In the global battle against illicit drugs, stemming the crisis of opioid dependence poses a grave challenge.

The World Health Organization (WHO) is issuing guidelines to help countries treat dependence on opioids and prevent the transmission of HIV and other blood-borne infections.

The United Nations Economic and Social Council (ECOSOC) and the Commission on Narcotic Drugs invited WHO in collaboration with the United Nations Office of Drugs and Crime (UNODC) to develop the guidelines – to be published in the coming months.

“These constitute the first attempt to compare different approaches to the management of opioid dependence in a systematic way,” says Dr Nicolas Clark, Medical Officer in WHO’s Mental Health and Substance Abuse Department.

Globally, there are around 16 million illicit opioid users; 0.4% of the total population in the 15 to 64 age group. Of those, 11 million people abuse heroin, according to the 2007 World Drug Report. Opioids are naturally occurring opiates and synthetic and semi-synthetic drugs that act on opioid receptors in the brain and can cause dependence due to their euphoric effects. Heroin is an opioid.

Other examples are morphine, methadone and buprenorphine, widely used as pain-killers.

The battle against opioid dependence is at its grimmest in the countries in and around Afghanistan, which accounted for nearly 93% of the global opium production in 2007. Opiate addiction is increasing in the countries neighbouring Afghanistan, including India, the Islamic Republic of Iran and countries in central Asia, and along the east coast of Africa. In contrast, the situation is largely stable or even declining in most of Europe, North America, and several parts of east and south-east Asia,” says Dr Thomas Pietschmann, of UNODC’s Policy Analysis and Research Branch.

Perhaps one of the most surprising findings of the new WHO guidelines is that methadone maintenance treatment – a treatment that has been around for over 40 years – is still regarded as the most effective.

But one of the key global issues is access to treatment. Less than 650,000 people are thought to be receiving substitution treatment globally for opioid dependence, less than 10% of those in need of treatment. Opioid substitution therapy is the medically supervised administration of a psychoactive substance that is similar to the one producing dependence.

In countries where opioid substitution is widely available, 40–50% of drug users receive treatment. Most of the unmet need for treatment is in Asia and eastern Europe, particularly in China, India and the Russian Federation.

The two most common agents used for substitution therapy are methadone and buprenorphine. Used in this way, these substances have a stable non-intoxicating effect, while diminishing the effects of any additional opioid use.

This long-standing treatment was endorsed in 2004 by WHO, UNODC and UNAIDS (Joint United Nations Programme on HIV/AIDS) in a joint position paper. The three agencies argued that there was consistent evidence to link substitution therapy for opioid dependence with substantial reductions in illicit use, criminal activity, deaths due to overdose, and behaviour that leads to a high risk of HIV transmission.

But various political, social and cultural factors impede the expansion of methadone (or buprenorphine) treatment for opioid addicts.

In many countries, methadone and/or buprenorphine maintenance treatment is unavailable or illegal. For example, though the Russian Federation has one of the highest rates of opiate use in the world, “substitution therapy by methadone and buprenorphine is forbidden by law. All treatment for drug abuse in the Russian Federation is abstinence oriented,” says Dr Evgeny Krupitsky, Psychiatrist, Leningrad Regional Dispensary of Narcology.

Access to methadone depends on how strictly governments apply control measures to this narcotic. “In countries, where governments allow the use of methadone for medical and/or scientific purposes, the problems in accessing supplies of methadone (e.g. importing methadone) may be connected to problems their national competent authorities have with the application of control measures for narcotic drugs,” explains Pavel Pacha, Chief, Narcotics Control and Estimates Section, International Narcotics Control Board (INCB).

But despite these daunting challenges on the ground, there are promising signs. China, for example, is ramping up its methadone maintenance programme for heroin users.

“The first methadone maintenance treatment clinic was piloted in 2004 in China,” says Dr Li Jianhua, Deputy Director, Yunnan Institute for Drug Abuse. “By the end of 2007, there..."
were 503 such clinics in 23 provinces. About 60,000 heroin-dependent patients were treated in these clinics till the end of 2007. It has already become an important treatment approach for heroin-dependent patients and a means of preventing the spread of HIV/AIDS. We plan to start using buprenorphine to treat heroin dependence this year. However, we wish we could have more methods for treating drug-dependent patients.”

