

Mental health among opiate users in Kabul: a pilot study from the Médecins du Monde Harm Reduction Programme

Marc Vogel, Senop Tschakarjan, Olivier Maguet, Olivier Vandecasteele, Till Kinkel & Kenneth Dürsteler-MacFarland

The number of injecting opiate users in Afghanistan has recently risen dramatically. Through this cross-sectional pilot study, the authors have aimed to assess psychiatric comorbidity and drug use patterns among Afghan opiate users, which might have implications for harm reduction and treatment interventions. The authors conducted semi-structured psychiatric interviews, with a convenience sample of 30 clients of the Médecins du Monde drop-in centre in Kabul. Symptoms were classified according to the WHO International Classification of Diseases, Revision 10. Results show that psychiatric comorbidity is very common, particularly depressive and posttraumatic stress disorders. Ideally, this could be addressed by harm reduction and treatment measures.

Keywords: Afghanistan, cross-sectional study, harm reduction, heroin, opiate, psychiatric comorbidity

Introduction

For decades, the population of Afghanistan has lived with armed conflict, displacement and traumatisation. Several studies have reported high levels of symptoms such as depression and anxiety among the general Afghan population (Cardozo et al., 2004; Panter-Brick et al., 2009; Scholte et al., 2004). There has also been a recent dramatic increase in opiate use. The 2009 United

Nations Office on Drugs and Crime (UNODC) Drug Survey estimates there are 230,000 opium users and 120,000 heroin users, nationwide. This is a rise of 53% and 140%, respectively, compared to 2005 (UNODC, 2009). The same report indicates an annual prevalence of regular opiate use of 2.7% in the adult population. This increase is considered to be a consequence of socioeconomic shortcomings, an ample drug supply and an influx of returning refugees who initiated opiate use while displaced (Strathdee et al., 2006; Todd et al., 2009; UNODC, 2009). Traditionally, opium was eaten or smoked in Afghanistan. However, while in 2003 there was an estimated minimum of 470 injection drug users (IDUs) in Kabul (UNODC, 2003), by 2007 this had risen to 1,250 IDUs (The World Bank, 2008). Rising rates of injection use has been ascribed to returnees adopting it in neighbouring nations, and raises the fear of epidemics of blood-borne infections like HIV, and hepatitis B (HBV) and C (HCV) (Saif-ur-Rehman et al., 2007; Todd et al., 2007; UNODC, 2003). Of the 523 opiate users tested by the French nongovernmental organisation (NGO) Médecins du Monde (MDM), in their drop-in centre in Kabul, by 2011, 4%, 27% and 7% tested positive for HIV, HCV and HBV, respectively (MDM, unpublished data).

Harm reduction approaches, like needle exchange programmes (NSP) and addiction treatment [particularly opioid maintenance therapy (OMT)], are effective in reducing high risk behaviours, morbidity and mortality, as well as slowing the spread of HIV (World Health Organization, 2004). By late 2010, there were 15 detoxification centres (approximately 200 beds), 15 community based treatment facilities, 17 harm reduction drop-in centres, and 10 voluntary counselling and testing centres in Afghanistan (personal communication of Dr. Samaruddin, Harm Reduction Consultant, National AIDS Control Programme). Treatment is usually limited to 21-day detoxification with benzodiazepines, non-steroidal anti-inflammatory drugs and sometimes clonidine, followed occasionally by in- or outpatient counselling (Todd et al., 2009; Todd, Safi & Strathdee, 2005; UNODC, 2005). Treatment possibilities do not meet demand, and long waiting lists for inpatient treatment, high costs and lack of transportation further limit access. In 2005, only an estimated 0.25% of Afghan drug users were undergoing addiction treatment (UNODC, 2005).

MDM has been operating a harm reduction programme in Kabul since 2006, targeting prevention, care and treatment of IDUs, as well as the establishment of a national training and resource centre on harm reduction and HIV. It actively involves IDUs in promoting distribution of information and knowledge of available interventions in the community. The programme incorporates treatment of somatic conditions, e.g. antiretroviral therapy, basic pharmacological and psychosocial mental health treatment, as well as social counselling. Furthermore, it includes the only OMT programme in Afghanistan, initiated in February 2010.

