suicide were ranked as essential by over 50% respondents (i.e. the set level of consensus). In particular, research questions regarded as the greatest priority related to access and engagement with suicide prevention services, suicide protective and risk factors compared to populations not from immigrant and refugee backgrounds, and culturally-appropriate assessment of suicide risk.

**Conclusions:** This research agenda, which was developed using a cross-sectorial and bottom-up approach, may serve as a guide to researchers, government and funding bodies about high priority research to prevent suicide among people from immigrant and refugee backgrounds.

**Keywords**

Mental health, suicide, immigrants, refugees, culture, cultural diversity, research agenda, critical suicidology, qualitative

*Suicide is indeed complex and remains a mystery, yet it can become an option, an idiom of particular distress, for a specific population* (Kral, 2012, p.319).

**Introduction**

In today's societies, the large scale movements of people of immigrant and refugee backgrounds are common phenomena. Such movements have resulted in countries progressively becoming more multicultural. As further discussed in Colucci and Too (2014), cultural factors are correlated with the suicidal behaviours of immigrants and refugees as shown, for instance, by the existing findings that the suicide rates in immigrants reflect the rates of their country of birth (Ide et al., 2012; Law et al., 2013). On the other side, research also indicates that second-generation immigrants generally show a higher risk of suicidal behaviour compared to those of the first generation (Ratkowska and De Leo, 2013) and various immigrant, refugee and ethnic minority groups are at a heightened risk for suicidal behaviour (Aichberger, 2014; Colucci, 2014). In spite of the higher risk for suicide among some immigrant and refugee populations, to date the vast majority of suicide research has maintained a focus on majority populations living in Western countries (Van Bergen et al., 2014). Research on suicide among people from refugee backgrounds is particularly scarce (Colucci, 2014). Thus, the study of suicidal behaviours among ethnic minority groups, including immigrants and refugees, is an important and urgent area in suicide research (Van Bergen et al., 2014). This study sets Australian priorities for suicide research for people from immigrant and refugee backgrounds.

Australia is one of the most multicultural societies in the world. In 2016, the proportion of Australians who were born overseas has hit its highest point in over 120 years, with 28 per cent of Australia's population born overseas and over 20% children of immigrants (Australian Bureau of Statistics, 2016). This trend is bound to continue considering that the percentage of Australian-residents born overseas has increased every year for the last 15 years. Over half of them spoke a language other than English at home (idem).

The cultural and linguistic diversity of the population is not reflected in research and funding available. In fact, while suicide research on immigrants was prolific in the 1960s and 1970s (a time when European immigration was dominant) it decreased in the following decades (a time when dominant ethnic groups are from Asia), (NHMRC, 2000).

A report on research priorities in mental health demonstrated that only 2.2% of Australian mental health articles published in 1998 studied non-English speaking populations and only 1.5% of funding grants awarded in 2000 were assigned to study this population (Jorm et al., 2002). Similarly, a recent review of Australian

mental health articles published between 1992 and 2012 in four major Australian mental health journals found that the majority of Australian research did not mention whether people from culturally and linguistically diverse backgrounds were included in these studies. Only 9.7% of articles considered culturally and linguistically diverse samples whereas 9.1% of articles contained the exclusion criteria of insufficient proficiency in English in the sampling and participation (Minas et al., 2013).

A recent discussion paper for the National Mental Health Commission aimed to evaluating existing Australian mental health research and its inclusion of people from culturally and linguistically diverse backgrounds (Minas et al., 2013), concluded that consideration of cultural and linguistic diversity is needed when framing mental health policy. Conversely, there is very little implementation of those components that are relevant to the particular needs of immigrant and refugee populations. This finding is confirmed by the lack of reference to these subpopulations in the National Mental Health Report 2010 that summarised the progress of mental health reform in Australia over a period of fifteen years (Department of Health and Ageing, 2010).

Research concerning mental health of immigrants and refugees is essential to enhance the capacity of governments to effectively address the specific needs of culturally and linguistically diverse communities to reduce mental health problems and prevent suicide. Nevertheless, presently in Australia limited attention has been given to researching these populations and there is no comprehensive set of priorities within the field of mental health research for people of immigrant and refugee backgrounds. One of the key recommendations proposed in the discussion paper by Minas and collaborators was the development of a multicultural mental health research agenda. Developing a research agenda for immigrant and refugee populations provides an opportunity to formulate research priorities that are useful in developing relevant strategies, address areas of need, create partnerships, and reduce duplications in research. The agenda can also be used as a guide to researchers and funders when seeking research priorities within the field.

Following this recommendation, this study consulted experts across various sectors with the aim to develop an Australian mental health and a suicide research agenda for people of immigrant and refugee backgrounds, and is an extension of a previous study aimed to develop a refugee mental health research agenda (Colucci et al., 2010). This manuscript describes the methodology and reports the data specifically about the suicide research agenda, with a focus on the leading questions across suicide research domains.

