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OPIATE USE, TREATMENT, AND HARM REDUCTION IN AFGHANISTAN: RECENT CHANGES AND FUTURE DIRECTIONS

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Abstract

Afghanistan leads global opium and cannabis production, amidst concerted efforts to improve the country's infrastructure. In this commentary, the evidence base for drivers of increased drug use in the context of deteriorating security is presented, government, donor, and civil society responses to date are described, and key areas for health policy response are summarized. Opiate use in Afghanistan shows disturbing trends: multiple substances are accessible at low cost and frequently used in combination, and injecting use has become more common. Pressures from both donor and governmental sectors have compromised innovations in programming. Further, civil unrest and resultant displacement have created challenges for programme implementation. Afghanistan urgently needs a well-funded, sustainable, comprehensive, and inclusive programme of drug dependency treatment, aftercare, and harm reduction services, as well as realistic, effective, and culturally-salient primary prevention programmes. To date, drug dependence is not a prioritised issue, current programmes are under-resourced, and the continuum of care has a narrow scope generally limited to treatment. Unless this issue is addressed, the next generation of Afghans is poised to become a casualty of the opiate industry.

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Conflict of interest statement

We declare that we have no conflict of interest.

Keywords

Afghanistan; illicit drug use; opiates; opioid substitution therapy; harm reduction; drug dependence treatment; conflict

Drug Issues in Afghanistan, a Changing Terrain

In the last decade, the terms “post-conflict”, “nascent democracy”, “failed state”, and “narcostate” have been variously applied to Afghanistan; dynamic changes occurring over that time period have perhaps justified each appellation. The last six years have been marked by a steady deterioration of security and governance amidst efforts to improve infrastructure. Opium and cannabis production have reached record levels, with large-scale cultivation in certain provinces offsetting successful eradication in others. Afghanistan leads global production for these substances, with an estimated 3600 and 2500 metric-tonnes supplied in 2010, respectively, and an increase in both cultivation and production noted for 2011.[United Nations Office on Drugs and Crime (UNODC) 2010a, UNODC 2011] The trend toward increasing cultivation, including in formerly “poppy free” provinces in 2011, has been a prime concern.[UNODC 2011]

Problem drug use has received relatively less attention than drug cultivation and production. According to UNODC, approximately 8% of 15-to-64 year-old adults use some form of intoxicant, and estimated opium use prevalence (2.3 to 2.9%) places Afghanistan among the ten countries with highest opiate consumption globally.[UNODC 2010a, 2010b] Between 2005 and 2009, heroin use among adults increased by 140%, to an estimated 120,000 regular users nationally.[UNODC 2010b] Problem drug use among children and youth is becoming more common, although data are sparse and vary considerably by region.[UNODC 2010b] All data sources indicate that injection use of opiates, particularly heroin, is rising.[UNODC 2010b; Maguet and Majeed 2010] In urban settings, surveys of injecting drug users (IDUs) show a concentrated HIV epidemic in Hirat, and a high incidence of hepatitis C virus in Kabul.[National AIDS Control Programme 2010; Todd, Nasir, Stanekzai, Rasuli, Fiekert, Orr, Strathdee, Vlahov 2010] Even the media has begun to depict burgeoning opiate use among urban populations in Afghanistan.[Rubin and Rahimi 2011]

Compared to issues of opium production and opiate consumption, harm reduction and drug dependence treatment programmes have received relatively less research attention. Past reviews have highlighted linkages between opium production, rising insecurity, opiate use, and HIV in Afghanistan.[Griffin & Khoshnood 2010; Beyrer, Wirtz, Baral, Peryskina, Sifakis 2010; Felbab-Brown 2007] This commentary focuses attention on harm reduction and treatment initiatives, presenting a brief review of changes in security and policy relevant to opiate use over the last six years. Specifically, the evidence for drivers of illicit drug use, and the government, donor, and civil society responses to date are reviewed. We then summarize key areas for health policy response.