In western settings, opiate users show a high prevalence of psychiatric comorbidity particularly major depression, antisocial personality disorder, and anxiety disorders (Brooner et al., 1997; Kidorf et al., 2004). Similarly, a study on opiate users in Iran found a prevalence of 7% for major depression, and 55% for opiate induced depression (Ahmadi et al., 2003). Psychiatric comorbidity may be associated with the severity of substance use (Brooner et al., 1997), compromised outcome of addiction treatment (Rounsaville et al., 1986), and high risk behaviours like injecting, needle sharing, prostitution and unsafe sex (King et al., 2000). HIV- and HCV-seroconversion appears to be related to psychiatric symptoms and trauma (Woody et al., 1997). Drug treatments, which addressed psychiatric comorbidity in an integrated way, yielded superior results regarding psychological functioning and reduction of opiate use (Grella & Stein, 2006).

This study aimed to identify psychiatric comorbidity and patterns of development of opiate use in male Afghans treated at the MDM drop-in centre in Kabul. With high levels of psychiatric symptoms present in the general population, and many returning refugees among opiate users, the authors expected a high number of individuals with psychiatric comorbidity.

Methods

Setting and participants

The MDM drop-in centre had 738 registered users in 2009, offering comprehensive health care and social services (Maguet & Majeed, 2010). In June 2009, MDM recruited a convenience sample of 30 opiate users. Criteria for inclusion in the sample included: aged over 18 years, regular opiate use in the last month and possessing the ability to provide informed consent. As some participants

were illiterate, the information text was read aloud. None of the users approached declined to participate. The authors ensured that all relevant, ethical safeguards, according to the Helsinki Declaration (World Medical Association, 2008), were respected.

Instruments

Psychiatric interviews were conducted with assistance of an interpreter. This method allows collection of in-depth information about psychiatric symptoms, and structured questions can be combined with an interview driven approach. Validity can be further enhanced by means of a translator serving as cultural advisor, giving the correct context to the statements of the interviews. Symptoms regarded as pathological in other settings, may then be rated as a cultural phenomenon (i.e. a normal reaction to stressful living conditions), or indeed pathological. Interpreters were university students, employed by MDM as translators and cultural mediators.

Interviews lasted 45–60 minutes and comprised standardised questions concerning sociodemographic data and opiate use, followed by a semi-structured assessment of psychopathological symptoms. Personal history, patterns of drug use and symptoms were further explored via in-depth interviews.

Data analysis

Diagnostic evaluation of psychopathological symptoms, according to the diagnostic criteria of the WHO International Classification of Diseases, Revision 10 (ICD-10, World Health Organization, 1992) and screening of in-depth information for drug use patterns was performed independently by two different researchers (S.T. and M.V.). When, after the in-depth exploration, it still remained unclear if symptoms were

part of a ‘normal’ reaction to highly stressful living conditions, the authors were generally cautious to rate these as pathological. Due to the small sample size, analyses were limited to descriptive statistics.

Results

Opiate use behaviour and patterns of opiate use development

Table 1 summarises sociodemographic and opiate use characteristics of the sample.

The average initiation age of regular opiate use was 22.8 years (13–35 years). Twenty-eight participants started by smoking, one began with sniffing, and one with injecting. Mean duration of opiate use, before switching to injection use, was 5.8 years (1 month–16 years). After detoxification treatment, one person returned to smoking opiates after having injected for six years. In 28 users, displacement preceded opiate use, one was born in Iran and took up opiate use there before migrating to Afghanistan, and one had never left the country. All of the 22 individuals who started opiate use abroad did so in Iran. Seven participants began using after their return to Afghanistan. Of 24 current or former IDUs, 20 started injection use in Afghanistan, and 13 took up opiate smoking while displaced and started injecting after their return to Afghanistan. While four participants began both smoking and injecting outside of Afghanistan, six did so after returning to Afghanistan.