Abuse and diversion of opioids prescribed for substitution treatment are also of concern. India, for example, has a particular problem with abuse of pharmaceutical products such as buprenorphine.

A national survey, which the Ministry of Social Justice and Empowerment and UNODC conducted in 14 sites across India in 2004, found that the majority (35%) of drug users reported heroin as their primary drug of abuse. Other opioids (buprenorphine, propoxyphene and opium) accounted for 29% of drug use. The pattern of drug use varied in different parts of the country.

“The addiction to pharmaceuticals is a decade-old problem,” says Dr Rajat Ray, Professor and Head of the Department of Psychiatry and Chief of India’s National Drug Dependence Treatment Centre.

“India’s enforcement agencies were under pressure from international bodies. As a result of crackdowns, opiates became scarce. So, drug users switched to alternative compounds. These were pharmaceutical products which gave them a similar experience: buprenorphine, propoxyphene, diazepam, tranquilizers, or anti-histamines. The choice of compound varied from region to region,” says Ray. But “dealing with drug abuse has been a low priority in the country. If it is getting more prominence today, it is because of the links with HIV. Opioid substitution therapy is available across the nation in only 35 centres. That is nothing for a country of India’s size,” he says.

But scaling up substitution is likely to be a daunting task. The first challenge is cost. “Many states do not have money so there are no state-sponsored programmes. And much more needs to be done to create greater public awareness about the efficacy of this approach,” says Ray.

“In many countries in southern Asia, in particular Bangladesh, India and Nepal, there continue to be longstanding problems with pharmaceutical preparations containing controlled substances. In general, pharmaceutical preparations are diverted from domestic distribution routes and are sold without prescription in pharmacies and various other retail outlets in the region,” observed the INCB in its 2006 annual report.

Senior officials of India’s Narcotics Control Bureau say that the leakage of pharmaceutical preparations onto the black market is partly due to the lack of an effective mechanism to control the 600,000 chemists in the country.

These preparations are also sold on the black market by patients. “Without adequate supervision of administration, both methadone and buprenorphine will make their way to the black market to people who inject them and may contract disease or suffer overdose as a result,” says WHO’s Clark.

The sharing of contaminated injecting equipment among drug users is now the primary mode of HIV transmission in many countries in eastern Europe, the Commonwealth of Independent States and Asia, and therefore treating drug dependence has become vital to reducing transmission of the disease.

In India, the latest phase of the National AIDS Control Programme (NACO) explicitly recognizes the need for a policy on opioid substitution therapy. “The National AIDS Control Organization has already taken steps to fund about 33 nongovernmental organizations that have been providing opioid substitution therapy using buprenorphine. This will run for a period of six months. Currently, a proposal is being prepared to scale up opioid substitution therapy.

“India does not have a methadone maintenance clinic as yet but methadone will be piloted during the scale-up phase. NACO is considering the option of both methadone and buprenorphine for use as opioid substitution therapy for IDUs,” says Dr Ravindra Rao, Programme Officer, NACO.
Primary health care: Fiji’s broken dream

Primary health care programmes have faltered across much of Fiji due to a shortage of health workers and funds among other factors. Senior health official Dr Jona Senilagakali recently returned to the village selected to launch primary health care in the island nation in 1978. Johnety Jerety, who accompanied him, reports.

Nacanieli Sosenabarari has welcomed many changes in his village these past 30 years. Like the rest of his community at Natogadrravu, about 30 kilometres from Fiji’s capital, Suva, Sosenabarari, now in his 60s, no longer lives in a thatched, bamboo hut, but a modern house made of iron and concrete. He no longer draws his drinking-water from the potentially polluted nearby river; these days it comes from a tap in his house, which also has a water-seal flush toilet. Refuse previously left strewn about the village is now deposited in communal bins.

These improvements in basic amenities, which have helped to improve the health of villagers, stem from the enthusiasm with which the village embraced primary health care back in the late 1970s, after Fiji signed up to the 1978 Declaration of Alma-Ata of “health for all” by the year 2000. Following a series of South Pacific regional seminars in 1977 involving the World Health Organization (WHO) and the United Nations Children’s Fund (UNICEF), Fiji decided to take a village-based approach to primary health care.