Current Trends are Disturbing

Use of opium and other substances for medicinal and social purposes has been present in Afghanistan for centuries. During the Taliban regime, all intoxicants were deemed illicit, and this law was strictly enforced.[MacDonald 2008] In the last decade following the Taliban government, intoxicant use has become more apparent, to include opium, together with cannabis, and psychotropics such as prescription analgesics and benzodiazepine tranquillisers.[UNODC 2010b, Macdonald 2008] Trends for drug use and patterns of risk behaviours further changed in the last six years, particularly for opium use, in three key ways.

First, multiple substances, including opiates, cannabis, pharmaceutical psychotropics, alcohol, and volatile inhalants, are increasingly accessible, available at low cost, and frequently used in combination.[UNODC, 2010b, Macdonald 2008] Harm reduction programmes report a substantial change in the drug variety available in the last few years, with emergence of refined heroin (*crystal*) and amphetamines (*kraak*) in the market (personal communication, Olivier Vandecasteele).

Second, injecting use of opiates, often with pharmaceutical agents, has become more common, with 15–20% of the 120,000 estimated heroin users in Afghanistan having injected in 2009.[UNODC 2010b] Injecting was originally considered an ‘imported’ behaviour: data from the prior decade from Afghan refugees in Pakistan and Afghans relocated to Kabul indicated that injection had been learned outside of Afghanistan and brought upon return. [UNDCP 1999, Zafar et al. 2003] Now, however, injecting appears to be normative behaviour, especially in urban settings. Two datasets on male IDUs in Kabul support this point: one cross-sectional study in 2006, and one cohort study spanning the period from 2007 to 2009. In the former, a small proportion [12.3%, total n=462] initiated injecting within the past year.[Todd, Abed, Strathdee, Scott, Botros, Safi, Earhart 2007] In the latter, one-third (23.0%, total n=111/482) started injecting within the last year, of whom the vast majority (95.5%, n=106/111) initiated injecting in Afghanistan.[Todd, Nasir, Stanekzai, Fiekert, Rasuli, Vlahov, Strathdee 2011]

Last, reasons for opiate use and transition to injecting may be changing. Two common reasons were cited by Kabul IDUs in 2007 for initiating opiate injection: economic reasons (because less drug is needed to deliver the same effect, due to physical habituation or greater purity) and peer influence (strengthened by displacement from the family unit).[Todd, Stibich, Stanekzai, Rasuli, Bayan, Wardak, Strathdee 2009] In-depth interviews, conducted in 2009 at end of the cohort study to assess contextual change, indicated that the transition to injecting opiates also rested on need for a concealed, rapid route of administration, in the wake of police harassment (personal communication, A. Nasir). This resonates with the reason cited by drug users for moving from smoking cannabis (hashish) to heroin inhalation during the Taliban regime and its notorious Department for the Promotion of Virtue and Prevention of Vice: heroin was less likely to be detected than pungent cannabis smoke and so users were less likely to be arrested and punished.[UNDCP 1999]

Drivers of opiate use

What are the major drivers likely to underpin current trends? Behavioural, social, economic, and political factors are reviewed below, although causality cannot be proven and data are still incomplete and of variable quality.

Surveys of Afghan refugee populations show a major change in drug use patterns and the adoption of higher risk behaviours, such as injecting; this trend has been related to changes in the cultural, economic, and social fabric of society.[Ezard, Oppenheimer, Burton, Schilperoord, Macdonald, Adelekan, Sakarati, van Ommeren 2011; Zafar, Brahmabhatt, Imam, ul Hassan, Strathdee 2003] Such changes have been amplified in the last six years due to accelerating civil insecurity, repatriation of refugees and internal displacement, and urban crowding in an extremely impoverished setting. These factors are intertwined and potentially create a synergistic effect on increasing problem drug use and dependency.