**Methods**

This research was conducted using a Delphi consensus approach, which involves consulting experts on a recurring progression of questions through a series of questionnaires. This method has been shown to be effective in eliciting the opinions of experts to determine research priorities across multiple aspects (Jorm et al., 2002; Minas and Jorm, 2010). This method also sits well with the critical suicidology methodological approach as the suicide research questions were developed by the participants themselves through open-ended questions thus using a qualitative research strategy (Kral and Burkhardt, 2002).

*Participant selection and recruitment*

Policy makers, service providers, academics, service user and carer advocates in Australia with expertise in mental health and/or suicide of immigrants and refugees were invited to form the expert panel and participate in the study. Potential participants were identified through search of relevant literature and websites, key Australian mental health or suicide prevention organisations, the networks of Mental Health in Multicultural Australia (www.mhima.org.au), as well as snowball sampling and individuals who self-nominated after seeing the study advertisements (e.g. flyers and mailing lists). We also held two consultations with service users and people working with service users and carers in Melbourne to facilitate recruitment of people with lived experience.

Ethical approval for this project was granted by the Melbourne School of Population and Global Health Human Ethics Advisory Group (ID 0932986.2).

*Procedures*

This study was conducted using Delphi consensus method with two rounds of online questionnaires. In the first round, potential participants identified through the recruitment strategy described above were sent an individualized link to an online questionnaire using the web application SurveyMonkey. Participants were directed to read the plain language statement and asked to indicate their consent to take part in the study. The participants recruited through the consultations who opted for the paper version of the questionnaire, were provided with stamped envelopes to post to the research team.

After providing consent, participants were asked to respond to some socio-demographic questions and then rank the importance of a set of research questions, which were divided into nine domains. These domains included: 1) epidemiology/prevalence of mental health problems, 2) understanding determinants of mental

health, 3) assessment of mental health problems, 4) conceptualization of mental health/illness and help-seeking strategies, 5) mental health service models/systems, 6) mental health services utilization, 7) treatment methods, 8) mental health promotion, and 9) research methodology. The domains and questions were based on the questionnaires used in the study for the refugee mental health research agenda (Colucci et al., 2010) and other key literature about mental health and suicide among immigrants and refugees. Participants were given the choice to rank the importance of each research question using a 3-point Likert scale (i.e. Essential-Important-Neither/Uncertain). They were instructed to tick 'Essential' if they agreed that without an answer to the question Australia's ability to contribute to a better mental health of people from immigrant and refugee backgrounds is seriously hampered, 'Important' if they agreed that Australia's ability to contribute to a better mental health of people from immigrant and refugee backgrounds would be assisted by having an answer to the question or 'Neither/Uncertain' if they thought the question was neither 'essential' nor 'important', or if they were uncertain of the importance of the question. Participants were made aware that only the questions rated "essential" would be considered high priority in the final research agenda. At the end of each domain, participants were given the chance to suggest additional research question that were not included in the questionnaire. They were also requested to propose three key research questions regarding specifically suicide and suicide prevention among immigrants and refugees. Participants who had direct research experiences with immigrants and refugees were also asked to answer a set of questions regarding research skills and knowledge.

During the first round of the study, 238 research questions about suicide were suggested. Questions that were unclear, irrelevant, redundant or were not a question but a comment, were excluded. The remaining questions were collated and summarised into 73 questions, which were then included in the second round questionnaire. These included questions such as, "How does the conceptualization of suicide vary across cultural groups?"; "What role does spirituality/religion play in influencing the views towards suicide and help-seeking in people from migrant and refugee backgrounds?", "What are the suicide bereavement and grieving experiences of families within different migrant and refugee communities?", "What suicide prevention training for people from migrant and refugee backgrounds is currently available in Australia?" and "What are the key referral points and pathways to suicide prevention services for people from migrant and refugee backgrounds?"

Participants who responded at the first round received the second online questionnaire and were asked to rank the importance of the new research questions. In both rounds, participants were sent two email reminders where no response or incomplete surveys were received before deadline.

*Data Analyses*

As mentioned above, the eligible open-ended suggestions made in round one were grouped by themes using thematic analyses and collated into the research questions for round two. Questions that were ranked as 'Essential' by over 50% respondents were included in the research agenda (i.e. the set level of consensus based on a previous study by Powell, 2003). Of these, the three leading questions that were rated Essential' by the greatest number of respondents in each domain were indicated as highest priorities. Similarly to the approach used by the Lancet Global Mental Health Group (2007), the five leading questions across domains were then selected.

**Results**

In the first round of survey, a total of 642 eligible individuals received an email with information about this study. Of these, 155 (24.1%) self-selected to take part in the project and 138 of them filled in the Round 1 survey. This number, however, does not represent the total number of participants as we were informed that some surveys reported the answers provided by a group. In the second round, of the 138 respondents invited to participate in the second and final survey, 86 completed the survey.