Psychiatric comorbidity

Table 2 summarises the data on psychiatric comorbidity. Of the 30 sampled, 28 described symptoms indicative of at least one co-occurring psychiatric disorder, 12 of two or more. Symptoms of a depressive episode were reported by 26 participants, with 10 fulfilling ICD-10 criteria for the category

Table 1. Sociodemographic characteristics and opiate use (n = 30)

Variables	n (%)
Age (years)	
Mean (range)	32.4 (20–52)
Marital status	
Married	13 (43)
Divorced	1 (3)
Single	16 (53)
Living situation	
Fixed abode	9 (30)
Homeless	21 (70)
Occupation	
Regular work	8 (27)
Unemployed	22 (73)
Education	
6 years or less	11 (37)
7 years or more	13 (43)
Missing data	6 (20)
Displacement ^a	
None	1 (3)
Once	3 (10)
Twice or more	26 (87)
Country of refuge ^b	
Iran	27 (90) ^c
Pakistan	9 (30) ^d
Other	2 (7)
Duration of opiate use (years)	
Mean (range)	8.8 (0.7-28)
Mode of opiate administration ^e	
Injecting	23 (77)
Smoking	7 (23)
Duration of injection use (years) ^f	
Mean (range)	2.6 (0.1-18)
Detoxification treatments ^g	
Yes	8 (27)
No	22 (73)

^a Fled the country or born to refugee parents abroad.

^b Percentages add up to more than 100% because of several countries of refuge.

^c Four born in Iran.

^d One born in Pakistan.

^e Heroin or opium.

^f Of 23 injection users.

^g Mostly in Iran.

Table 2. Psychiatric comorbidity (n = 30)

Variables	n (%)
Additional diagnoses	
0	2 (7)
1	16 (53)
2	5 (17)
3	5 (17)
4	2 (7)
Depressive disorder	
None	4 (13)
Mild	9 (30)
Moderate	7 (23)
Severe	10 (33)
Traumatic experiences	23 (77)
PTSD	18 (60)
Schizophrenia	3 (10)
Anxiety disorder	6 (20)

“severe” (World Health Organization, 1992). Six interviewees were diagnosed with either panic disorder (ICD-10, F41.0) or generalised anxiety disorder (ICD-10, F41.1). None fulfilled criteria for bipolar disorder. The depressive symptoms mentioned most were depressed mood (n=28), anhedonia (i.e. the inability to experience pleasure from previously enjoyable activities) (n=26), loss of interest (n=23) and energy (n=21), guilt feelings (n=20) and disturbed sleep (n=20). Only four participants reported a pessimistic view of the future, and only 10 reported reduced self-esteem or self-confidence. Twenty-three interviewees mentioned exposure to traumatic events in the past, with 18 meeting ICD-10 criteria of posttraumatic stress disorder (PTSD). Traumatic events were mainly related to imprisonment, torture or witnessing of the death of a relative or friend, either due to drug use, illness or war related events. Psychotic symptoms were present in 15 participants, but only three fulfilled diagnostic criteria for schizophrenia.

Case vignette

Male, 28 years old, not married, no children. He was born in an adjacent country to refugee parents and received eight years of (school) education. He spent eight years in prison for allegedly destroying the window of a police car during street riots. He reported that in prison he was strapped to a table and whipped with a cable. It was there he started smoking opium. After his release, he was expelled to Afghanistan, returning there while his relatives stayed behind. Already dependent on opiates, he started injection use 15 days after arrival and lost contact with his family. Seven months later, at the time of his interview, he was diagnosed with a severe depressive episode and PTSD, reporting emotional numbness, reduced energy, loss of interest, enjoyment and appetite, sleeping problems, nightmares, reduced concentration, hopelessness and flashbacks of his experiences in prison. Asked about suicidal thoughts, he answered; *I can't kill myself anymore, because I am already dead?*

Several months later, he started methadone maintenance, and urinalysis for opiates has been consistently negative since. Because of persisting depressive symptoms, the patient was put on antidepressants. He was then able to find a job as a peer educator, eventually stabilising on a mildly depressive level. With the exception of nightmares, other PTSD symptoms have disappeared.

Discussion

This is the first study reporting on psychiatric comorbidity and development of opiate use in Afghan opiate users. Psychiatric comorbidity exceeded that of both the Afghan general population, and other opiate dependent populations, with 93% reporting symptoms of at least one mental disorder.