Afghanistan is still in the throes of a violent insurgency, partially funded by the drug trade, with levels of unrest escalating sharply in the last six years. There has been a steady increase in armed conflict within Afghanistan from 2006, with civilian casualties for 2010 exceeding all previous years, 75% of which were attributed to insurgent acts.[United Nations Assistance Mission in Afghanistan (UNAMA)/ Afghanistan Independent Human Rights Commission (AIHRC) 2011] Widespread corruption and lack of timely justice, of stable governance, and of effective national security have created conditions for unchecked opiate and cannabis production and, potentially, consumption.[Rubin 2004, Peters 2009] In the last six years, Taliban groups have set up functioning parallel governance structures in several provinces, creating de facto polities funded in part through insurgent networks and the opium trade.[Peters 2009, Chivers 2011] Opium revenues support not only the insurgency, but also, allegedly, high-level echelons of the Afghan government.[Filkins, Mazzetti, Risen 2011] Thus, the term post-conflict likely no longer applies to Afghanistan, although other previously-listed appellations remain relevant. The choice of label is important as post-conflict states, where a degree of stability and infrastructure may be assumed, have different challenges than those with active armed conflict and ongoing insecurity, with attendant programming implications.

Within Afghanistan, rising levels of population displacement have arguably increased propensity towards drug use and dependency. The last decade has seen the largest and swiftest repatriation of refugees in recorded history, involving more than five million returnees.[UNHCR 2009] Urban overcrowding has greatly intensified. Between 2001 and 2009, the population of Kabul tripled in size, to 4.5 million people in a city designed to accommodate approximately 500,000.[Setchell and Luther 2009] More than half the Afghan population survives on less than US\$2 a day, and unemployment estimates approach 50%. [Matta, 2010; AISA, 2011] Psychological stressors, present in overcrowded urban settings and among displaced groups with no resources and social support networks, may well promote opiate use among those who previously only considered opiate use for medicinal or social purposes. These challenging contexts disproportionately affect vulnerable populations, particularly youth and the homeless. An estimated 50,000 to 60,000 street children live in Kabul, with a dearth of information regarding drug use among them.

[UNHCR 2008] Conflict, displacement, economic insecurity, and fragmentation of social networks are all conducive to a rise in drug use.

Everyday threats to wellbeing are also drivers of drug use, despite a continued stigma associated with drug dependency and overt family dysfunction. In-depth social science research has shown that the family unit is the key pillar of social support in Afghanistan, the only functioning safety net available for the past 30 years.[Dupree 2004] Afghan cultural values – to be a good Muslim, to show family unity, to work hard to improve household circumstances, and to achieve honour and respectability – form the bedrock of hope and fortitude in the face of adversity and an uncertain future.[Eggerman and Panter-Brick 2010] Thus religious, cultural, and family ties are central to the resilience of the Afghan population, but conflict-related loss of life, massive population displacement, and weak infrastructure of basic services have significantly weakened the scope and effectiveness of community and family networks. Interviews from a large random sample of Afghan families show that what drove family members to frustration and desperation was the sense of being unable to achieve the culturally-prescribed milestones of employment, home ownership, and marriage alliances.[Eggerman and Panter-Brick, 2010; Panter-Brick, Goodman, Tol, Eggerman 2011] Both men and women reported a heavy burden of depression and stress, while some young people expressed a sense of alienation from family, drug usage, and suicide attempts.[Panter-Brick and Eggerman, 2010] The mental health burden of social and economic stressors is thus nested within a context of chronic poverty, widening inequalities, and exposure to increasing armed conflict.[Cardozo, Bilukha, Gotway Crawford, Shaikh, Wolfe, Gerber, Anderson 2004; Panter-Brick, Eggerman, Gonzalez, Saftar 2009; Panter-Brick, Goodman, Tol, Eggerman 2011]

Threats to wellbeing are especially acute for women in Afghanistan, a group for which there is little information on drug dependency or access to treatment. High levels of depression and reports of psychotropic substance exposure suggest that self-medication of pervasive mental health disorders and psychosocial stressors is likely.[Cardozo et al. 2004, Macdonald 2008] Starting in 2008, UNODC has piloted harm reduction services for female drug users and spouses of male drug users; the pilot has since expanded to five provinces, and provided services to 3,436 female drug users (personal communication, Dr. M. Tariq Sonnan). Some 90% of services are delivered by home outreach, due to curtailed mobility of women outside the home. In this programme, opiates were the drug of choice for the majority (70–90%) of female clients; displacement/immigration and exposure to drug use within the home were two reasons most frequently given for initiating drug use.