Like many countries at that time, Fiji hoped to overcome a lack of resources by galvanizing community involvement to improve health across its 100 or so islands that are today inhabited by a population of 848 000 people.

Dr Jona Senilagakali, who was the country’s Permanent Secretary for Health at the time, said in 1980 during an interview with WHO’s former publication, World health magazine, that this grassroots commitment “from village people who want to improve things in their known village for their own reasons” was Fiji’s key to achieving health for all.

The village of Natogadrravu was at the forefront of those early efforts to bring primary health care to Fiji’s villages and remains a model for others in the island nation, showing what strong leadership and active participation by all community members can achieve.

“We have experienced the benefits of primary health care and it is important that every village in Fiji take primary health care very seriously,” Sosenabarari says. “We have had the benefits because we have a very effective village committee that always works together with the people in the village to decide on every development.”

“We didn’t have enough doctors and nurses or even aid workers to work with the communities.”

Dr Jona Senilagakali

Primary health care initiatives have reduced sickness and fatal disease in the village, Sosenabarari says. “The number of people dying has decreased and not too many people are sick now compared to the olden days.”

Fellow elder Saimone Rokotunidau, in his 60s, has also seen the benefits flow from primary health care initiatives. “We have our aid post and a village health worker and there is no need for us to go to Suva to get treatment for minor injuries – that is taken care of in the village,” Rokotunidau says, referring to Fiji’s capital.

Natogadrravu chief Semi Matalau says that the village development committee has been instrumental in achieving improved health and living conditions.

“If the committee comes up with a suitable development idea for the village, we discuss it and then call a village meeting where everyone can take part, including our elders who have the final say on most occasions. So it is more of a community decision than the committee taking the decision themselves.”

Elsewhere in Fiji, however, primary health care results have been patchy. Promising early developments lost momentum in many villages. Last year Senilagakali was interim Health Minister, since January of this year he has been Medical-Officer-in-Charge of the Army Medical Scheme. He blames this stagnation on, among other things: poor government policy and a lack of central support to the villages; inadequate resources and monitoring from central government; and a “brain drain” that has resulted in a shortage of doctors and nurses.

Senilagakali says the primary health care project reached most communities throughout Fiji when it was launched. But in the 1980s, many initiatives stalled. “We didn’t have enough doctors and nurses or even aid workers to work with the communities,” he says.

He says poor government policy was the main reason why Fiji was unable to achieve the WHO health-for-all target by 2000. “After I left my post, the government did not schedule...
workers to go to all communities in all the islands to monitor the project and health workers were not encouraged to work more with the communities to improve their health standards.”

The government was short-sighted when it handed over ownership of the Fiji School of Medicine to a South Pacific regional institution in 1995 – a move that transformed it into a centre that serves the whole region, Senilagakali says. “When it was administrated by the Fiji government, every graduate had to work for government services and they were paid by the government. If that system had been maintained, Fiji would have had enough doctors and the health services and primary health care programmes would have achieved that 2000 target. Now the ministry of health has no power over the school and our nurses and doctors can go anywhere to work. Because of that decision, Fiji is still short of qualified doctors and nurses and will remain so in years to come.”

While he was in charge of Fiji’s health portfolio last year, Senilagakali tried to put primary health care back at the top of the agenda. He is unshaken in his belief that community decision-making and participation are crucial to primary health care success.

Dr Josaia Samuela, Fiji’s National Adviser on Family Health, also believes that the primary health care campaign in his country has not been a success. “There is no proper monitoring of the health standards in the communities or villages. I think 70–80% of the population has access to health services but only 40% has access to quality health services.

“Health has improved very slowly since the 1970s, but not to the minimum standard expected. Even some of the villages just a few kilometres from Suva do not have proper water infrastructure. Valenitina village, which is a kilometre from Suva, doesn’t have a proper water supply. They depend mainly on water from the well or rainwater, and as a result, they experienced a typhoid fever breakout (in 2007).

What is the use of having a vision of health for all without providing adequate resources?

Dr Josaia Samuela

“In the 1970s the clinics started with one nurse or doctor but if you look at it now, there are not enough staff to take care of everyone. We have to add another one or two staff, more resources, to reflect population increases. There are health workers in almost every village but those places that don’t have village health workers are left behind because they are the ones who educate people on primary health care. “More centralized resources and community aid should be made available. Other stakeholders, like the ministries of health, Fijian affairs, provincial development, agriculture, fisheries and land, have a role to play in primary health care,” Samuela says.

