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SPECIAL
PAPER

Developing substance misuse services in United Arab Emirates: the National Rehabilitation Centre experience

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In 2001 a directive was issued to establish the National Rehabilitation Centre (NRC) to deal with the growing problem of substance misuse in the United Arab Emirates. The NRC has achieved many goals as a treatment and rehabilitation facility as well as a drug and alcohol demand reduction response centre. It is now working towards being an international centre of excellence.

Since its birth in 1971, the United Arab Emirates (UAE) has enjoyed an unparalleled transformation in every sphere of life. The transition from poverty to affluence over such a brief period has brought challenges to the indigenous population and required significant psychological adjustment (Al Nahyan, 2014). In addition to Westernisation and globalisation, the influx of a massive multi-national workforce has had a significant impact on Emirati culture, traditions, and social and family structures.

Substance misuse in the UAE was not seen as a problem until the 1980s, when increases in

both the number of drug users and the amounts used were observed. Drug use had spread from a few isolated examples in some ethnic groups to many, including Emiratis (Sarhan, 1995). UAE citizens now account for less than 20% of the total population. The observation that drug misuse is spreading faster among this sector than among other nationalities makes it both a cause for concern and a national security issue. An indirect indication of the substance misuse problem comes from a study of suicides in Dubai between 1992 and 2000, which showed an annual rate of suicide of 6.2/100 000. Of this figure, 27% tested positive for alcohol, with no significant difference between Muslims and non-Muslims (Koronfel, 2002).

A recent qualitative study carried out by the National Rehabilitation Centre (NRC) on 13- to 18-year-old adolescents showed that there were notable gender and age differences in knowledge of and attitudes to substance misuse. For example, 17- to 18-year-old males were able to name different alcoholic beverages, street names of drugs and routes of administration. Females noted that substance misuse was more permissible for males

in the culture, who would be forgiven, but not for females, who would risk their personal and family reputation. Peer pressure, boredom, perceptions of image, poor parental monitoring, parental conflict, parents from different nationalities, lack of awareness of the harms of substance use and availability of funds were seen as risk factors. Strong relationships with parents, closer monitoring, more social activities and the Islamic religion were seen as protective factors (Alhyas *et al.*, 2015).

The response to the country's growing substance misuse problem noted in the late 1980s has been a slow one. Preventive interventions in schools and media have been minimal. There were no specialist rehabilitation centres, although there were addiction treatment units in Abu Dhabi, Dubai, Sharjah and Ras Al Khaima Emirates. These were part of psychiatric hospitals, with a few beds allocated to mandatory treatment orders/sentences by the judicial system. It is within this context that in 2001 HH the late Sheikh Zayed Bin Sultan Al Nahyan issued a directive to establish the NRC as a response centre to deal with this growing problem.

The legal framework

The UAE is a signatory to the international laws on drug demand reduction. In 1986 the UAE Federal National Council passed a federal law of 65 articles for fighting drugs, which includes a list of banned substances (the Controlled Drugs Act 1986). This law was revised in 1995, 2005 and 2009. There is zero tolerance of use of banned substances and conviction results in a mandatory sentence of 4 years' imprisonment for use of schedule 1 drugs (Controlled Drugs Act 14/1995). The revisions in 1995 and 2005 introduced the clause that provides for treatment and rehabilitation, which added some flexibility. The National Committee for Fighting Drugs was established in 1987, with stakeholders from key ministries and organisations. The Director General of the NRC heads a section of this Committee, which is responsible for overseeing the entire spectrum of drug demand reduction.

Alcohol consumption is legal only for non-Muslims who are at least 21 years of age and within licensed premises. Non-Muslim residents of the UAE can apply for an alcohol licence. UAE legislation based on Shari'ah law prohibits a Muslim to consume alcohol in the UAE and the UAE Penal Code (1987) provides guidelines on the sentencing of offenders. The move of the economy towards the tourism and leisure industries and the technical illegality of a tourist consuming alcohol in the UAE pose a challenge to legislators.

Substance misuse and Arabic and Islamic culture

Substance misuse in the UAE should be considered within the historical, regional and cultural context. The use of substances such as opium and cannabis is recorded from Pharonic Egypt and the medieval period (Hamarneh, 1972; Crocq, 2007; Wanigaratne *et al.*, 2007).

While there are internationally accepted definitions of disease terms for substance use disorders (notably in ICD-10 and DSM-5), there are also culturally bound understandings of terms that can lead to confusion. In Islamic countries any use of psychoactive substances is forbidden by the Holy Quran (in several verses) and so is not culturally acceptable. In this context, no distinction is made between 'substance use' and 'substance misuse'. The consumption of alcohol or any substance which clouds the mind is forbidden (Baasher, 1981).