*Participants' characteristics*

Participants had an average age of 47 years and were largely females, born in Australia and with English as their first language (see Table 1). In regard to their primary area of activity, 47.1% were from mental health or suicide prevention services, followed by experts from other services specifically for immigrants and refugees (16.7%), government organizations (13.8%), and university or other research/education centre (13.8%). Their primary professional qualifications were, most commonly, social work (19.6%), psychology (18.8%) or nursing (14.5%).

INSERT TABLE 1 HERE

*Research priorities*

Of a total of 73 collated suicide questions included in the study, 70 were rated as ‘essential’ by 50% or more respondents. Among those, the three leading questions that received the highest percentages of consensus for each suicide domain are listed in order in Table 2.

INSERT TABLE 2 HERE

The five leading questions across research domains were the following:

1. What are the key barriers to access and engagement with suicide prevention services in people from migrant and refugee backgrounds?
2. What are the key protective factors for suicidal behaviours of people from migrant and refugee backgrounds and people not from migrant and refugee backgrounds?
3. What considerations are essential in conducting a cultural appropriate suicide risk assessment for people from migrant and refugee backgrounds?
4. What are the key risk factors for suicidal behaviours of people from migrant and refugee backgrounds and people not from migrant and refugee backgrounds?
5. *What is the prevalence of suicidal behaviours in asylum seekers and people from migrant and refugee backgrounds held in immigration detention centres?
5. *Are cultural values and beliefs, including religion and spirituality related positively or negatively to suicidal behaviour of people from migrant and refugee backgrounds?
5. *What are the most effective methods of assessing suicide risk in people from migrant and refugee backgrounds? (* means equal ranking)

**Discussion**

Qualitative research methods are generally excluded from mainstream suicidology as demonstrated by the report by (Hjelmeland and Knizek, 2010), which indicated that, during a period of three years, less than 3% of all the research articles published in the three main international suicidological journals had used qualitative methods, and most often in addition to a quantitative method. At the opposite, this study showed that aualitative methods implemented in the development of research agendas can reveal topics that may not emerge using solely ‘top-down impositional’ quantitative approaches (Booth, 2014). Astrength of the present suicide research

agenda was the use of an open-ended qualitative approach to generate items that were later included in the agenda using a quantitative approach. Another long-standing weakness of several suicide research agendas is the gap between what frontline fieldworkers such as service providers and policy-makers need from research and what research actually produces for them (National Action Alliance for Suicide Prevention Research, 2013). Thus, another strength of this study is the involvement of experts across sectors, including people with lived experience of suicidal behaviours and professionals other than psychiatrists and psychologists, contrasting the restrictive look at 'authoritative voices'within mainstream suicidology reprimanded also by critical suicidology scholars such as (Marsh, 2015a) . Fifty percent or more of these experts agreed that 70 (out of 73) of the key research priorities identified through open-questions are essential to be addressed to improve suicide prevention among people from immigrant and refugee backgrounds in Australia. In particular, the research questions related to improving access and engagement with suicide prevention services was identified as the greatest research priority. The need to develop certain mechanisms to engage this group of people in receiving appropriate services (assuming these services are in fact appropriate) has also been highlighted by existing research (Wong, 2012). In Australia immigrants and refugees are generally under-represented in the populations who access services (Wagner et al., 2006; Hassett and George, 2002; Boufous et al., 2005; Klimidis et al., 1999a; Klimidis et al., 1999b; Ziaian et al., 2012; Correa-Velez et al., 2007; Stolk et al., 2008; Bruxner et al., 1997; McDonald and Steel, 1997; Colucci, 2014). The main hindrances identified among immigrants was stigma and shame (Drummond et al., 2011; Youssef and Deane, 2006; Wynaden et al., 2005), whereas key reasons among refugees included fear of being judged by service providers and others, as well as fear of hospitalisation, the complexities of service referral processes and eligibility criteria, and cultural mismatch or understanding of their cultural background (Drummond et al., 2011; Colucci et al., 2015). These factors need to be considered when developing effective ways to engage immigrants and refugees with suicide prevention services.

Apart from the obstacles to service access, the low rates of access by immigrants and refugees might also be due to lower prevalence of mental illness and suicide in these populations (Minas et al., 2013; Colucci et al., 2015). The panel of experts in the current study indicated that research on the prevalence of suicidal behaviours specifically for these populations in Australia is still largely needed. This is consistent with the finding from the previous consensus study on Australian refugee mental health research, in which the prevalence of mental health problems among refugee children/young people and adults was indicated as one of the key research priorities (Colucci et al., 2010). To date, Australian studies have not provided conclusive findings on whether the