“The government has to adjust now in order to deliver good health to the people to a required standard. It must create the environment to deliver the goods. What is the use of having a vision of health for all without providing adequate resources?”

Samuela says most Fijians are aware of the importance of primary health care to their lives but many still practise poor hygiene. “I think it is more than ignorance. There is a need to provide support. Consider the inequality in funding and support many of our rural people suffer. A whole village may share one tap. Without improving their social infrastructure, how can we expect them to change their behaviour? It is a complex issue.”

Samuela, too, believes strong leadership and a motivated community are crucial to achieving good primary health care outcomes.

“Sometimes the development of primary health care is not sustainable in villages, when the village chief might move away for employment. So they have to pick another village head and it slows the development of primary health care in the village.

“We found many of the villages we went to have no village committees and they are left with very poor health standards compared to the villages that have proper committees to make decisions and manage their village.”
Turmoil disrupts AIDS care in Kenya

Post-election turmoil in Kenya has disrupted the fragile and complex systems for delivering HIV/AIDS treatment in rural areas. Peter Mwaura reports from Nairobi.

Health services in Kenya have been scrambling to get life-saving antiretroviral (ARV) treatment to thousands of people displaced in a spiral of ethnic violence following the disputed presidential election on 27 December 2007.

An estimated one in 20 people are infected with the virus that causes AIDS in Kenya, a country of about 35 million people.

By early last month, about 250,000 people had fled their homes and were living in temporary shelter, prompting fears that thousands of people with HIV/AIDS would be unable to reach health-care facilities for treatment because of the violence.

WHO expressed concern for the well-being of the internally displaced who were sheltering in crowded spaces with poor water supply and sanitation, and shortages of food and medicines.

The unrest has been particularly acute in western Kenya, where 62,000 HIV-positive people have been enrolled at 19 clinical sites and seven satellite clinics as part of AMPATH (Academic Model for the Prevention and Treatment of HIV), one of the largest and most comprehensive AIDS programmes in Africa.

Its clinics are located in towns and rural centres, while the main referral centre is at Moi University in Eldoret, one of the parts of Kenya that was worst affected by the violence.

“The initial disruption in HIV/AIDS care was huge and, if prolonged, could have disastrous effects on care and outcomes,” said Dr William Michael Tierney, AMPATH’s research director. He told the Bulletin that access to medication was “a huge problem because of patients not being able to travel and many staff being homeless, unable to travel, and perhaps leaving permanently because they are of the wrong tribes.”

Tierney added however that “because we have an electronic medical record system and record the tribe of every patient enrolled, we were able to identify how many of our patients overall and by care site were of the Kikuyu tribe and were most likely to be affected (about 4500 patients or 7.4%).” The programme’s catchment area in western Kenya has a population of five million with an estimated 300,000 HIV-positive individuals.

“Such information allows us to plan for which communities may need more assessment and interventions as we move forward,” said Tierney, who is also a professor at Indiana University School of Medicine, which established the programme with Kenya’s Moi University Teaching and Referral Hospital in the 1990s.

The violence has not only affected AMPATH clients but also its workforce, according to the programme’s team leader Dr Joseph Mamlin, who is based in Eldoret.

In the first week of violence, less than 10% of the programme’s clients and staff found their way to a clinic.

“The very next week a remarkable rebound occurred in all sites, except for Burnt Forest,” Mamlin told the Bulletin in an e-mail message.

“We have multiple large IDP [internally displaced persons] camps, many housing 10,000 to 20,000 people, all
around us now. We have been able to work closely with all relief agencies and have the programme’s teams engaged in every large camp. We clearly have hundreds of patients in the camps and many others, unknown numbers, moved far beyond our reach. But every day our register of displaced patients becomes more complete."

“Most of the displacement is around Eldoret and nearby clinics like Turbo, Mosoriot and Burnt Forest,” Mamlin said. “The worst affected so far is Burnt Forest. That site is devastated. But even then, the team has formed mobile units so as to reach Kalenjins [who were fighting Kikuyus] too fearful to return to the clinic [due to the high concentration of Kikuyus in nearby internally displaced persons camps] and making regular rounds in the camps housing mainly Kikuyu and some Kisii.”