Government, donor, and civil society responses

In early 2002, only two treatment services were available for drug users in Afghanistan; both were located in Kabul. The first National Drug Control Strategy, signed by President Karzai in May 2003, included the necessity for “provision of harm reduction services to IDUs as a public health measure to prevent the transmission of HIV and other blood borne diseases.” The Strategy also mandated the co-existence and inter-relatedness of harm reduction and drug dependency treatment.

In May 2005, the Ministry of Public Health (MoPH) and Ministry of Counter Narcotics (MCN) jointly signed a National Harm Reduction Strategy for IDU and the Prevention of HIV and AIDS that approved a wide range of harm reduction and treatment interventions. [Macdonald 2007] Several initiatives were launched, including Needle and Syringe distribution and collection Programmes (NSPs) and a pilot methadone-based Opioid Substitution Therapy (OST). However, this collaborative policy approach has not been sustained, due to challenges created by a fractured and conservative polity.

Since 2003, an increasing number of non-government organisations (NGOs) offer harm reduction services, including basic NSP and condom distribution along with wound care and first aid. In 2007, substantial funding became available for harm reduction programming, through the World Bank and the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and for abstinence-based programmes from the Colombo Plan. Consequently, the number and the variety of services offered to drug users have expanded, but continue to fall far short of requirements in urban areas, remain practically non-existent in rural areas, and are characteristically under-resourced and under-staffed. Given this gap between services available and needed, it is quite perplexing that government bodies would seek to quash some programmes.

There are two possible reasons for political opposition to harm reduction services in Afghanistan for which documentation is available. First, Afghanistan relies heavily upon donor funding, which potentially entails either adoption of the ideology upon which funding is contingent or preferential recipient selection based on ideology rather than capacity. For example, the Colombo Plan provides a substantial amount of funding for abstinence-based treatment facilities in Afghanistan: it has negatively portrayed harm reduction programmes, and divorced them from dependency treatment, rather than including them in a comprehensive continuum of care. The Afghan delegation taken to Singapore for training in December 2010, funded by the Colombo Plan, included key policy makers from the MCN. Delegates were told of the negative outcomes of a buprenorphine programme, but this was an initiative particular to Singapore, a country with one of the most punitive laws for drug use globally, and delegates were provided little exposure to OST models successfully implemented elsewhere in Asia. Meeting notes report that, “Based on Singapore’s experience with Subutex® (buprenorphine; Reckitt Benckiser Pharmaceuticals, Inc.) in drug substitution therapy, the participants were given an insight to the negative impact of harm reduction and substitution therapy.” [Colombo Plan Secretariat 2010; WHO 2009] Next, though the domestic market consumes only seven percent of the annual opium production, [UNODC 2010a] harm reduction and drug dependency treatment programmes are allegedly viewed as threatening commercial interests of those involved in both the opium industry and the government.[Associated Free Press, 2012]

In any event, governmental pressures have compromised programme implementation. For example, the single pilot methadone programme within Afghanistan has been repeatedly refused methadone importation approval by the Drug Regulation Committee of the MCN, with consequent periodic shortages and inability to expand.[Rubin and Rahimi 2011] These refusals occurred despite methadone being listed on the World Health Organization (WHO) Essential Drugs List, and the mandate of this treatment written in the Ministry of Public

Health's Policy on OST.[Razzaghi 2011, MOPH 2009] In April-May, 2011, this gridlock between two separate governmental bodies resulted in the near-termination of the pilot OST programme due to lack of methadone.