Overall, the prevalence of substance misuse is low, and high abstinence rates have been reported in the Middle Eastern region compared with the West and some countries in the East (World Health Organization, 2014; United Nations Office on Drugs and Crime, 2011). This is thought to be due to adherence to Islam and the fact that the consumption of alcohol and/or illicit drugs is a crime (World Health Organization, 2006).

The NRC

The NRC was established in 2002 and mandated to raise awareness, establish prevention, treatment and rehabilitation services, and to conduct research relating to substance misuse. Subsequently, a series of other functions, such as surveillance, human capacity building, policy and legislative development, and advocacy to service the community at large, were added.

Treatment and rehabilitation

The NRC provides a full spectrum of continuing care and has an in-patient capacity of 86 beds. It also caters for mandatory treatment orders. The out-patient service sees up to 40 patients per day. Since its establishment it has treated over 3000 patients, both male and female. This number has increased gradually. The Centre started with 18 beds, and there has been a sharp increase in activity since 2009. In 2016 the NRC's capacity was increased to 169 beds with a brand new purpose-built campus.

Treatment for patients at the NRC involves a detailed multidisciplinary assessment from which an individualised care plan is devised. Having a team led by psychiatrists enables dual diagnosis issues to be detected and treated at the outset. The treatment offered is an evidence-based, integrated psychological and pharmacological approach that follows international guidelines, with any necessary cultural adaptations. All patients are seen by a psychiatrist who completes the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST; Humeniuk *et al.*, 2010) and the Addiction Severity Index (ASI; McLellan *et al.*, 1980). Patients are either admitted to the detoxification unit or followed up in the out-patient department, according to their clinical needs. In 2003 the NRC introduced opioid replacement therapy and maintenance on buprenorphine. It was the first centre to do so in the region.

In-house physicians manage the medical complications of substance misuse (overdoses, severe

