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CASE REPORT

Paired suicide in a young refugee couple on the Thai-Myanmar border

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SUMMARY

A young refugee woman attended antenatal clinic on the Thai-Myanmar border at 9 weeks' gestation. As part of an ongoing study of perinatal mental health, she underwent a structured psychiatric interview during which she described occasional depressed mood, anhedonia and passive suicidal ideation. Her husband was a young refugee known to use alcohol and drugs. 2 days later, the couple committed suicide together by herbicide ingestion. Refugee populations are at risk of developing mental disorders as a result of their marginalised status, socioeconomic disadvantage and exposures to trauma. Pregnancy may have exacerbated feelings of hopelessness in this couple. The prevalence of mental disorders such as depression is increased in the perinatal period and suicide is the second leading cause of death in young women globally. Prevention programmes and early recognition of mental disorders may improve detection and lead to better support for vulnerable individuals.

CASE PRESENTATION

The Thai-Myanmar border is home to an estimated 104 000 refugees who have fled long-standing ethnic conflict, poverty and unemployment in Myanmar.¹ Refugees live in nine established camps along the border and represent a diverse group of Burmese, Karen and Burman Muslim ethnicities, each with their own distinctive cultures, languages and religious beliefs. Many have lived in the camps for decades and the situation is atypical of more acute refugee settings elsewhere. Camp residents have access to bamboo housing, food rations, limited education and basic healthcare. Maela is the largest camp with an estimated population of 40 000.¹ Opportunities for further education and paid employment are scarce and freedom of movement is very limited. Some residents take up agricultural work outside of the camp at the risk of incurring fines or arrest by the Thai authorities.

Two medical non-governmental organisations (NGOs) provide maternal, neonatal, paediatric and general adult medical care.¹ The majority of health workers are locally trained staff without tertiary education. Mental health services are severely lacking. A small team of psychosocial workers with 3 months' training provides basic counselling and community follow-up. No psychiatrist is available within the camp. Severe cases are referred to the local Thai government hospital where one psychiatrist is currently employed. However, language and cultural differences between Myanmar refugees and Thai healthcare staff often result in suboptimal

diagnosis and treatment. NGOs' lack of funding for mental health disorders also acts as a barrier for referral. Patients who are considered at high risk of suicide are admitted for observation at one of the camp's medical facilities. With the permission of the patient, family members and camp leaders are notified. Patients who require longer term support are offered accommodation in a patient house or referred to the safe houses of one of the other NGOs.

M, an 18-year-old woman of Karen ethnicity living in Maela camp, attended her first antenatal clinic (ANC). Ultrasound examination confirmed a healthy pregnancy of 9 weeks' gestation. All routine investigations were normal. As part of an ongoing study of perinatal depression in this population, M completed a Structured Clinical Interview for the Diagnosis of Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) Disorders (SCID).² During the interview, she described episodes of depressed mood, anhedonia, low energy and 'thinking too much'. These episodes occurred once or twice a month and usually lasted no more than 1 or 2 hours each time. She also described occasional passive suicidal ideation with no previous attempts and no active intent.

M attributed these symptoms to family problems. She experienced conflict with her parents-in-law, who disapproved of her marriage to their son and felt she did not contribute sufficiently to household finances. M's own mother had died 5 years previously and M described ongoing feelings of grief. M's father had remarried and M had a good relationship with her stepmother, whom she described as kind and caring. M also had a strong and loving relationship with her husband and said she felt close to him and able to share her feelings with him. She was happy to be pregnant. Objectively, M appeared healthy, content, well-kempt and had a normal affect. She engaged well during the SCID. Owing to the short-lived and intermittent nature of the symptoms she described, she did not meet DSM-IV criteria for major or minor depressive disorder.³

M's husband, O, was a 22-year-old man of Karen ethnicity who worked in the camp crematorium and was known to use alcohol and recreational drugs. O had spent his entire life in the camp. His mother was known to be heavily alcohol dependent. O had a tense relationship with his mother due to her overt disapproval of M. Until recently, M and O had lived with O's parents. However, during a recent dispute, O's mother had aggressively kicked M and O out of the house, telling them



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they were a burden on the household. At the time of M's ANC visit, M and O had been living with M's father and stepmother for a few weeks. Since O was not a patient and had never sought medical care, we know little about him or his psychological state.