The prevalence of depressive disorders is in the upper range described for opiate dependent patients (Brooner et al., 1997; Kidorf et al., 2004). It is also higher than in studies of the general Afghan population (Cardozo et al., 2004; Scholte et al., 2004), although those estimates were made with standardised instruments, the validity of which was questioned in this context (Bolton & Betancourt, 2004). As with other mental disorders, symptoms have to be critically evaluated in light of the cultural context. For example, admitting thoughts of hopelessness or reduced self-esteem may not co-exist with the Afghan male's role model of the proud head of a family. Indeed, these were rarely reported. Similarly, hopelessness might be looked upon as an evil notion, particularly in combination with suicidal ideation. The Quran has been interpreted as forbidding suicide (Nemati, 2007) and seven interviewees mentioned this. Although there may be a certain protective cultural element, these symptoms may have been underreported due to a desire to give socially acceptable answers.

Of this sample, 77% reported exposure to traumatic events and 60% showed PTSD symptoms meeting clinical diagnosis of PTSD according to ICD-10. This indicates a higher prevalence than in both the general Afghan population and western opiate users, but conforms to that of other traumatised or displaced communities. A cross-sectional study, among Afghan refugees in Pakistan, attending a psychiatric clinic found a proportion of 80% (Naeem et al., 2005). In displaced Iranian treatment seekers exposed to torture, PTSD was reported in 53% (Priebe & Esmaili, 1997). Prevalence of PTSD in populations exposed to armed conflict varies with methodological factors (e.g. sample size, type of diagnostic assessment), study population (refugees vs. community

samples, clinical vs. nonclinical), or contextual factors (nature of trauma and recovery environment) (Rodin & van Ommeren, 2009; Steel et al., 2009). Differences in clinical and research criteria for diagnosis of PTSD in ICD-10 further complicate comparisons (Johnson & Thompson, 2008). Living conditions for IDUs in Kabul may further precipitate traumatic experiences and development of psychiatric comorbidity like PTSD and depression (Miller & Rasmussen, 2010). For example, many opiate users are homeless and live under the Pole Sokhta Bridge, where they face daily stressors like marginalisation, hygiene problems, infectious diseases, high mortality and frequent arrests by the police. Lack of social support has been described as a risk factor for sustained PTSD (Gorst-Unsworth & Goldenberg, 1998), and many participants reported loss of family contact (unpublished data). However, the clinical utility of the diagnosis of PTSD in Afghanistan has been questioned (Miller et al., 2009). Some PTSD symptoms, such as irritability, sleeping problems or concentration deficits, may also be explained by opiate use itself, or the associated living conditions. Where this was clear, we did not rate these as pathological. Nevertheless, the symptoms are present on a phenomenological basis, cause psychological distress and possibly influence outcome of harm reduction measures.

Compared to other drug using populations, the point prevalence of 10% for diagnosis of schizophrenia in our sample is substantial. None had received antipsychotics. In Afghanistan, treatment of this disorder has traditionally been performed by mullahs or healers, aiming to drive away the disease causing, evil spirit by a strict diet and the recitation of holy verses (van de Put, 2002). Stigmatisation is even stronger than for other mental disorders. Additionally, opiate

use may constitute an attempt at self-medication for psychotic symptoms, explaining the high prevalence.

The substantial burden of psychiatric comorbidity found in this pilot study underlines the need for integrating mental health treatment in harm reduction and drug use programmes. Comorbidity has been linked to reduced success of these interventions, and to an increase of high risk behaviours (King et al., 2000; Rounsaville et al., 1986). Addressing comorbid mental disorders would substantially improve treatment of Afghan opioid users. This should be done in integrated treatment centres, with expertise on both substance use and mental health disorders. Separation of both treatments, as is the prevailing practice in Afghanistan, is not merely illogical, but also jeopardises the outcome of interventions targeting the individual, as well as those combating the spread of HIV and HCV. Moreover, the small number of participants reporting previous treatment in this study illustrates the general need to expand treatment services.

Treatment of mental disorders, which are widely regarded as being caused by evil spirits or witchcraft, is challenging in itself. Social marginalisation and the obstacles to gaining access to opiate users further complicate it. However, our experience shows that a variety of psychiatric interventions are possible within the context of harm reduction work in Afghanistan. For all conditions, psycho-education and the explanation and relativism of symptoms are crucial to improve compliance and adherence. This should occur on an individual basis, but can be supplemented effectively through group interventions. We repeatedly offered these in our tearoom and they were usually well accepted. Supportive therapy is particularly useful for depressive drug