A third party independent evaluation of the pilot programme was required by the MCN prior to issuance of an importation license, completed with WHO funding in May 2011. This evaluation concluded that client retention rates were comparable to programmes operating in more developed settings, adequate security measures were present to minimize diversion, and that the current cost of the programme approximated US \$4 per day for each client, a cost lower than comparable programmes in other settings.[Razzaghi 2011] Following this evaluation, requests from MoPH to MCN for methadone importation license were once again refused, with the accompanying demand for another third party evaluation.

With respect to OST, areas of disconnect persist between policy and practice, which may speak to wider financial and ideological interests. The newly-released National Drug Demand Reduction Policy for 2012 – 2016 thus endorses harm reduction, in principle, and approves OST while emphasizing the need to “finalize and approve mechanism and guideline [sic] for the substitution therapy, taking into account allocation of effective medications that are affordable and accessible in the country” and the “establishment of clear systems of import, transportation, storage, distribution, and monitoring for the substitution therapies” [Ministry of Counter Narcotics ,2012]. Yet OST has been approved, funded, and implemented in Afghanistan since 2009, under the supervision of the Ministry of Public Health and WHO, and already been positively evaluated. The continued debate surrounding this issue indicates that OST may be untenable in Afghanistan and that other innovative approaches are needed for harm reduction in this setting..

Many new treatment programmes have emerged in the last six years, as drug use has increased, particularly in urban areas. In the Kabul cohort study, more than 14 treatment programmes were noted in Kabul alone; some revolved around profit, using pharmaceutical narcotics as a substitute for opiates.[Todd et al. 2011] Most government and NGO-funded treatment programmes are abstinence-based; few offer medical therapy for withdrawal symptoms, or a comprehensive continuum of care. There has been no systematic assessment of treatment approach or treatment efficacy to date. Government requirements for treatment programmes are currently under revision, but harm reduction initiatives are not part of that discussion.

Given the extent of Afghanistan's drug use problem, there is a distinct shortage of treatment and supportive services at all levels: for example, low threshold interventions (mainly services that require little motivation on the part of the drug user and offer basic assistance like shelter, hygiene, first aid, and food) that target more “hidden” or hard to reach clients; number of residential beds; support for home-based detoxification; after care services and social reintegration; and relapse prevention and harm reduction.[UNODC 2010b] Outside of the previously-described home-based programme, there are only five drug treatment centres providing care specifically for women in Afghanistan (personal communication, Dr. M. Tariq Sonnan). Early intervention and primary prevention has also received focus with programming in place for street children, educators, children attending schools in some parts

of the country, and those seeking religious guidance; however, the reach and impact of these programmes has not been formally assessed. Further, there is no current programming specifically directed at returnees.

Key Areas for Action

Afghanistan urgently needs a well-funded, sustainable, comprehensive, and inclusive programme of drug dependency treatment and rehabilitation, aftercare, and harm reduction services for the wide range of problem drug users. It also needs realistic and culturally-situated primary prevention programmes. The provision of accurate and realistic information about drugs and drug use for Afghanistan's many drug users, as well as those who are at risk for drug misuse, is particularly important. As stated by the Government's National Drug Control Strategy 2008–2012: "Problem drug users will be given all possible care and support based on the minimum standards of care outlined in the National Drug Treatment Guidelines and in treatment and harm reduction protocols that need to be developed. A comprehensive, integrated and well-coordinated network of prevention, treatment, rehabilitation, aftercare, relapse prevention and harm reduction services will be established and maintained in all provinces." [Ministry of Counter Narcotics 2008] The Treatment Guidelines advocate for a comprehensive drug treatment service and continuum of care, to include a range of treatment options depending on need, with the aim of providing an "integrated treatment, prevention and harm reduction programmes that will reduce the risk of infectious diseases and other medical and social harm, including drug-related deaths." [Ministry of Counter Narcotics 2005] Similar sentiments are echoed in the National Drug Demand Reduction Policy for 2012 – 2016, but actions to date do not portray translation of policy to practice. Political will must be exercised to ensure that harm reduction and drug dependency treatment are part of the same continuum of care in congruence with these policies.