Two days after M's ANC attendance, O sourced a bottle of herbicide outside the camp premises, remarking to an acquaintance in passing, "today will be the last day you see me". In the bathroom of their home, M and O each drank a cup of herbicide. They were seen by M's stepmother leaving the bathroom and calmly entering their sleeping area together. They were found shortly after on their bed, struggling to breathe and frothing at the mouth. They were driven to the camp medical clinic but pronounced dead on arrival. The cause of death as reported by the medical team was suicide by pesticide ingestion. No suicide note was left by the couple and, apart from the remark made by O, neither party had discussed their plans with any friends or relatives. The camp committee and camp security force confirmed death by suicide.

While we are unable to determine with certainty the motivation for this paired suicide, a number of factors are likely to have played a role. Parental disapproval of the couple's relationship acted as a chronic, daily stressor, as recounted by M during her interview. Their eviction from the home of O's parents may have been a sign of worsening tensions between the couple and O's parents. Alcohol and substance abuse are common within this refugee setting and are known risk factors for suicide.^{4 5} The alcohol dependency of O as well as his mother may have compounded aggressions with the family and exacerbated financial difficulties. Chronic poverty and the lack of employment opportunities are additional underlying risk factors.⁴

M and O also faced challenges related more specifically to their refugee status. The limited freedom of movement coupled with the dearth of work opportunities within refugee camps is disheartening for residents. Uncertainty regarding the future can be unsettling and evoke feelings of hopelessness, especially in a setting as protracted as the Thai-Myanmar border, where displacement has occurred continuously over a period of 30 years.⁶ Many of Maela's residents have spent decades awaiting resettlement to a third country or repatriation to their homeland whenever this becomes a viable and safe option. Both paths involve significant challenges. Those returning to Myanmar may find reintegration difficult following prolonged absence. For residents born in Maela, repatriation may be the first time they enter their native country. Those who are granted resettlement in third countries such as the UK or the USA face the arduous task of adapting to life in new and unfamiliar surroundings, language and cultural differences, loss of extended community networks, social isolation and, often, poor access to health and social services.⁷ The young couple we describe had spent a significant proportion of their lives in a camp with very little control over their own destinies. In the months preceding the suicide, rumours were spreading that registration for resettlement abroad was closing. Pregnancy may have further exacerbated the perceived futility of the couple's situation. Feelings of hopelessness, despair and uncertainty over the future, exacerbated by family conflict, substance abuse and long-term financial insecurity, may have become unbearable for this newly-wed, recently pregnant couple at a time in their lives which should have been full of hope and opportunity.

GLOBAL HEALTH PROBLEM LIST

- ▶ Suicide is one of the leading causes of death in young people globally.

- ▶ Marginalised populations such as refugees are at high risk of mental disorders and suicide.
- ▶ Mental disorders such as depression are common during the perinatal period.
- ▶ In settings with good antenatal attendance, pregnancy offers a valuable time to identify and support women at risk of mental disorders and suicide.
- ▶ Tackling suicide requires multifaceted approaches and collaborative working between health services, social services and policymakers but these tend to be non-existent or weak in refugee settings.