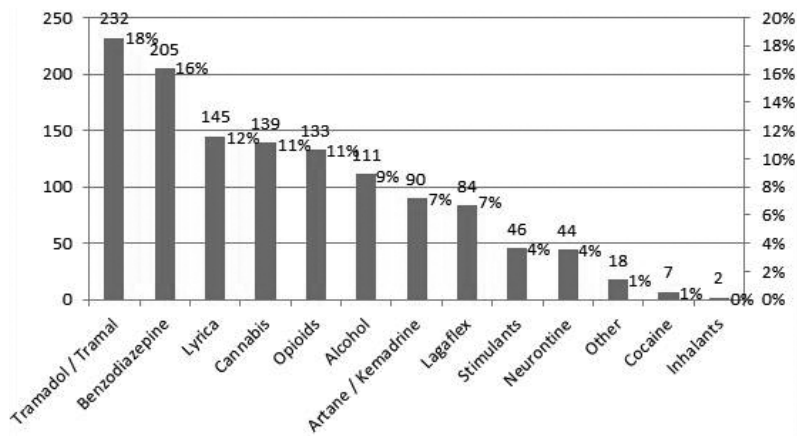


Fig. 1
Polysubstances breakdown: 2013

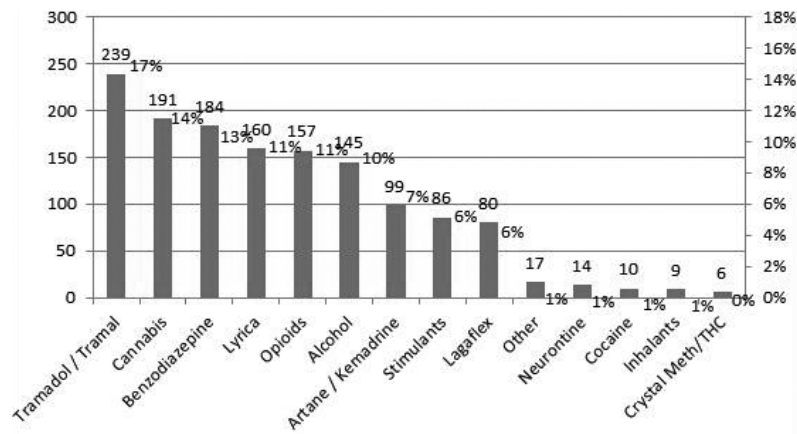


Fig. 2
Polysubstances breakdown: 2014

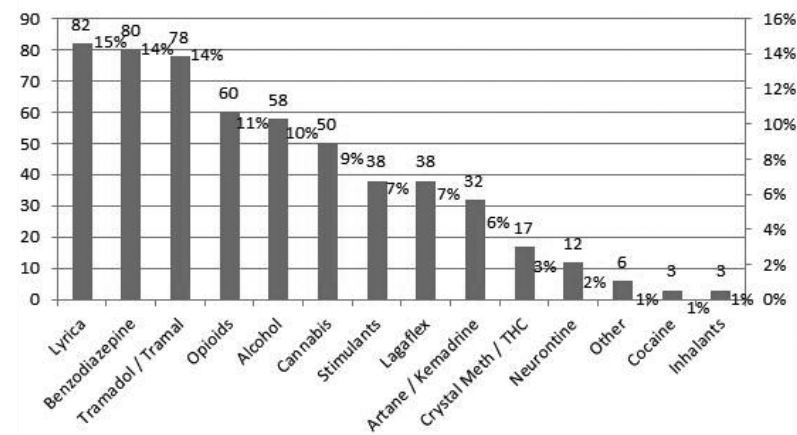


Fig. 3
Polysubstances breakdown: 2015 (to April)

withdrawals, blood-borne viruses, cardiovascular and liver diseases).

The psychology team provides psychometric and addiction-related assessments, including neuropsychological testing. They also provide both individual and group therapy. Addiction-specific treatment includes motivational interviewing, relapse prevention and contingency management.

The out-patient service provides patients with the Matrix Programme, which is an evidence-based psychosocial intervention programme (Rawson *et al*, 1995) that includes individual, group and family interventions. It is delivered by Emirati psychologists trained at the Matrix Institute in California, USA.

Systematic measurement of outcome has been only recently instated. Crude measurement of outcome has shown a reduction in relapse rates from 60% in 2003, a year after the centre opened, to 20% in 2010.

Patient profile

The authors' own clinical observations and the data available from the NRC cohort since 2002 shows a remarkable pattern of changing cycles of drug misuse that can be categorised roughly into distinct groups:

- substances with high prevalence – alcohol, cannabis and heroin, Captagon (an amphetamine-type stimulant), anticholinergics and some benzodiazepines
- substances that have been controlled and consumption reduced – some opioid analgesics, some benzodiazepines, cough syrups and barbiturates
- new arrivals – crystal methamphetamine, synthetic cannabinoids and prescription medications (e.g. tramadol, pregabalin and gabapentin).

There have also been sporadic cases of the misuse of solvents, khat and cocaine (Elkashef *et al*, 2013; Alblooshi *et al*, 2016).

The data reported below relate to Emirati nationals only. Although a few non-nationals were admitted to the NRC, the complicated legal issues acted as a barrier to their admission. Expatriates are now treated in the new NRC facility after securing the necessary legislative and logistic frameworks.

Figures 1–3 show the substances used by all the patients seen at the NRC over the period 2013–15. The striking observation is how the order of these substances keeps changing. Tramadol held the top spot for the 2 years 2013 and 2014, only to be replaced by pregabalin as the first choice. The latter was lurking in the fourth and third spots for 2 years. Another observation is the appearance of crystal methamphetamine, virtually unknown in 2013, to pick up the tenth spot in 2015. We are presently seeing a surge in crystal meth and heroin use.

Prevention

It is acknowledged that prevention is a much neglected area in the global response to the growing menace of substance misuse. This situation has prevailed despite the existence of an evidence base to support effective interventions, particularly with young people. An international working group has been convened to develop standards on prevention, with the NRC as one of the participants (United Nations Office for Drugs and Crime, 2013). The NRC's main priorities are prevention among young people and overdose management and prevention.

Campaigns such as 'Facts' and 'Isolation' run by the NRC aimed to increase public awareness of the dangers of substance use and advertise what help and services are available. The school-based prevention programme 'Unplugged', which is an evidence-based intervention, developed in Europe and implemented in some Arabic countries, is the NRC's flagship project in substance use prevention among young people. The NRC aims to implement 'Unplugged' in all schools in the UAE, following preliminary evaluation.

Research

The research section of the NRC has a broad agenda. This includes epidemiological, health systems and outcome research, as well as biological, pharmacological and translational research. In the UAE, the NRC has research collaborations with United Arab Emirates University, Khalifa University and New York University Abu Dhabi. Recently, it signed an agreement with the National Institute on Drug Abuse (NIDA) in the United States for collaboration and research capacity building. It has also signed an agreement to be one of the field-testing sites for the new edition of the World Health Organization's International Classification of Diseases (ICD-11).

To contribute to global efforts and promote addiction research particularly in low- and middle-income countries, the NRC has collaborated with the Colombo Plan (an international intergovernmental organisation) to establish the *International Journal of Prevention and Treatment of Substance Use Disorders*. It is expected to fill the gap in published addictions research from such countries.