Harm reduction programmes have improved greatly in the last six years, but urgently need more flexibility to adapt their services and funding allocations to a migratory population and to ensure service delivery is not compromised during periods of insecurity. Treatment programmes have also expanded, but lack standardized approaches; there has been no independent evaluation of efficacy to inform guidelines, and the government has minimal ability to curtail the activities of profit-driven private clinics (e.g. those replacing heroin with pharmaceutical substitutes). Police and community leaders need to be closely involved with programmatic decisions, particularly if they are currently driving a trend towards opiate injection, albeit inadvertently.

Finally, programme changes are urgently required for two reasons. First, there is need for increased coverage of primary prevention and treatment, together with sufficient funding, to cope with rapidly increasing urban populations. Second, alternative strategies to access services during periods of armed conflict need to be developed, particularly in urban areas increasingly impacted by violence. Admittedly, this is a challenging prospect, underscoring the need for operations research to determine feasible programme models for conflict-affected contexts. [Ezard et al. 2011, Ezard 2011]

Opiate dependency in Afghanistan is not prioritised, relative to many other health problems, although reducing the incidence of communicable diseases like HIV and addressing mental health needs are two of the top six priorities for national healthcare services as identified by the MoPH. [MoPH, 2005] Current programmes are insufficient to meet demand for harm reduction and dependency treatment programmes, and these two approaches need to be deployed in complementary ways. A generation of disaffected youth and displaced populations is now facing bleak economic and social prospects, and may turn into the casualties of the opium industry in Afghanistan. Drug treatment, rehabilitation, and harm reduction services need expansion, coupled with sustainable economic development, effective governance, and abatement of armed conflict in Afghanistan.

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References

- Afghanistan Investment Support Agency (AISA). (2011). Business Environment. Retrieved 7th March, 2012 from: <http://www.aisa.org.af/english/bus-env.html>.
- Associated Free Press. Afghan corruption feeding unrest: experts. April 13, 2012 Retrieved 1st May 2012 from: <http://tribune.com.pk/story/364129/afghan-corruption-feeding-unrest-experts>.
- Beyrer C, Wirtz AL, Baral S, Peryskina A, Sifakis F (2010). Epidemiologic links between drug use and HIV epidemics: an international perspective. *Journal of Acquired Immune Deficiency Syndrome*, 55 Suppl 1, S10–6.
- Cardozo BL, Bilukha OO, Crawford CA, Shaikh I, Wolfe MI, Gerber ML, Anderson M (2004). Mental health, social functioning, and disability in postwar Afghanistan. *Journal of the American Medical Association*. 292, 575–84. [PubMed: 15292083]
- Chivers CJ. (2011). In Eastern Afghanistan, at War With the Taliban's Shadowy Rule. *The New York Times* February 6, 2011. Retrieved 7th March, 2012 from: <http://www.nytimes.com/2011/02/07/world/asia/07taliban.html?pagewanted=all>.
- The Colombo Plan Secretariat. (2010). Implemented Activity Details. Retrieved 7th March, 2012 from: http://www.colombo-plan.org/colombo-plan_sitearchives/readActivityImplemented.php?id=271&page=3&srcnav=DAP.
- Dupree NH (2004). The family during crisis in Afghanistan. *Journal of Comparative Family Studies*, 35, 311–31.
- Eggerman M, Panter-Brick C (2010). Suffering, hope, and entrapment: Resilience and cultural values in Afghanistan. *Social Science & Medicine*, 71, 71–83. [PubMed: 20452111]
- Ezard N (2011). Substance use among populations displaced by conflict: a literature review. *Disasters*. E-published ahead of print (doi: 10.1111/j.1467-7717.2011.01261.x)
- Ezard N, Oppenheimer E, Burton A, Schilperoord M, Macdonald D, Adelekan M, Sakarati A, van Ommeren M (2011). Six rapid assessments of alcohol and other substance use in populations displaced by conflict. *Conflict and Health* 5, 1. [PubMed: 21310092]
- Felbab-Brown V (2007). *Opium Licensing in Afghanistan: Its Desirability and Feasibility*. Policy Paper, Brookings Institution, Washington, D.C., USA.
- Filkins D, Mazzetti M, Risen J (2009). Brother of Afghan Leader Said to Be Paid by C.I.A. *New York Times*, October 27. Retrieved 7th March, 2012 from: <http://www.nytimes.com/2009/10/28/world/asia/28intel.html>.