prevalence of mental disorders among immigrant and refugee populations is the same, significantly less or more than the Australian-born population (Klimidis et al., 1994; Stuart et al., 1998; Minas et al., 2008; Australian Bureau of Statistics, 2008). The prevalence seems to vary substantially according to the particular ethnic groups or by country of birth, age groups and disorder being studied (Silove and Steel, 1998; Silove et al., 1998; Ziaian et al., 2012; Schweitzer et al., 2011; Silove et al., 2007; Minas et al., 2008; McEvoy et al., 2011; Alati et al., 2003; McGarth et al., 2001; McKelvey et al., 2002; Davies and McKelvey, 1998). Also in regards to suicide, it is unclear if immigrants are at higher risk of suicide (NHMRC, 2000). While most of Australian suicide research is epidemiological[1] (Robinson and Pirkis, 2013), studies of this kind specific for immigrant and refugee populations are still limited. More research is needed specifically on this population including, as indicated by the expert panel, prevalence studies of suicidal behaviour among asylum seekers and people held in immigration detention centres. This high risk population was identified as a priority focus also in a previous suicide research agenda (Niner et al., 2008). As refugees are more vulnerable to self-harm and suicidal behaviour than the general population in Australia (Dudley, 2003), it would be important to also explore the potential impact on suicidal behaviour of Australian procedures and policies for people requesting asylum. Considerations and methods for culturally appropriate assessment of suicide risk, another key priority suggested by the experts, would be useful both for prevalence and prevention/intervention studies and programmes. Research on practical ways to identify and assess suicide risk was included also in the US agenda (Ahmedani and Vannoy, 2014).

Participants also agreed that more research is required to identify protective and risk factors for suicidal behaviours among immigrants and refugees and compare these with factors among the general populations. In particular, research to shed light on cultural values and beliefs, including religion and spirituality, related negatively or positively with suicidal behaviour were perceived as highly essential. A previous suicide research agenda also prioritized the exploration of societal and cultural factors rather than individual-level factors (Niner et al., 2008), which is in line with the importance of a socio-cultural understanding of suicidal behaviour and its prevention argued by a number of Critical Suicidology scholars such as (Colucci, 2006; White, 2015; Kral, 2012; Hjelmeland et al., 2006; Broz, 2015; Marsh, 2015b).

Tseng (2001) observed the impact of several cultural factors on suicide using his theory of cultural effects on psychopathology. He depicted that culture affects the nature and severity of the distress that people may suffer and this distress may then contribute to the occurrence of suicidal behaviour. He also pointed out that

[1] This finding was observed also in a review of abstracts to key international suicide congresses and symposia, which observed that 48% of abstracts were related to epidemiological studies of suicide and another 12% described research into biological or genetic factors

some societies have a negative attitude attached to suicidal behaviour. For instance, suicide is seen as an unforgivable sin by Muslims, as a crime by the Indian legal systems, and as an abominable act by the Baganda in Uganda (Mugisha et al., 2011); whereas, suicide is perceived as an honourable act of self-sacrifice by the Japanese community (Young, 2002). Although cultural factors play an important role on suicidal behaviours, research in this area is still largely inadequate both in terms of quantity and depth (Colucci and Lester, 2013; Colucci and Too, 2014). Thus, further and better (qualitative and mixed-method) cultural research is warranted if we want to reach a deeper and broader understanding of this phenomenon (Hjelmeland, 2011; Booth, 2014; Kral, 2012; Marsh, 2015b), including community and participatory action research methods (Diocera et al., under submission); Kral and Idlout, 2016). Such research, mindful of the methodological and ethical issues intrinsic to any suicide prevention study (Silverman et al., 2014), would contribute to provide an alternative argument to the dominant assumptions that drive most of research, policy and practice in modern suicidology, i.e. that "suicide is pathological", "suicide is science" and "suicide is individual" (see (Marsh, 2015b):

*Limitations*

Expert members may have varying degrees of knowledge about what is currently happening in Australian mental health and suicide research in immigrants and refugees. However, the Delphi method does not allow accounting for different degrees of knowledge in calculating consensus. Another limitation was the relatively smaller number of respondents from service user and carer backgrounds, in spite of our efforts to recruit them through consultations with potential participants from these groups and through existing networks. In a linked paper (Diocera et al., under submission)) we explore how to improve participation of service users and carers from immigrant and refugee backgrounds in mental health and suicide research, including the use of research methods that are engaging, participatory, and driven by the communities.-such as participatory action research- and engage service users and carers throughout the various stages of the research, from developing the research questions, designing the method, collecting and analysing the data to disseminating and implementing the findings and evaluation. Such participatory and collaborative approach is already successfully been used by critical suicidologists such as Kral and seem to be on the increase (see (Kral and Idlout, 2016). Availability of training and support for carers and service users for them to develop their skills and knowledge of research was also indicated as an important strategy to improve engagement in mental health and suicide research. We aim to

use these and other methodological suggestions provided by participants to improve future engagement of service users and carers from immigrant and refugee backgrounds in mental health and suicide research.