Education and training

An adequate response to the growing problem of substance misuse requires a skilled and competent workforce in the areas of prevention, treatment, teaching and research. The NRC has taken on workforce capacity building as one of its priorities. Driven by its own needs, it has undertaken an education and training agenda to serve the UAE and the region, by developing a training institute.

The cross-professional Psychological Skills and Competencies Training Programme for Mental Health Professionals initiated by the NRC in partnership with Maudsley International and King's College London in 2009 is a good example of the NRC's work. Its success in improving skills in

a multidisciplinary workforce has led to a partnership with the United Arab Emirates University to make it into a postgraduate diploma.

Training courses for professions including psychiatry, primary care physicians, social workers and nurses are also being planned. The NRC is currently working with the Arab Board of Psychiatry and the United Arab Emirates University to establish a Fellowship in Addiction Psychiatry.

Since its establishment the NRC has hosted a number of international and regional conferences and symposia and was due to host the International Society for Addiction Medicine (ISAM) conference in 2017.

Regional and international collaborations

In line with the UAE National Strategy, the NRC has formed a number of partnerships with international organisations, including the United Nations Office on Drugs and Crime (UNODC), the World Health Organization (WHO) and the Colombo Plan. Currently, the Director General of the NRC is the Chair of the UNODC-WHO Regional Technical Advisory Group and the Colombo Plan's International Centre for Credentialing and Education of Addiction Professionals (ICCE) Commission.

Conclusion

Due to its rapid development and in line with global trends, the UAE has to deal with the problem of rising substance misuse. The biggest challenge is protecting the young population. Religious and cultural factors may play a protective role and minimise the problems; nevertheless, the trend is for substance misuse to increase. Since its establishment, the NRC has developed rapidly and achieved many of its goals as a treatment and rehabilitation facility as well as a drug and alcohol demand reduction response centre. It is now working towards being an international centre of excellence.

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Kenya's mental health law

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Kenya's Mental Health Act 1989 is now outdated. It is a signatory to international rights conventions that provide for state protection of the rights of people with mental illness, their property and their treatment. There is, however, a glaring failure to implement the existing legal provisions. A new Mental Health Bill that aims to respond comprehensively to the challenges affecting mental health services in Kenya is awaiting enactment.

Colonial legacy

The English Mental Health Act 1959 was in use in Kenya when the country gained independence in 1963. That Act recognised the need for medical treatment of mental illness and emphasised the provision of community services. It introduced the medical model in mental health treatment in Kenya (Jenkins *et al*, 2011).

Kenyan mental health law

While the 1959 legislation might have been progressive for its time, it offered little protection of patients' basic human rights. In Kenya, it was replaced with the Mental Health Act of 1989, which attempted to further decentralise services. It allowed any hospital to be gazetted as a mental health hospital (Petersen *et al*, 2011). Admission procedures were simplified under the Act and there was an attempt to integrate mental health services within the nation's general health services (Monteiro *et al*, 2014). It allowed for the provision of voluntary treatment of people with mental illness and created a regulatory board to oversee its implementation. This Act remains in force (Marais & Peterson, 2015).

The 1989 Act has not been amended since 1991. As a result, some of its provisions are noticeably out of date and even at odds with Kenya's constitution and incompatible with present international standards. The main shortcoming is its overemphasis

on in-patient treatment. Although it offers some protection for in-patients regarding ill treatment in hospital, administration of their estates and the examination of females, it fails to address the patient's right to information, consent to treatment, confidentiality and conditions in mental health facilities (Muga & Jenkins, 2010). It also fails to embrace the World Health Organization's model of mental health treatment which recommends an optimum mix of mental health services such as counselling, psychotherapy, aftercare and rehabilitation services besides pharmacological interventions (Muga & Jenkins, 2010). Further, it does little to promote community mental health services at the primary care level and makes no distinction between mental illness and mental disability.

Mental health law implementation and review

There has been a notable failure to implement some of the Act's provisions. Section 4, which provides for the establishment of a national Mental Health Board, and section 7, which provides for the appointment of district mental health councils, have not been adequately implemented. Lack of budgetary allocation has been cited as the main reason (Jenkins *et al*, 2011).

The Kenya Mental Health Bill 2014 has been drafted and is in parliament awaiting enactment into law. It is hoped that when the Bill is eventually enacted, it will address the shortcomings of the 1989 Act and bring Kenya's mental health services to a par with international standards. The primary aim of the Bill is to reduce inequalities in the allocation of health resources and to improve access to services. This will be through provision of a framework to ensure there is a national mental health plan to review mental health services and develop rules and regulations that will ensure the implementation of the Act. The policy will further develop guidelines and standards on prevention,