- Griffin N, Khoshnood K (2010). Opium trade, insurgency, and HIV/AIDS in Afghanistan: relationships and regional consequences. *Asia Pacific Journal of Public Health*, 22(3 Suppl),159S–167S. [PubMed: 20566549]
- Macdonald DS. (2007). *Drugs in Afghanistan: Opium, Outlaws and Scorpion Tales*, London: Pluto Press, pp. 144.
- Macdonald DS (2008). Afghanistan Research and Evaluation Unit (AREU) Briefing Paper Series: Afghanistan's Hidden Drug Problem: The Misuse of Psychotropics. Kabul, Afghanistan: AREU.
- Maguet O, Majeed M (2010) Implementing harm reduction for heroin users in Afghanistan, the worldwide opium supplier. *International Journal of Drug Policy*, 21, 119–21. [PubMed: 20171864]
- Matta B (2010). Afghanistan Battles Insecurity, Joblessness. Voice of America News.com December 23. Retrieved 7th March, 2012 from: <http://www.voanews.com/english/news/Battling-Insecurity-and-Joblessness-in-Afghanistan-112372424.html>.
- Ministry of Counter Narcotics, Islamic Republic of Afghanistan. (2005). National Drug Treatment Guidelines for Afghanistan. Kabul, Afghanistan, pp.3.
- Ministry of Counter Narcotics, Islamic Republic of Afghanistan. (2008). National Drug Control Strategy: Demand Reduction Implementation Plan 2008–2012, Kabul, Afghanistan pp. 3.
- Ministry of Counter Narcotics, Islamic Republic of Afghanistan. (2012). National Drug Demand Reduction Policy 2012–2016: A Policy for Prevention, Treatment and Rehabilitation of the Drug Addicts, Kabul, Afghanistan, pp. 26.
- Ministry of Public Health, Islamic Republic of Afghanistan. (2009). Final Policy On Opioid Substitution Therapy. Kabul, Afghanistan: Ministry of Public Health.
- Ministry of Public Health, Islamic Republic of Afghanistan. (2005). Vision for Health 2005–2015. Available at: <http://webcache.googleusercontent.com/search?q=cache:73BP1k8Koz8J:moph.gov.af/en/page/584+Afghanistan+national+health+policy,+2005-2015&cd=1&hl=en&ct=clnk&client=firefox-a>. Retrieved 7th March, 2012.
- National AIDS Control Programme, Ministry of Public Health, Islamic Republic of Afghanistan. (2010). UNGASS Country Progress Report: Afghanistan. Kabul, Afghanistan, Ministry of Public Health.
- Panther-Brick C, Eggerman M, Gonzalez V, Saftar S (2009). Violence, suffering, and mental health in Afghanistan: a school-based survey. *The Lancet*, 374, 807–86.
- Panther-Brick C, Goodman A, Tol W, Eggerman M (2011). Mental Health and Childhood Adversities: A Longitudinal Study in Kabul, Afghanistan. *Journal of the American Academy of Child & Adolescent Psychiatry*, 50, 349–63. [PubMed: 21421175]
- Peters G (2009). How Opium Profits the Taliban. *Peaceworks* No. 62. United States Institute of Peace Washington, D.C.
- Razzaghi E (2011). Evaluation of Afghanistan OST Pilot Project: Final Report. Kabul, Afghanistan: World Health Organization-Eastern Mediterranean Region Office.
- Rubin AJ, Rahimi S (2011). Few Treatment Options for Afghans as Drug Use Rises. *The New York Times*, August 27, 2011. Retrieved 7th March, 2012 from: <http://www.nytimes.com/2011/08/28/world/asia/28kabul.html?pagewanted=all>.
- Rubin BR (2004). *Road to Ruin: Afghanistan's Booming Opium Industry*. New York, USA; Center for American Progress & Center on International Cooperation.
- Setchell CA, Luther CN (2009). Kabul, Afghanistan: a case study in responding to urban displacement. *Humanitarian Exchange Magazine*, 45, December 2009. Retrieved 7th March, 2012 from: <http://www.odihpn.org/report.asp?id=3053>.
- Todd CS, Abed AM, Strathdee SA, Scott PT, Botros BA, Safi N, Earhart KC (2007). Prevalence of HIV, hepatitis B, hepatitis C, and associated risk behaviors among injection drug users in Kabul, Afghanistan. *Emerging Infectious Diseases*. 13, 1327–1331. [PubMed: 18252103]
- Todd CS, Stibich MA, Stanekzai MR, Rasuli MZ, Bayan S, Wardak SR, Strathdee SA (2009). A qualitative assessment of injection drug use and harm reduction programmes in Kabul, Afghanistan: 2006–2007. *International Journal of Drug Policy*, 20, 111–20. [PubMed: 18207381]
- Todd CS, Nasir A, Stanekzai MR, Rasuli MZ, Fiekert K, Orr M, Strathdee SA, Vlahov D (2010). Hepatitis C and HIV Incidence Among Injecting Drug Users in Kabul, Afghanistan Poster Presentation MOPDC101. XVIII International AIDS Conference, Vienna, Austria.

