Scale-up of a comprehensive harm reduction programme for people injecting opioids: lessons from north-eastern India

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Introduction

In 2009, the World Health Organization (WHO), the Joint United Nations Programme on HIV/AIDS (UNAIDS) and the United Nations Office on Drug and Crime (UNODC) endorsed a comprehensive harm reduction package consisting of nine interventions. The package provided prevention, treatment and care services for people injecting opioids who were infected with the human immunodeficiency virus (HIV). 1 Globally, only 10% of all individuals who inject opioids are being reached by HIV prevention services, which are located primarily in high-income countries. 2 Because any population-level impact on HIV infection rates among people who inject opioids demands large-scale delivery of this harm reduction package, there is clearly an urgent need to scale up the package in low- and middle-income countries, but how? The best way is through strategic advocacy to influence national and local policies; an enabling environment; community mobilization; innovative delivery models and practical approaches to enable rapid scale-up. 3,4

In 2004 the Bill & Melinda Gates Foundation, through its Avahan India AIDS initiative, funded Project ORCHID (acronym for “organized response for comprehensive HIV interventions in selected high-prevalence districts”) in Manipur and Nagaland, two states of north-eastern India, to introduce and scale up a comprehensive harm reduction package for people injecting opioids. 5 This paper describes the approaches to achieving scale-up, the lessons learnt from this experience, and how these lessons have informed harm reduction programmes and policy in India.

Local setting

India has an estimated 186 000 people who inject illicit drugs. The practice of injecting illicit drugs is an important driver of the country’s epidemic of HIV infection and acquired immunodeficiency syndrome (AIDS). 6 Government-funded harm reduction programmes targeting people who inject illicit drugs have been active in India since 1999, but they were limited in scope and scale until 2007, when the National AIDS Control Plan III (NACP III) was launched. Historically, the states of Manipur and Nagaland have been prioritized for the development of programmes targeting people who inject illicit drugs. 7

Manipur and Nagaland are small states on India’s mountainous, remote border with Myanmar, where illicit drugs are readily accessible. Both states have primarily rural populations characterized by ethnic, linguistic and tribal diversity. Infrastructure development, particularly in the areas of transport and health services, lags behind that in other parts of the country because of political instability and conflict in the region.

Manipur and Nagaland have an estimated 10 000 and 16 000 people who inject illicit drugs, respectively. The drugs of choice are the opioid heroin in Manipur and pharmaceuticals such as dextropropoxyphene, also an opioid, in Nagaland. When Project

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ORCHID was established, the prevalence of HIV infection among people injecting these drugs was 24.5% in Manipur and 8.4% in Nagaland. Strong geographic and social barriers hindered the local scale-up of a harm reduction package.

A government-funded harm reduction programme was already in place across most districts in Manipur and Nagaland when Project ORCHID was launched. Local nongovernmental organizations (NGOs) implemented the programme, which consisted of a basic package comprising needle, syringe and condom distribution and educational and outreach activities. However, programme components were inconsistent across sites partly because of a lack of national operational guidelines, training manuals, monitoring systems and intense field-level supervision. In addition, opioid agonist maintenance treatment and community mobilization, two elements of vital importance for scale-up and sustainability, were not part of the programme.

Relevant changes
Programme infrastructure

The Project ORCHID harm reduction programme, which covers 10,800 people who inject opioids, operates in seven districts of Manipur and six districts of Nagaland. The remaining districts in both states are covered by a government harm reduction programme. All of the nine WHO/UNODC/UNAIDS comprehensive harm reduction package components were delivered in the covered districts, except for hepatitis screening and treatment. Twenty-four local NGOs were contracted to deliver services at the district level. The infrastructure included 38 clinics and 46 drop-in centres. The programme used a participatory, peer-based approach with over 300 trained peer educators from within the community of people who injected opioids. These educators were paid a small honorarium.

Approaches to scale

To scale up the harm reduction package, Project ORCHID developed several innovative improvements and additions to the existing government package of harm reduction services (Box 1).