*Conclusions and future directions*

The recent examination of Australia-based suicide research by (Robinson and Pirkis, 2013) found a disappointing decrease in the amount of funding allocated to suicide-related research in Australia. Yet, suicide prevention has been indicated as a priority, both at a global (WHO, 2014) and local level (Department of Health and Human Services, 2016). In particular, a senate inquiry into suicide and a parliamentary inquiry into youth suicide cited the development of a strategic research agenda as national priorities. This study contributes to this objective by providing suicide research priorities specifically for people from culturally-diverse backgrounds, including the need for research to understand barriers to accessing and engaging with services and the impact of cultural values and beliefs, including religious and spiritual beliefs, on suicidal behaviour.

Robinson and Pirkis (2013) concluded their review stating, "we still have some way to go when it comes to the priority given to certain type of research in Australia" (p. F). In some fields, formal research agendas were able to catalyse research efforts and advance knowledge and practice (National Action Alliance for Suicide Prevention Research, 2013) We hope that the findings of the current study will be used as a guide by researchers and funders when selecting high priority research in mental health and suicide prevention so that the specific needs of immigrant and refugee communities are not left out.

The cross-sectorial and bottom-up approach used to set up this research agenda may also serve as a template for setting up similar agendas in other countries, following the critical suicidologists argument to "build solutions from the ground up rather than impose them from above" (Marsh, 2015b) p.27).

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**Declaration of interest**

The authors declare that they have no competing interests.

**References**


Ahmedani B and Vannoy S. (2014) National pathways for suicide prevention and health research. *American Journal of Preventive Medicine* 42: S222-S228.

Aichberger MC. (2014) Rates of suicidal behaviour among immigrants ad ethnic minorities in Europe. In: Van Bergen D, Heredia Montesinos A and Schouler-Ocak M (eds) *Suicide in the context of migration.* Gottingen, Germany: Hogrefe Publishing.

Alati R, Najman JM, Shuttlewood GJ, et al. (2003) Changes in mental health status amongst children of migrants to Australia: A longitudinal study. *Sociology of Health and Illness* 25: 866-888.

Australian Bureau of Statistics. (2008) National Survey of Mental Health and Wellbeing: Summary of Results, cat. no. 4326.0. Canberra: Australian Bureau of Statistics.

Australian Bureau of Statistics. (2016) Australian Bureau of Statistics: Migration, Australia, 2014-15, cat. no. 3412.0. Canberra: Australian Bureau of Statistics.

Booth CL. (2014) Experiences and wisdom behind the numbers. *American Journal of Preventive Medicine* 47: S106-S114.

Boufous S, Silove D, Bauman A, et al. (2005) Disability and health service utilization associated with psychological distress: The influence of ethnicity. *Mental Health Services Research* 7: 171-179.

Broz L. (2015) I, Too, Have a Dream … About Suicidology. *Social Epistemology Review and Reply Collective* 4: 27-31.

Bruxner G, Burvill P, Fazio S, et al. (1997) Aspects of psychiatric admission of migrants to hospitals in Perth, Western Australia. *Australian and New Zealand Journal of Psychiatry* 31: 532-542.

Colucci E. (2006) The cultural facet of suicidal behaviour: its importance and negligence. *Advances in Mental Health* 5: 1-13.

Colucci E and Lester D. (2013) *Suicide and culture: Understanding the context,* Cambridge, U.S.: Hogrefe Publishing.

Colucci E, Minas H, Szwarc J, et al. (2010) A mental health research agenda for people of refugee background in Australia: a consensus study. Centre for International Mental Health (University of Melbourne), the Victorian Foundation for Survivors or Torture, the Royal Children's Hospital and the Centre for Multicultural Youth. .

Colucci E, Szwarc J, Minas H, et al. (2015) In or out? Barriers and facilitators to refugee-background young people accessing mental health services. *Transcult Psychiatry* 52: 766-790.

Colucci E, Szwarc, J., Minas, H., Paxton, J. and Guerra, C. . (2014) The utilisation of mental health services among children and young people from a refugee background: A systematic literature review. *International Journal of Culture and Mental Health* 7: 86-108.

Colucci E and Too T. (2014) Culture, cultural meaning(s) and suicide among immigrants and refugees. In: Van Bergen D, Heredia Montesinos A and Schouler-Ocak M (eds) *Suicide in the context of migration.* Gottingen, Germany: Hogrefe Publishing.

Correa-Velez I, Sundararajan V, Brown K, et al. (2007) Hospital utilisation among people born in refugee-source countries: An analysis of hospital admissions, Victoria, 1998-2004. *Medical Journal of Australia* 186: 577-580.

Davies LC and McKelvey RS. (1998) Emotional and behavioural problems and competencies among immigrant and non-immigrant adolescents. *Australian and New Zealand Journal of Psychiatry* 32: 658-665.

Department of Health and Ageing. (2010) *National Mental Health Report 2010: Summary of 15 years of reform in Australia's mental health services under the National Mental Health Strategy 199302008.,* Canberra: Commonwealth of Australia.