GLOBAL HEALTH PROBLEM ANALYSIS

Suicide is a significant global health problem. It is the second leading cause of death among people aged 15–29 years worldwide, and the burden is inequitably distributed with 75% of all suicides occurring within low and middle income countries (LMIC).⁴ Risk factors for suicide are multifactorial and complex, spanning health systems, societal, community and individual levels. They include trauma and abuse, discrimination, isolation and poor social support, dislocation, relationship discord, unemployment and mental disorders.⁸ Refugee communities carry many of these risk factors and are thus a vulnerable group.⁷

Several factors are likely to have contributed to the suicides of this couple. Their refugee status is likely to have been a major factor. Some of the social stressors this couple faced—including alcohol and substance abuse and financial insecurity—are common to many populations living in poverty and not unique to refugees. However, for refugee populations, these social adversities are compounded by psychological stressors. Prior to leaving their homes, refugees are exposed to traumatic experiences which may have long-term effects on their mental health.⁹ Transit can be arduous and involve further trauma.⁹ On arrival at a camp, refugee communities face limited freedom of movement, a lack of opportunities to engage in paid employment or higher education and uncertainty over the future. Trapped 'between the tiger and the crocodile', refugees often face the difficult choice of awaiting repatriation to their homes or resettlement to a new country, both of which are associated with their own challenges.¹⁰ Following resettlement or repatriation, life can remain difficult as a result of ongoing socioeconomic adversity, difficulty integrating into local communities as a result of language and cultural differences and poor access to educational, social and health services.¹¹ These multilayered psychosocial challenges have significant and long-lasting effects on the psychological well-being of refugee communities.

To the best of our knowledge, this was the first paired suicide in our setting. Paired suicides—the mutual agreement of two individuals to kill themselves simultaneously—are rare, representing <1% of all suicides.^{12–14} In Western settings, paired suicides tend to involve older married couples of higher socioeconomic status.¹⁴ Case reports suggest that in non-Western settings, younger couples whose relationship lacks parental or societal approval may be more typical, as is likely to have been the case in our couple.^{14–16} In paired suicides, one party typically acts as the initiator.^{14 15} Since O sourced the pesticide, he may have taken the lead in this act. We cannot say to what extent coercion played a role. In our setting, an estimated 15% of women experience interpersonal violence during pregnancy.¹⁷ Against this backdrop, coerciveness in relationships is also likely to be common. The non-violent method of suicide, the absence of violence during the act and the fact that no calls for help were made by either party following pesticide ingestion

perhaps suggest a willingness of both parties to carry out the act successfully.¹² However, we cannot rule out psychological coercion. The lack of psychiatric assessment of O is an important limitation of our understanding of this case. M's father described the couple as being very much in love; this perhaps provides reason to believe that the suicides were carried out in mutual agreement. Both M and O were Buddhists. Buddhism regards death not as the end of life, but merely as a transition to the next life.¹⁸ M and O may have carried out their suicides together in the belief that this would offer an escape from their suffering and a means of being reborn together in their next lives.

The couple's pregnancy status and young age may also have played a role in their decision to commit suicide. Mental disorders such as depression are common during the perinatal period and women who are socially marginalised or living in poverty are at greatest risk.¹⁹ Suicide is an important cause of maternal death both in high-income and low-income settings.^{20 21} On the Thai-Myanmar border, the rate of maternal suicide is high at 16.4 per 100 000 live births.²² This contrasts significantly with total female suicide rates of 11.8 per 100 000 in those aged 15–29 years in Myanmar and 3.6 per 100 000 in those aged 15–29 years in Thailand in 2012.⁴ M described subthreshold symptoms of depression and occasional passive suicidal ideation. Although she was happy to be pregnant, her pregnancy may have brought to the forefront concerns and uncertainties around her and O's future and the life they could provide for their baby. Many suicides occur impulsively during moments of crisis, and young people are more likely to act on an impulse and carry out a suicide more quickly.¹⁵ Our young couple's actions may have been carried out in reaction to the recent family dispute in which M and O were evicted from O's parents' house, for example. Impulsive suicide attempts have a higher likelihood of being lethal when fatal means are easily available.⁴ Pesticides, one of the most common means of suicide globally and the leading method of suicide in rural areas of LMICs, are cheap and accessible in our setting and may have facilitated suicide in this case.