The disruption, however, has shown that the programme’s plans to decentralize care and deliver more in the community were correct. “If we had been delivering more care in the communities and less in the health centres, the interruptions in transportation systems would have affected our patients less, especially getting drug refills. I anticipate that this will accelerate our efforts to ramp up community-based care,” Tierney said.

Mamlin praised the loyalty and commitment of the programme’s Kenyan staff. “They have taken every risk to stay at their posts. Many of our workers have lost homes or have been forced to send members of their families to safer locations but the core of the programme’s staff is working overtime to meet the needs of our patients.”

With its staff of about 900, the programme had made progress in confronting the HIV/AIDS pandemic in western Kenya. Before the outbreak of violence, it enrolled more than 2000 people every month and tested 169 000 people every year, including more than 30 000 pregnant women, for HIV. It also provided 23 000 patients with psychosocial support, fed 30 000 people every week and provided school fees, housing and other assistance to 1900 orphans.

Record keeping which is essential to patient care delivery and outcomes has also been affected. In some cases only a single staff member was able to reach a clinic on a given day and, at worst, the programme simply recorded the name and ID of a patient, and refilled drugs, with no encounter forms completed to record details each time the patient visited a clinic. The programme has developed two new encounter forms for collecting data on HIV/AIDS treatment in camps for the internally displaced.

“Record keeping is the cornerstone of what we do and will not be compromised any more than is absolutely necessary,” Tierney said.

Many of our workers have lost homes or have been forced to send members of their families to safer locations.”

Tierney and Mamlin said it was too early to know the precise impact that the violence had had on the prevention and treatment programme, but were optimistic about the prospects of restoring treatment to most people in need. Mamlin said: “I fully expect all AMPATH sites to weather this storm, find the majority of their patients and continue to grow in comprehensive care.”
Dr Sally Stansfield is the Executive Secretary of the Health Metrics Network. A citizen of the United States of America, she gained her medical degree at the University of Washington and later studied at Yale. From 1999 to 2006, she was the Associate Director for Global Health Strategies of the Bill & Melinda Gates Foundation. She draws upon more than 30 years of clinical and public health practice, experience in research agencies, universities, governments, nongovernmental organizations, and multilateral agencies. She has designed and managed programmes for the US Centers for Disease Control and Prevention, the US Agency for International Development and Canada’s International Development Research Centre and has advised governments primarily in Africa and Asia.

The Health Metrics Network, which is hosted by WHO, received US$ 50 million in funding from the Bill & Melinda Gates Foundation to improve the quality and reliability of health information in developing countries. Executive Secretary Dr Sally Stansfield says it’s time for the world to shift the ownership of health information to countries instead of letting donors and disease-specific programmes run the agenda.

Q: What has been achieved since the Health Metrics Network (HMN) was launched in May 2005?
A: HMN has worked with countries to produce a framework for the development of health information systems, which has been endorsed by the World Health Assembly. We initially made 65 grants to low- and middle-income countries. These grants have been instrumental in creating a massive amount of momentum and demand for the reform of health information systems. We have had requests from more than 100 countries for financial and technical support. At the outset, we found that many of the sources of health information including census, civil registration and surveys were under the control of the national statistical authorities. The health sector needs the data that is controlled by the national statistical offices to be able to make health-related decisions. In many cases, the health information system managers had never met the national authorities, so HMN has, for example, helped bring these two groups together.

Q: How does HMN fit into the jigsaw with the other organizations that are working to improve statistical feedback, such as United States Agency for International Development (USAID), the United Nations Children’s Fund (UNICEF), and Partnership in Statistics for Development in the 21st Century (PARIS21)?
A: HMN is the only mechanism within countries for joint planning and action by all of these partners, and is uniquely positioned to help transform information systems because it is a network. We help countries to align technical and financial support from all contributing partners. What HMN has added, which has not been seen in the past, is a willingness to integrate information across sources to maintain a new kind of public health intelligence instead of disease-by-disease tracking. This is especially important in the development of global health security.