Department of Health and Human Services. (2016) Victorian Suicide Prevention Framework 2016–25. Melbourne: State of Victoria.

Diocera D, Colucci E and Minas E. (under submission)) Undertaking mental health and suicide prevention research with people from immigrant and refugee backgrounds.

Drummond PD, Mizan A, Brocx K, et al. (2011) Barriers to accessing health care services for West African refugee women living in Western Australia. *Health Care for Women International* 32: 206-224.

Dudley M. (2003) Contradictory Australian national policies on self-harm and suicide: The case of asylum seekers in mandatory detention. . *Australasian Psychiatry* 11: S102–108.

Hassett A and George K. (2002) Access to a community aged psychiatry service by elderly from non-English-speaking backgrounds. *International Journal of Geriatric Psychiatry* 17: 623-628.

Hjelmeland H. (2011) Cultural context is crucial in suicide research and prevention. *Crisis* 32: 61-64.

Hjelmeland H, Kinyanda E, Knizek BL, et al. (2006) A discussion of the value of cross-cultural studies in search of the meaning(s) of suicidal behavior and the methodological challenges of such studies. *Archives of Suicide Research* 10: 15-27.

Hjelmeland H and Knizek BL. (2010) Why we need qualitative research in Suicidology. *Suicide and Life-Threatening Behavior* 40: 74-80.

Huisman AH, Pirkis J and Robinson J. (2010) Intervention studies in suicide prevention research. *Crisis* 31: 281-284.

Ide N, Kolves K, Cassaniti M, et al. (2012) Suicide of first-generation immigrants in Australia, 1974-2006. *Soc Psychiatry Psychiatr Epidemiol* 47: 1917-1927.

Jorm A, Griffiths K, Christensen H, et al. (2002) Research priorities in mental health. Canberra: Mental Health Branch, Commonwealth Department of Health and Ageing.

Klimidis S, Lewis J, Miletic T, et al. (1999a) *Mental health service use by ethnic communities in Victoria: Part I. descriptive report,* Melbourne: Victorian Transcultural Psychiatry Unit.

Klimidis S, Lewis J, Miletic T, et al. (1999b) *Mental Health Service Use by Ethnic Communities in Victoria: Part II, Statistical Tables,* Melbourne: Victorian Transcultural Psychiatry Unit.

Klimidis S, Stuart G, Minas IH, et al. (1994) Immigrant status and gender effects on psychopathology and self-concept in adolescents: A test of the migration-morbidity hypothesis. *Comprehensive Psychiatry* 35: 393-404.

Kral MJ. (2012) Postcolonial suicide among Inuit in Arctic Canada. *Culture, Medicine, and Psychiatry* 36: 306-325.

Kral MJ and Burkhardt DJ. (2002) The new research agenda for a cultural psychology. *Canadian Psychology* 43: 154*162.

Kral MJ and Idlout L. (2016) Indigenous best practices: Community-based suicide prevention in Nunavut, Canada. In: J. White IM, M.J. Kral, & J. Morris (ed) *Critical suicidology: Transforming suicide research and prevention for the 21st century.* Vancouver, BC: University of British Columbia Press.

Law CK, Kõlves K and De Leo D. (2013) Suicide mortality in second-generation migrants, Australia, 2001-2008. *Soc Psychiatry Psychiatr Epidemiol*.

Marsh I. (2015a) 'Critical suicidology': toward an inclusive, inventive and collaborative (post) suicidology. *Social Epistemology Review and Reply Collective* 4: 6-9.

Marsh I. (2015b) Critiquing contemporary suicidology. In: White J, Kral, M., Morris, J. and Marsh, I (ed) *Critical Suicidology: Transforming Suicide Research and Prevention for the 21st Century.* Vancouver: BC: University of British Columbia Press, 15-30.

McDonald B and Steel Z. (1997) Immigrants and Mental Health: An Epidemiological Analysis. Sydney: Transcultural Mental Health Centre.

McEvoy PM, Grove R and Slade T. (2011) Epidemiology of anxiety disorders in the Australian general population: Findings of the 2007 Australian National Survey of Mental Health and Wellbeing. *Australian and New Zealand Journal of Psychiatry* 45: 957-967.

McGarth J, El-Saadi O, Cardy S, et al. (2001) Urban birth and migrant status as risk factors for psychosis: An Australian case-control study. *Soc Psychiatry Psychiatr Epidemiol* 36: 533-536.