Community participation and mobilization

Both Manipur and Nagaland have a history of strong community action and advocacy movements within the community of people who inject opioids. Project ORCHID built on this foundation to foster community participation and strengthen the organizational and leadership capacity of these community groups. Community participation and ownership were fostered through: (i) participatory mapping of people who inject opioids to establish the denominator (estimated number of such people in the area where the programme was responsible for establishing services); (ii) formation of a programme management team composed of community members who injected opioids (community committees) to help develop components such as clinical services and outreach. A focus on locally driven advocacy through churches, community groups and power structures was essential for scale-up. Ongoing responsibility for advocacy was gradually transferred to the community groups composed of people injecting opioids. Community-led crisis response teams were formed to respond to incidents of harassment and violence, and these teams were also equipped with naloxone to manage opiate overdoses.

A business model for project management

Project ORCHID employed Avahan private sector principles to achieve its scale-up targets by placing a strong emphasis on programme management and supervision. Project ORCHID management teams provided direct technical support in monitoring and evaluation, medical services and outreach, and implementation to the NGOs delivering services. The programme emphasized the use of data for local decision-making. Community-friendly monitoring tools enabled peer educators to conduct periodic risk assessments among their peers and track those who injected opioids for services. Detailed operational guidelines and training manuals were developed to inform and standardize interventions across the two states, along with a comprehensive monitoring framework with clear, graded indicators and targets.

Improvements and additions

To address human resource barriers, the programme introduced task shifting. Nurse-led clinics for the treatment of sexually transmitted infections provided symptomatic treatment where doctors were not available, and paid distributors of needles, syringes and condoms were employed in locations without peer educators. Mobile outreach clinics were also used to reach remote areas and to increase uptake. The programme also introduced an NGO-led integrated opioid agonist maintenance treatment delivery model. Targeting subpopulations, such as new users and females injecting opioids, was an essential part of scale-up. In 2010, a pilot intervention

Box 1 Innovations introduced by Project ORCHID to standard harm reduction package for people injecting opioids in Manipur and Nagaland states, India

The “what”: additions to India’s standard harm reduction package

- A focus on people who started injecting opioids within the last three months
- Customized interventions for females who inject opioids
- Provision of naloxone and other critical components of the commodity package
- Specialized services for female spouses or other sexual partners of people injecting opioids
- Customized interventions for people injecting opioids who are geographically hard to reach (pilot)

The “how”: management approaches used to scale up harm reduction

- Strong field-level programme management and execution to ensure scaled delivery
- Use of data for local decision-making (e.g. microplanning through peer-based outreach)
- Enhanced local and state advocacy through key structural players (e.g. religious leaders and police)
- Strong focus on community mobilization, including active involvement in programme design and delivery
- Capacity building within institutions involved in service delivery
- For NGOs, flexible response to local barriers through innovative service models, such as: (i) enhanced staffing of the NGO-delivered opioid agonist maintenance treatment programme; (ii) secondary distributors to ensure adequate and uninterrupted commodity supply in remote locations; (iii) extensive use of mobile clinics to bring services to workplaces, hot spots and other locations where key target populations are located; (iv) nurse-delivered care for sexually-transmitted infections in light of the shortage of physicians in the region.

NGO, nongovernmental organization.
for females was established in a district with a large number of women injecting opioids. This intervention was staffed with women only and addressed the dual risks involved in opioid injection and sex work. Linkages to other services for women, such as gynaecological care, prenatal care, night shelters and opioid substitution treatment, were also offered as part of the intervention. Strategies to reach new opioid injectors included enlisting young peer educators and conducting social activities to attract young injectors to the services.

Programme sustainability

To ensure sustainability the programme has worked closely with state and national AIDS agencies to share lessons and influence policy. The Bill & Melinda Gates Foundation and the Government of India signed a memorandum of understanding in 2009 to transition the funding and management responsibility of the programme to the government in a phased manner over a three-year period.