Addressing suicide requires cross-sector collaboration and must include both population-wide and targeted approaches. Public awareness initiatives can reduce stigma and empower communities to support vulnerable individuals.⁴ Training health workers, educators, police and community leaders enables better identification and management of those in need of care.⁴ In resource-poor settings, health workers and community members can be trained to deliver effective and evidence-based care to individuals with mental disorders.²³ Restricting access to suicide means—for example, through centralised storage of pesticides away from individuals' homes—can be effective.²⁴ Improved availability and quality of data is essential in order to monitor trends and identify patterns in attempted and completed suicides.

Risk factors such as mental disorders and alcohol abuse must be identified early. Previous suicide attempt is the single greatest predictor of completed suicide, and families and communities can be mobilised to support those who have attempted suicide to find positive ways of coping.⁴ Screening may be feasible for certain groups. In our setting, pregnant women attend ANC frequently, and this period of increased contact offers a good opportunity for routine screening for mental disorders as well as substance misuse and interpersonal violence. In our case, one of the suicides occurred in a woman with subthreshold symptoms of depression. The failure of the SCID to identify this woman as high risk highlights the urgent need for a more

in-depth understanding of local experiences of mental disorders and their association with suicide, and for culturally and locally validated tools. The addition of a more detailed assessment of suicidal intent may also be warranted. A number of tools are available to aid the assessment of individual suicide risk, though these first need to be validated locally.²⁵ Greater emphasis on the SCID item relating to future-oriented thinking and feelings of hopelessness could also be incorporated into the suicide assessment. It may also be important to increase the community's understanding of what services are available to those with mental disorders or suicidal ideation. If individuals are aware that despite the scarcity of resources within the camp there are health workers who can provide counselling, treatment, housing support and referral if necessary, they may be more willing to reveal suicidal intent and seek care.

The rarity of paired suicides globally, the fact that this was the first case in our setting and the lack of psychiatric assessment of O limit our understanding of the risk factors specific to this suicide. Alongside the approaches outlined above, initiatives to promote strong personal relationships, develop positive coping strategies and empower women are likely to be helpful in addressing paired suicide. While some of these interventions can be conducted locally, others require collaboration with national and international policymakers. Addressing these core determinants is essential in order to ensure that the mental health needs of vulnerable populations are adequately met.

Learning points

- ▶ Suicide is one of the leading causes of death in young people globally.
- ▶ Refugees are at high risk of developing mental disorders, and refugee women are especially vulnerable during the perinatal period.
- ▶ Perinatal depression causes significant distress for families and places strain on the wider society in multiple ways.
- ▶ Paired suicides are rare and in non-Western settings often involve young couples.
- ▶ Mental health resources, social care and policymakers must work together to tackle mental disorders and suicide in vulnerable populations.

Contributors GF, MMO and BL provided clinical care to the patient and family members. GF, MMO, BL and RM wrote the report. All the authors have seen and approved the final version. GF accepts responsibility for the overall content as a guarantor.

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REFERENCES

- 1 The Border Consortium (TBC). *Refugee and IDP camp populations: January 2016*. Mae Sot: The Border Consortium, 2016. <http://www.theborderconsortium.org/media/66743/2016-01-jan-map-tbc-unhcr.pdf> (accessed 19 May 2016).
- 2 First MB, Williams JBW, Spitzer RL, et al. *Structured Clinical Interview for DSM-IV-TR Axis I Disorders, Clinical Trials Version (SCID-CI)*. New York: New York State Psychiatric Institute, 2007.