McKelvey RS, Sang DL, Baldassar L, et al. (2002) The prevalence of psychiatric disorders among Vietnamese children and adolescents. *Medical Journal of Australia* 177: 413-417.
Minas H and Jorm AF. (2010) Where there is no evidence: use of expert consensus methods to fill the evidence gap in low-income countries and cultural minorities. *Int J Ment Health Syst.* 4.
Minas H, Kakuma R, Too LS, et al. (2013) Mental health research and evaluation in multicultural Australia: developing a culture of inclusion. *International Journal of Mental Health Systems* 7: 23.
Minas H, Klimidis S, Ranieri N, et al. (2008) Relative prevalence of psychological morbidity in older immigrants. *International Journal of Culture and Mental Health* 1: 58-72.
Mugisha J, Hjelmeland H, Kinyanda E, et al. (2011) Distancing: a traditional mechanism of dealing with suicide among the Baganda, Uganda. *Transcult Psychiatry* 48: 624-642.
National Action Alliance for Suicide Prevention Research. (2013) The agenda development process of the United States' National Action Alliance for Suicide Prevention Research Prioritazation Task Force. *Crisis* 34: 147-155.
NHMRC. (2000) National Youth Suicide Prevention Strategies: Setting the evidence-based research agenda for Australia (A literature review). Canberra, Australia: Department of Health and Aged Care.
Niner S, Pirkis J, Krysinka K, et al. (2008) Research priorities in suicide prevention: A qualitative study of stakeholders'views. *Australian e-Journal for the Advancement of Mental Health* 8: np.
Powell C. (2003) The Delphi technique: Myths and realities. *Journal of Advanced Nursing* 41: 376–382.
Ratkowska KA and De Leo D. (2013) Suicide in Immigrants: An Overview *Open Journal of Medical Psychology* 2: 124-133.
Robinson J and Pirkis J. (2013) Research priorities in suicide prevention: an examination of Australian-based research 2007-11. *Australian Health Review* 38: 18-24.
Schweitzer RD, Brough M, Vromans L, et al. (2011) Mental health of newly arrived Burmese refugees in Australia: contributions of pre-migration and post-migration experience. *Australian and New Zealand Journal of Psychiatry* 45: 299-307.
Silove D and Steel Z. (1998) The Mental Health and Well-Being of On-Shore Asylum Seekers in Australia. Sydney: Psychiatry Research and Teaching Unit, University of New South Wales.
Silove D, Steel Z, Bauman A, et al. (2007) Trauma, PTSD and the longer-term mental health burden amongst Vietnamese refugees: A comparison with the Australian-born population. *Soc Psychiatry Psychiatr Epidemiol* 42: 467-476.
Silove D, Steel Z, McGorry P, et al. (1998) Psychiatric symptoms and living difficulties in Tamil asylum seekers: Comparisons with refugees and immigrants. *Acta Psychiatrica Scandinavica* 97: 175-181.
Silverman M, Pirkis J, Pearson JL, et al. (2014) Reflections on expert reccomendations for U.S. research priorities in suicide prevention. *American Journal of Preventive Medicine* 47: S97-S101.
Stolk Y, Minas IH and Klimidis S. (2008) *Access to metal health services in Victoria: A focus on ethnic communities,* Melbourne: Victorian Transcultural Psychiatry Unit.
Stuart GW, Klimidis S and Minas IH. (1998) The treated prevalence of mental disorder amongst immigrants and the Australian-born: Community and primary-care rates. *International Journal of Social Psychiatry* 44: 22-34.
Tseng WS. (2001) *Handbook of cultural psychiatry. ,* San Diego, CA Academic Press.
Van Bergen D, Heredia Montesinos A and Schouler-Ocak M. (2014) Suicide in the context of migration. Gottingen, Germany: Hogrefe Publishing.
Wagner R, Manicavasagar V, Silove D, et al. (2006) Characteristics of Vietnamese patients attending an anxiety clinic in Australia and perceptions of the wider Vietnamese community about anxiety. *Transcultural Psychiatry* 43: 259-274.
White J. (2015) Shaking up suicidology. *Social Epistemology Review and Reply Collective* 4: 1-4.

WHO. (2014) Preventing suicide: a global imperative. Geneva, Switzerland: World Health Organization.

Wong DFKL, A. Y. K.;Poon, A.;Chow, A. Y. M. (2012) Gender differences in mental health literacy among Chinese-speaking Australians in Melbourne, Australia. *International Journal of Social Psychiatry* 58: 178-185.

Wynaden D, Chapman R, Orb A, et al. (2005) Factors that influence Asian communities' access to mental health care. *International Journal of Mental Health Nursing* 14: 88-95.

Young J. (2002) Morals, suicide, and psychiatry: A view from Japan. *Bioethics* 16: 412-424.

Youssef J and Deane FP. (2006) Factors influencing mental-health help-seeking in Arabic-speaking communities in Sydney, Australia. *Mental Health, Religion and Culture* 9: 43-66.

Ziaian T, de Anstiss H, Antoniou G, et al. (2012) Depressive symptomatology and service utilisation among refugee children and adolescents living in South Australia. *Child and Adolescent Mental Health* 17: 146-152.