Scale-up, costs and influence

An evaluation of the impact of the harm reduction programme on HIV infection rates and cost-effectiveness will be carried out in 2013; an independent evaluation of programme sustainability will also be undertaken. In this section we present the results of programme scale-up and of analyses of programme cost and influence. Our data sources included estimations of population size conducted in 2005, 2007 and 2009, as well as programme monitoring data. A community-driven participatory and direct mapping method was used in 2010 to identify people injecting opioids who were not being reached by the programme within the target area, as well as to validate the names of registered individuals appearing in programme records. Key programme indicators included the number of each of the following, cumulatively and in any given month: (i) people injecting opioids who were ever contacted; (ii) people injecting opioids who had visited the clinic; (iii) people injecting opioids who were tested for HIV; (iv) needles and syringes distributed, and (v) condoms distributed. The information was collected from peer educator calendars, which are micro-planning tools used by peer educators to plan, monitor and record their outreach activities, and from clinic records collated and managed through the programme’s computerized management information system. Data collection and analyses of the opioid agonist maintenance treatment programme are described by Kermode et al.14

The cost of the programme was calculated from the overall programme budget and from the budgets of NGOs sub-contracted for the 2011–2012 financial year. We calculated both direct programme implementation costs at the NGO level and Project ORCHID management costs (i.e. costs of field monitoring, training and capacity-building, as well as monitoring and evaluation). The costs of opioid agonist maintenance treatment included both programme implementation and drugs. We calculated the allocated annual cost per person injecting opioids (cost per target for the Project ORCHID and national harm reduction programme) as well as the actual annual cost for each person reached by the programme (cost per participant “ever contacted” for the Project ORCHID programme only). The latest reference cost for the national programme was for 2009 and included only NGO-level costs; management costs at the state and national levels were not captured.

Programme scale and scope

In fiscal year 2011–2012, the harm reduction programme contacted more than 12,000 people who injected opioids and delivered an average of 16 needle and syringes per person per month. The rate of return of syringes and needles was 68%. Uptake of clinical services and HIV testing increased between 2009 and 2011 (Table 1), largely owing to implementation of strategies such as mobile medical and HIV testing services. Annual syphilis testing among people injecting opioids increased from an average of 27% (4887) in 2009 to 58% (6264) in 2012, and over 40% (4320) of programme participants were tested for HIV. Of those who disclosed their HIV status, 81% (970) are enrolled in antiretroviral therapy (ART) services. Opioid substitution treatment covers 13.7% (1520) of all individuals injecting opioids who are targeted by the programme. This is considerably more than the global average and 4.5 times higher than the Indian national average of 3%.15 The retention rate of clients in the opioid substitution treatment programme after 6 months is 63%.14,16

Between 2009 and 2011, the percentage of registered programme participants who had been injecting opioids for less than one year increased from 4% (146) to 21.5% (1071), and the fraction of females registered at the programme increased from 2.7% (119) to 7% (340). Between 2010 and 2012, the fraction of females injecting opioids who were contacted monthly increased from 69% (104) to 100% (150) and monthly tests for HIV increased from 3% (5) to 8% (12) in Project ORCHID’s pilot female injecting drug user project. The number of condoms distributed monthly per female injecting opioids increased from an average of 26 in 2010 to 67 in 2012, and the number of needles and syringes distributed monthly increased from an average of 7 in 2010 to 93 in 2012. By 2012, 98% (53) of the HIV-positive individuals who injected opioids were registered in ART services.

Safe injecting behaviour, already frequent among people injecting opioids (i.e. non-sharing of needles and syringes in the most recent opioid injection) increased or remained at a stable level, according to behavioural surveys.17 Exposure to the harm reduction programme was associated with lower odds of having shared needles or syringes in the previous month.

Programme cost

In 2011–2012, Project ORCHID ear-marked 78 United States dollars (US$) at the NGO level for every person injecting opioids. A year of opioid substitution treatment cost US$ 237 per person injecting opioids – much less than in other opioid substitution treatment programmes in the region (such as in Cambodia).18 The actual cost to Project ORCHID at the NGO level of reaching every person injecting opioids in the year was even lower (US$ 67). In addition, for every person injecting opioids who was reached, the Project ORCHID programme spent an additional US$ 87 in intense field monitoring, training, capacity building and evaluation activities. Management-level costs for the national programme are not known.