- 3 American Psychiatric Association (APA). *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)*. Washington DC: American Psychiatric Association, 2000.
- 4 World Health Organisation. *Preventing suicide: a global imperative*. Geneva: World Health Organisation, 2014. http://apps.who.int/iris/bitstream/10665/131056/1/9789241564779_eng.pdf?ua=1&ua=1 (accessed 26 Jul 2016).
- 5 Ezard N, Thiptharakun S, Nosten F, et al. Risky alcohol use among reproductive-age men, not women, in Mae La refugee camp, Thailand, 2009. *Confl Health* 2012;6:7.
- 6 United Nations High Commissioner for Refugees (UNHCR) Policy Development and Evaluation Service. *UNHCR's mental health and psychosocial support for persons of concern: global review—2013*. Geneva: UNHCR, 2013. <http://www.unhcr.org/51bec3359.pdf> (accessed 26 Jul 2016).
- 7 Kirmayer LJ, Narasiah L, Munoz M, et al. Common mental health problems in immigrants and refugees: general approach in primary care. *CMAJ* 2011;183: E959–67.
- 8 World Health Organization (WHO) and Calouste Gulbenkian Foundation. *Social determinants of mental health*. Geneva: World Health Organization, 2014. http://www.who.int/mental_health/publications/gulbenkian_paper_social_determinants_of_mental_health/en/ (accessed 26 Jul 2016).
- 9 Zimmerman C, Kiss L, Hossain M. Migration and health: a framework for 21st century policy-making. *PLoS Med* 2011;8:e1001034.
- 10 Human Rights Watch. *From the tiger to the crocodile: abuse of migrant workers in Thailand*. New York: Human Rights Watch, 2010. <https://www.hrw.org/report/2010/02/23/tiger-crocodile/abuse-migrant-workers-thailand> (accessed 26 Jul 2016).
- 11 Lingam R. An assessment of the mental health beliefs and needs of refugees from Burma. In: Barnes D, ed. *Asylum seekers and refugees: issues of mental health and wellbeing*. Sydney: Transcultural Mental Health Centre, 2003:148–62.
- 12 Brown M, Barraclough B. Epidemiology of suicide pacts in England and Wales, 1988–92. *BMJ* 1997;315:286–7.
- 13 Hunt IM, While D, Windfuhr K, et al. Suicide pacts in the mentally ill: a national clinical survey. *Psychiatry Res* 2009;167:131–8.
- 14 Prat S, Rérolle C, Saint-Martin P. Suicide pacts: six cases and literature review. *J Forensic Sci* 2013;58:1092–8.
- 15 Granboulan V, Zivi A, Basquin M. Double suicide attempt among adolescents. *J Adolesc Health* 1997;21:128–30.
- 16 Fishbain DA, Aldrich TE. Suicide pacts: international comparisons. *J Clin Psychiatry* 1985;46:11–15.
- 17 Falb KL, McCormick MC, Hemenway D, et al. Symptoms associated with pregnancy complications along the Thai-Burma border: the role of conflict violence and intimate partner violence. *Matern Child Health J* 2014;18:29–37.
- 18 Kelly BD. Self-immolation, suicide and self-harm in Buddhist and Western traditions. *Transcult Psychiatry* 2011;48:299–317.
- 19 Howard LM, Molyneaux E, Dennis CL, et al. Non-psychotic mental disorders in the perinatal period. *Lancet* 2014;384:1775–88.
- 20 Oates M. Suicide: the leading cause of maternal death. *Br J Psychiatry* 2003;183:279–81.
- 21 Fuhr DC, Calvert C, Ronsmans C, et al. Contribution of suicide and injuries to pregnancy-related mortality in low-income and middle-income countries: a systematic review and meta-analysis. *Lancet Psychiatry* 2014;1:13–25.
- 22 Fellmeth G, Paw MK, Wiladphaingern J, et al. Maternal suicide risk among refugees and migrants. *Int J Gynaecol Obstet* 2016;134:223–4.
- 23 van Ginneken N, Tharyan P, Lewin S, et al. Non-specialist health worker interventions for the care of mental, neurological and substance-abuse disorders in low- and middle-income countries. *Cochrane Database Syst Rev* 2013;(11): CD009149.
- 24 Hawton K, Ratnayake L, Simkin S, et al. Evaluation of acceptability and use of lockable storage devices for pesticides in Sri Lanka that might assist in prevention of self-poisoning. *BMC Public Health* 2009;9:69.
- 25 Centre for Suicide Research, Department of Psychiatry, University of Oxford. Clinical guide: assessment of suicide risk in people with depression. <http://cebmh.warne.ox.ac.uk/csr/clinicalguide/docs/Assessment-of-suicide-risk-clinical-guide.pdf> (accessed 26 Jul 2016).

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