**Table 1**. Demographic and other personal information of participants

| **Age** | *Mean* = 47 years old | |
|---|---|---|
| | *Number* | *Percentage* |
| **Gender** | | |
| Female | 105 | 76.1 |
| Male | 33 | 23.9 |
| **Country of birth** | | |
| Australia | 89 | 64.5 |
| Overseas | 49 | 35.5 |
| **First language** | | |
| English | 104 | 75.4 |
| Non-English | 34 | 24.6 |
| **Primary areas of activity** | | |
| University or other research/education centre | 19 | 13.8 |
| Government/policies | 19 | 13.8 |
| Mental health or suicide prevention service specifically for refugees and/or immigrants | 22 | 15.9 |
| Other mental health or suicide prevention service | 43 | 31.2 |
| Other service for refugees and/or immigrants (non-mental health/suicide prevention) | 23 | 16.7 |
| Service user or carer organisation/group | 10 | 7.2 |
| Other | 2 | 1.4 |

**Table 2. Three leading research questions for each suicide domain**

| **Suicide research agenda** | **Percentage of consensus (i.e. item rated as 'Essential')** |
|---|---|
| **Domain 1. Epidemiology/Prevalence of suicide** | |
| 1. What is the prevalence of suicidal behaviours in asylum seekers and people from migrant and refugee backgrounds held in immigration detention centres? | 76.74% |
| 2. What is the prevalence of suicidal behaviours among people from migrant and refugee backgrounds, disaggregated by relevant subgroups (e.g. cultural, socioeconomic status, age and resettlement location)? | 73.26% |
| 3. What are the similarities and differences in the patterns of suicidal behaviours in people from migrant and refugee backgrounds over time? | 62.79% |
| **Domain 2. Understanding determinants of suicide** | |
| 1. What are the key protective factors for suicidal behaviours of people from migrant and refugee backgrounds and people not from migrant and refugee | 80.23% |

| | |
|---|---|
| backgrounds? | |
| 2. What are the key risk factors for suicidal behaviours of people from migrant and refugee backgrounds and people not from migrant and refugee backgrounds? | 77.91% |
| 3. Are cultural values and beliefs, including religion and spirituality related positively or negatively to suicidal behaviour of people from migrant and refugee backgrounds? | 76.74% |
| **Domain 3. Assessment of suicide risk** | |
| 1. What considerations are essential in conducting a cultural appropriate suicide risk assessment for people from migrant and refugee backgrounds? | 79.07% |
| 2. What are the most effective methods of assessing suicide risk in people from migrant and refugee backgrounds? | 76.74% |
| 3. What training is required to improve the capacity of mental health professionals to assess risk of suicide in people from migrant and refugee backgrounds? | 74.42% |
| **Domain 4. Conceptualization of suicide and help-seeking strategies** | |

| | |
|---|---|
| 1. What are the factors that deter help-seeking among people from migrant and refugee backgrounds at risk of suicide at the individual, family, and community levels? | 74.12% |
| 2. §What are the coping and help-seeking strategies among people from migrant and refugee backgrounds at risk of suicide? | 71.76% |
| 2. §What kinds of support are believed to be helpful among people from migrant and refugee backgrounds at risk of suicide? | 71.76% |
| 3. How do people from migrant and refugee backgrounds perceive suicide and the factors that increase risk of suicide? | 67.06% |
| **Domain 5. Suicide prevention service models/systems** | |
| 1. How can suicide prevention services be adapted and extended to better meet the needs of people from migrant and refugee backgrounds? | 75.29% |
| 2. How can cultural competency/responsiveness of emergency department teams be improved for people from migrant and refugee backgrounds at risk of suicide? | 64.71% |
| 3. How adequate is the training of suicide prevention service providers to work with people from migrant and refugee backgrounds at risk of suicide? | 63.53% |

| | |
|---|---|
| **Domain 6. Suicide prevention services utilization** | |
| 1. What are the key barriers to access and engagement with suicide prevention services in people from migrant and refugee backgrounds? | 82.35% |
| 2. What are the key facilitators to access and engagement with suicide prevention services in people from migrant and refugee backgrounds? | 76.47% |
| 3. What is the most effective way to facilitate access to suicide prevention services among people from migrant and refugee backgrounds? | 75.29% |
| **Domain 7. Suicide prevention/intervention** | |
| 1. What are the culturally appropriate strategies for health and mental health professionals to recognise and respond to suicide risk in people from migrant and refugee backgrounds? | 75.29% |
| 2. What do people from migrant and refugee backgrounds suggest can be done to prevent suicide? | 71.76% |
| 3. What sorts of community education and awareness programs are beneficial in reducing suicide among people from migrant and refugee backgrounds? | 68.24% |

| **Domain 8. Suicide research methodology** | |
|---|---|
| 1. What are the most effective strategies used to engage people from migrant and refugee backgrounds in suicide research? | 62.35% |
| 2. How are demographics and cultural diversity embedded in the planning, procedures and practices of a suicide research agenda? | 56.47% |
| 3. How can multilingual and culturally competent professionals contribute to suicide research that is responsive and reflective of the needs of people from migrant and refugee backgrounds? | 55.29% |

§equal rank