Influence on national model and sustainability

Lessons from the Project ORCHID/Avahan implementation approach and business model have been integrated into NACP III. Project ORCHID/Avahan op-
Lessons from the field

Reducing harm from opioid injection in north-eastern India

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Lessons learnt and discussion

Project ORCHID reached over 80% (9011) of the targeted individuals injecting opioids with comprehensive and quality harm reduction services and influenced national policy on harm reduction. Although the north-eastern part of India is unique culturally and politically, several lessons may be valuable for other regions within and outside India (Box 2). In scaling up programmes in resource-poor settings, standardization of services and flexibility are both required. Donors and governments benefit from allowing experimentation with alternative models, as shown by our use of secondary distributors, outreach mobile clinics and nurses to provide clinical services. We learnt a lot from the participation of people injecting opioids in programme design and implementation. Service delivery through peer educators and programme management was led largely by the community of people injecting opioids, who developed innovative solutions in responding to crises, including overdose management, and other problems. The community, as custodian and steward of the programme through community programme committees, has helped to avoid lapses in service provision. One of the most important lessons we learnt pertained to the central role of data and direct field-level management. Peer educators and programme managers who are skilled in...
Collecting and using data can plan and monitor their daily work more effectively. When we empowered these individuals in the use of data and standardized field monitoring (in terms of time spent in the field and clearly defined roles), programme outputs improved considerably. Barriers to programme implementation and service uptake are best addressed by means of structured advocacy through community members and other highly influential individuals (e.g. church leaders). Despite the violence often faced by the community of people who inject opioids, community crisis response teams played an important role in creating an enabling environment. Scaled harm reduction programmes, including opioid agonist maintenance treatment, can be delivered at a reasonable cost if local entities manage and deliver the services and use economies of scale. The delivery of the harm reduction programme, including opioid agonist maintenance treatment, cost about the same as that of the national programme and substantially less than that of other harm reduction programmes in the region.14,15

In a country such as India, where programmes are often taken to scale by the government, a programme’s influence on national policy and sustainability is important. The harm reduction programme attained this type of influence by sharing its experiences and the results of programme activities with the government. The sharing of local experience provides a “seat at the table” in venues such as expert panels or guideline development workshops convened by the government.

The harm reduction programme did not succeed in all areas. It did not cover the diagnosis and treatment of hepatitis C because treatment costs were too high and India lacked a national strategy for these activities. Coverage with opioid agonist maintenance treatment is still suboptimal because government funding is scarce, and linkage of this form of treatment with government-provided treatment for HIV infection is also complicated by inadequate government infrastructure and human resources. Finally, prison inmates injecting opioids are not covered by the harm reduction programme.

Project ORCHID features a “harm reduction PLUS” model that includes the core interventions, locally relevant innovations and approaches to scale that place the emphasis on programme management and community mobilization of people who inject opioids. The Project ORCHID experience and the lessons learnt throughout serve as a valuable model for other organizations attempting to scale up harm reduction packages. ■

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阿片类药物注射人群综合减害计划推广：印度东北地区的经验教训

摘要

针对注射违禁药物的人群的一整套减害措施具有成本效益，这套措施同样适用于感染艾滋病毒（HIV）的注射人群，但是还没有在全世界范围内推广。在印度东北地区曼尼普尔邦和那加兰邦，注射非法药物，尤其是阿片类药物加剧了艾滋病毒感染的流行。这些邦需要推广减害计划，但在实施起来面临困难。

方法 2004 年，比尔和梅林达·盖茨基金会资助的项目 ORCHID在曼尼普尔邦和那加兰邦扩大减害计划规模。

当地状况 据估计，2003 年曼尼普尔邦和那加兰邦分别有 1 万和 1.6 万人注射毒品。注射毒品人群的艾滋病毒感染率在曼尼普尔邦为 24.5%，在那加兰邦为 8.4%。

相关变化到 2012 年，减害计划已扩大为每月平均 9011 个诊所外联系人（目标人数的 80%）；每月平均 1709 人就诊（目标人数的 15%，远高于 5% 的每月目标），每个计划参与者每月平均各发放 16 个针头和注射器。阿片受体激动剂维持治疗覆盖率为 13.7%，参加治疗之后 6 个月的保持率是 63%。艾滋病毒阳性参与者的抗逆转录病毒治疗的覆盖率是 81%。

经验教训 由社区拥有、因地制宜的创新与商业途径组成的减害模型可以很好地推广减害计划，并影响减害政策。ORCHID项目已经对印度的国家减害政策产生了影响，对减害指导方针的发展作出了贡献。

Résumé

Extension d’un programme global de réduction des risques pour les personnes qui s’injectent des opioïdes: les leçons du Nord-est de l’Inde

Problème Les kits de réduction des risques pour les personnes qui s’injectent des drogues illicites, y compris celles qui sont infectées par le virus de l’immunodéficience humaine (VIH), sont rentables, mais n’ont pas été généralisés. Dans les États du Nord-est indien de Manipur et de Nagaland, l’épidémie d’infection au VIH est induite par l’injection de drogues illicites, en particulier les opioïdes. Ces États avaient besoin d’intensifier les programmes de réduction des risques, mais ils étaient confrontés à des difficultés pour le faire.