Q: Are people in the developing world aware that they are missing out on the kind of information that is taken for granted in industrialized countries?
A: No, in general the statistical services in countries are managed by governments and they are used to serve the needs of government officials, so it is rare that those statistics are systematically disseminated to citizens. It is rare [also] that citizens see it as their right to be able to hold their government accountable using those statistics.

Q: If you go to a country that has virtually no civil registration, where do you start? How do you persuade countries to see investment in health information systems as a priority?
A: Often the health system is weak in those places partly because the information system is weak. We begin by helping countries conduct an assessment of their information systems. If managers have the information that they need, citizens understand that they are underserved by their health system and the political pressure to improve services becomes stronger. We can use information to inform civil society to push managers, to push local government and to push nations to improve the quality and access to health services. Strengthening civil registration – birth and death registration – is a long-term plan, and we encourage countries to invest in strengthening the system in a way that will produce some quick wins to improve health decision-making. For example, we are working with many countries to find ways to use real-time information to alert managers to problems such as drug shortages or clusters of unexplained illness.

Q: How is accountability an essential element of health system reform?
A: We are helping countries find ways to hold managers accountable for performance and to reward those who are delivering better results. That way the information system quickly restructures around incentives to make the broader health system work.

Q: Does the need for donor and disease-control programmes to produce evidence of their results prevent countries from setting up integrated health information systems?
A: Countries have always received support from donors and disease-specific control programmes that are targeted to achieve the outcomes that these programmes care most about. It’s rare that support is received to strengthen the system so that countries can pursue the results that they are most committed to. The donors and the disease control programmes should rely upon the systems in countries to get their data instead of
getting the data directly themselves, or relying solely on surveys. One of the big barriers to making this happen is that people controlling the business of health development want to make sure that they can assure their flows of money by being able to show results. This is a noble goal but it’s time for the world to shift the control, shift the power, and shift the ownership of the information to the developing country managers.

Q: Is there much international receptiveness to this idea?
A: There is new commitment globally to strengthening health systems in countries. There is increasing recognition that investment solely through disease-control programmes has left countries with systems that are dysfunctional. As each disease-specific group marches through countries with its own survey, it leaves those countries with very little control of the evidence, very little ownership of the data and finally very little ownership of either the health problem or the solution.

Q: Is this a source of major irritation in some countries?
A: Yes. The countries are often quite sophisticated about the data, eager to take on the analysis and committed to making sure that the evidence is owned first and foremost within the country. It’s time for the global community to encourage the trend to use countries’ data rather than using globally generated estimates.

Q: So how do you get an integrated approach for data systems when countries are under siege from the disease-specific programmes that have a lot of money?
A: It’s possible to engage the disease-specific programmes in strengthening health systems. The Global Fund to fight AIDS, Tuberculosis and Malaria, for example, has a new commitment to use its resources not just to benefit the programmes to control the big three diseases but also to enable countries to use those resources to strengthen their systems. The tuberculosis community has realized that investment in information systems will provide much more sustainable improvements in surveillance for tuberculosis.

Q: How can WHO help countries to strengthen their own health data capacity?
A: WHO now works to adjust the statistics that come from individual countries so that they are comparable and credible. Rather than investing solely in analysis to reconcile conflicting information here in Geneva, there should be an increasing willingness at WHO to support development of that capacity in countries. I think we have to be wary of a tendency to centralize the analytic expertise in institutions in the industrialized world.

Q: You started with giving small grants to many countries but now you are isolating smaller numbers of countries for more intensive aid. Why is that?
A: The 65 grants to countries have done an immense amount to increase the demand for information system reform but we clearly need to be able to support that demand and that is a much more expensive prospect. We need to target both technical and financial resources on a small number of countries and show that an intensive approach to information system reform will deliver better outcomes. Cambodia, Sierra Leone and the Syrian Arab Republic are the first three of six countries and there may be more after that.

Q: HLN has funding to last seven years. How will you guarantee the longevity of the network?
A: The founding grant of US$ 50 million from the Bill and Melinda Gates Foundation has been augmented a bit by other donors, but it will obviously cost more than US$ 50 million to transform information systems in developing countries. We need to be very strategic in mobilizing other sources of funding. We are excited about the new global commitment to strengthen health systems. Many of our most important partners are convinced that we can harness the immense potential benefits of information and technology to transform health outcomes for the developing world.