users, but also those with other conditions stand to benefit. The involvement of the family has proven invaluable, particularly in the treatment of suicidal patients, because of the lack of inpatient treatment options. Due to the high coherence in Afghan families, this can often be accomplished. However, for those drug users who have lost contact with relatives, this can be an obstacle to successful treatment and proves to be an even greater burden than in other settings where the significance of the family system is comparatively lower. Social isolation and homelessness are particularly problematic for psychotic drug users, where the resulting reduced compliance often interfered with efforts to treat delusions and distrust. Opioid maintenance has made it easier to treat these patients in the MDM centre, since antipsychotics can be dispensed daily together with methadone. In addition to the family, goals to involve the community in treatment efforts were also included. Peer education is well accepted, effective and beneficial for both peers and educators. Wherever possible, drug users are supported in finding a job, which often constitutes a major stabilising element for male Afghan drug users and their self-respect.

Most participants in this study were former refugees in Iran. This corresponds to the results of a survey finding disproportionately high numbers of returnees from Iran in the opiate using population in Kabul (UNODC, 2005). Displacement preceded opiate use in 93% of interviewees. However, because of the small size of the sample, the authors have been cautious about drawing conclusions related to this phenomenon. Further research is needed with larger sample sizes and careful sampling to obtain representative study groups. Nevertheless, efforts to prevent uptake of opiate use in refugee populations should be

strengthened in the country of refuge, as well as on return.

While opiate use, as such, may be an imported behaviour in our sample, uptake of injection use is not. The majority switched to injection use in Afghanistan, demonstrating that viewing the situation as an imported problem is oversimplified. Domestic factors or characteristics inherent to drug using populations have to be investigated to explain this phenomenon. This is further supported by the relatively long mean duration of opiate use of 5.8 years before switching to injection. Psychiatric comorbidities are likely to be contributing to rising numbers of IDUs.

Limitations

Because of convenience sampling, interviewees may not be representative of opiate users frequenting the drop-in centre. Additionally, drug users in the MDM centre may differ from those treated elsewhere, or not at all. For example, interviewees regularly used MDMs NSP, while overall NSP participation among IDUs in Kabul may be low (Todd et al., 2009). Comparing populations of other drop-in centres and addiction services of public hospitals would also be important. Changes in population size and number of opiate users in recent years may also mean that context and development patterns of drug use may have changed. Furthermore, as this was a pilot study, sample size was small, not allowing for inferential statistics. Interview data are liable to reporting bias, and may have been influenced by factors such as social desirability, withdrawal or intoxication symptoms. More general diagnoses may have been overrated due to the difficulty in differentiating symptoms related to stressful environments or drug use, from those related to other mental disorders like depression and PTSD.

As the study was cross-sectional, one cannot infer causality or temporal relations between opiate use and psychiatric comorbidity. Prospective studies among returning refugees could rectify this.

Conclusion

In this study, the authors found a very high comorbidity with depressive and anxiety disorders, PTSD and schizophrenia in a convenience sample of Afghan opioid users. While these findings have to be replicated by larger studies, it is obvious that substance use programmes in Afghanistan urgently need to integrate treatment of mental health disorders. Despite scarce resources, we believe that basic psychiatric interventions, like antipsychotic and antidepressant drugs, psycho-education, psychosocial counselling and interventions aimed at improving social support, housing and livelihoods could and should be implemented in programmes addressing substance use in Afghanistan.

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Marc Vogel, MD, MScPH, is a psychiatrist specialising in addiction medicine . He is currently working at the Psychiatric Hospital of the University of Basel, Division of Substance Use Disorders, Basel, Switzerland, email: Marc.Vogel@upkbs.ch.

Senop Tschakarjan, MD, is currently working with the Department of Child and Adolescent Psychiatry of the University of Zürich, Switzerland. He has been mental health advisor for MDM in Kabul since February 2009 and medical coordinator from 2010 to 2011.

Olivier Maguet is head of the MDM programme in Kabul since 2006 and member of the board of MDM France.

Olivier Vandecasteele was general coordinator for MDM in Kabul from 2009 to 2011.

Till Kinkel, MD, MScIH, is a specialist in Internal Medicine and Emergency Medicine who has supported the MDM programme in Kabul as medical coordinator from June to December 2009.

Kenneth Dürsteler–MacFarland, PhD, is a psychologist with the Department of Substance Use Disorders of the Psychiatric Hospital of the University of Basel, Switzerland.