- Todd CS Nasir A, Stanekzai MR, Fiekert K, Rasuli MZ, Vlahov D, Strathdee SA (2011). Prevalence and correlates of HIV, syphilis, and hepatitis B and C infection and harm reduction programme use among male injecting drug users in Kabul, Afghanistan: A cross-sectional assessment. *Harm Reduction Journal*, 8, 22. [PubMed: 21867518]
- United Nations Assistance Mission in Afghanistan (UNAMA)/ Afghanistan Independent Human Rights Commission (AIHRC). (2011). Afghanistan Annual Report 2010: Protection Of Civilians In Armed Conflict. UNAMA, Kabul, Afghanistan.
- United Nations Drug Control Programme (UNDCP). (1999). Community Drug Profile No.1: Problem drug use in Afghan communities - an initial assessment Islamabad, Pakistan: UNDCP Office.
- United Nations High Commissioner for Refugees (UNHCR). (2008). Afghanistan at the crossroads: Street kids turn from beggars to beauticians. Retrieved 7th March, 2012 from: <http://www.unhcr.org/cgi-bin/texis/vtx/news/openssl.htm?tbl=NEWS&id=491af71b2>.
- UNHCR. (2009). Operational Information: Monthly Summary Report – January 09: Statistical Overview of Returned Afghan Refugees from Pakistan, Iran and Neighboring Countries, IDPs Caseload and Movements and Reintegration Activities 02 Mar 2002 – 31 January 2009. Kabul, Afghanistan: UNHCR.
- UNODC. (2010a). World Drug Report United Nations Publication Sales No. E.10.XI.13, Vienna, Austria.
- UNODC. (2010b). Drug Use in Afghanistan: 2009 Survey Executive Summary. UNODC, Kabul, Afghanistan.
- UNODC. (2011). Afghanistan Opium Survey 2011, Summary findings. UNODC, Kabul, Afghanistan.
- World Health Organization. (2009). Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence. Geneva, Switzerland: WHO.
- Zafar T, Brahmabhatt H, Imam G, ul Hassan S, Strathdee SA (2003). HIV knowledge and risk behaviors among Pakistani and Afghani drug users in Quetta, Pakistan. *Journal of Acquired Immune Deficiency Syndrome* 32, 394–8.