Approche En 2004, la Fondation Bill-et-Melinda-Gates a financé le projet ORCHID pour intensifier un programme de réduction des risques dans le Manipur et le Nagaland.

Environnement local En 2003, on estimait que 10 000 à 16 000 personnes s’injectaient de la drogue dans le Manipur et le Nagaland, respectivement. La prévalence de l’infection par le VIH chez les personnes s’injectant des drogues était de 24,5% dans le Manipur et de 8,4% dans le Nagaland.

Changements significatifs En 2012, le programme de réduction des risques a été étendu à une moyenne de 9 000 contacts par mois en dehors des cliniques (80% de la cible), pour une moyenne de 1 700 visites cliniques mensuelles (15% de l’objectif, bien au-dessus de l’objectif de 5% par mois) et pour une distribution mensuelle moyenne d’aiguilles et de seringues de 16 par participant participant au programme. La couverture du traitement d’entretien par agoniste opioïde était de 13,7% et la rétention 6 mois après l’inscription était de 63%. La couverture du traitement antirétroviral pour les participants séropositifs était de 81%.

Leçons tirées Un modèle de réduction des risques, constitué d’innovations pertinentes au niveau local et appartenant à la collectivité, ainsi que d’approches commerciales, peut entraîner une extension satisfaisante du programme de réduction des risques et influencer la politique de réduction des risques. Le projet ORCHID a influencé la politique nationale de réduction des risques en Inde et a contribué à l’élaboration de recommandations en matière de réduction des risques.
Resumen

Ampliación de un programa completo dirigido a reducir los daños entre las personas que se inyectan opiáceos: lecciones desde el noreste de India

Situación Los paquetes de medidas para reducir los daños que se producen entre las personas que se inyectan drogas ilegales, incluidas aquellas infectadas por el virus de la inmunodeficiencia humana (VIH), si bien eficaces en relación con el costo, no se han ampliado a nivel global. En los estados de Manipur y Nagaland, situados en el noreste de India, la epidemia de infecciones por el VIH se debe a la inyección de drogas ilegales, en especial de opiáceos. Estos estados tuvieron que ampliar sus programas de reducción de daños pero, al hacerlo, se enfrentaron a diversas dificultades.

Enfoque En el año 2004, la Bill & Melinda Foundation fundó el Proyecto ORCHID con objeto de ampliar un programa de reducción de daños en Manipur y Nagaland.

Marco regional En el año 2003, se estimó que 10 000 y 16 000 personas se inyectaban drogas en Manipur y Nagaland, respectivamente. La prevalencia de la infección por el VIH entre los consumidores de drogas inyectables fue del 24,5% en Manipur y del 8,4% en Nagaland.

Cambios importantes Hasta el año 2012, el programa de reducción de daños se amplió hasta una media de 9011 contactos mensuales fuera de clínicas (80% del objetivo); una media de 1709 visitas clínicas (15% del objetivo, muy por encima del 5% de la meta mensual) y una distribución mensual media de 16 aquetas y jeringuillas por participante en el programa. La cobertura del tratamiento de mantenimiento con opioides agonistas fue del 13,7% y la permanencia 6 meses después de la inscripción, del 63%. La cobertura del tratamiento con antirretrovirales para los participantes seropositivos fue del 81%.

Lecciones aprendidas Un modelo de reducción de daños consistente en innovaciones basadas en la comunidad y relevantes a nivel local y en enfoques comerciales puede resultar en una ampliación positiva del programa de reducción de daños e influir en la política de reducción de daños. El proyecto ORCHID ha influido en la política nacional de reducción de daños en India y ha contribuido al desarrollo de directrices para la reducción de daños.

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