

Across the Asia Pacific region, large migrant populations moving both within nations and across international borders have been a challenge to study and provide healthcare services. Although countries' epidemiological profiles take different shapes, there are also clear similarities that help to understand the region's epidemic. While prevalence among the general population is generally low, key populations such as sex workers, male clients of sex workers, men who have sex with men and people who inject drugs continue to have extremely high prevalence rates at specific geographical locations. Along with these high-risk groups, each country in the Asia Pacific now classifies migrant populations, both international and internal, as groups vulnerable to HIV infection.

Being a migrant is not a risk factor itself but causes for poor health and HIV vulnerability among migrants include: discrimination, gender inequality, sexual violence and exploitation, dangerous working environments, poor living conditions and lack of access to education, social services and, maybe most important, lack of access to healthcare. Migrants often lack access to mainstream healthcare, education and social services. Many migrants do not have legalstatus within their destination countries and live in isolation, making it difficult to protect themselves against the people who might exploit them or sexually abuse them. Social isolation and other factorsmay lead migrants to participate in high-risk behavior, including use of drugs and alcohol. Male migrants away from home may alsopartake in the services of female sex workers, while the female migrants might look to sex work when they need money and have no social network to support them. All of these situations and activities increase the vulnerability of migrants to HIV infection.

Scope:This regional review is curtailed due to the breadth of the topic. Migratory trends, economic push-pull factors, HIV epidemiological data, legal and policy environments, and national/regional HIV programming are all essential elements of any discussion of HIV and migration. This review will touch on all of these elements in a limited fashion while focusing on two high-volume migratory corridors that reflect the current trends in HIV epidemiology among migrant and mobile populations in the Asia Pacific region.

Migration:Migrants can be defined in several ways, most simply as either international migrants (i.e. external migrants) or as internal migrants whohave left their home communities for a lengthy period of time but who remain in their nation of citizenship. Seasonal laborers, for instance, are ofteninternal migrants. External migrants may have legal status in their host country or may be undocumented. Undocumented international migrants are often estimated to comprise the majority of the migrant population in a given country, complicating efforts to collect data, conduct outreach and provide health services [1].

Mobility: Mobility is a broadly encompassing term defining people who may be on the move in the short or long term. An important distinction between migrants and mobile populations is that mobile populations may be on the move either voluntarily or involuntarily. Frequently, mobile populations are characterized by long-distance movement but withregular returns to their home communities (e.g. truck drivers) [1].

For a variety of reasons, data collection on migrant populations has lagged behind that of other vulnerable groups. The very nature of migration makes accessing individuals and compiling population-level data challenging. However, data show that in the Asia Pacific the most highly mobile migrant populations, such as truck drivers, fisherman and itinerant laborers have the highest prevalence of HIV among migrants [2].

Overview

In 2010, the Asia Pacific region had an estimated 53 million international migrants comprising 25% of the global migrant population. Migrants comprise an estimated 1.3% of the Asia Pacific population, not including internal migrants, which in some countries (particularly India) add substantially to the total migrant population figure [3,4].

Of particular concern in the region aremale mobile or migrant workers who are clients of sex workers (SW)who return home to their communities where they pass the infection on to their wives and other intimate partners. In order to effectively prevent this route for HIV transmission, it is essential to focus on gathering data about migrant movements and behaviors to better target outreach, prevention, care, and treatment. Without these efforts, it is feared that epidemics among relatively small, high-risk groups mayincite an HIV epidemic in thepopulations currently at lower risk.

Figure 1 displays the proportion of migrants amongnew and existing cases of HIV in selected Asia Pacific countries. In 2011, for instance, 31% of new cases in Bangladesh were found among migrants. However, it is important to note that migrants are often subject tomandatory HIV testing, so the disparity in prevalence between migrants and the general population may be biased [2,5].

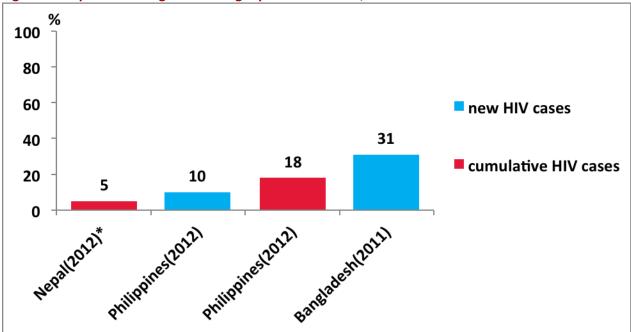


Figure 1: Proportion of migrants among reported HIV cases, selected countries: 2011-2012

Source [6]: Prepared by HIV and AIDS Data Hub for Asia and the Pacific, based on Bangladesh World AIDS Day Presentation 2012 http://www.bdnasp.net/index.php?option=com_content&view=article&id=104&Itemid=124: data retrieved on 14 Jan 2013; Nepal National Center for AIDS and STD Control at http://www.ncasc.gov.np/index1.php?option=information&id=38; National Epidemiology Center Philippines. (2012). Philippines HIV/AIDS Registry: December 2012

^{*} Migrant workers and spouses of migrants

Migration and Economic Corridors

The greatest volume of migration in the Asia Pacific occurs along established economic corridors. Although migrants are found in all corners of the region, focusing on behaviors in these corridors provides the best opportunity to collect data and scale-up interventions due to the volume of migrants traveling these routes. In Southeast Asia, the Greater Mekong Sub-region (GMS)includes several economic corridors along which the majority of migrant movement occurs. Within India the major economiccorridorsinclude: Ganjam to Surat, Mumbai and Thane; Bihar to Delhi, Haryana, and Punjab; and Eastern Uttar Pradesh to Mumbai and Thane. Other significant routes include: Nepal to India, Bangladesh to the Gulf States and Myanmar to Thailand.

Overseas Filipino Workers (OFW) provide a useful snapshot of current epidemiological trends among a large-volume migratory corridor and of related policy responses. HIV prevalence in the Philippines has remained low (<0.1% in 2012) [7] but estimates suggest the rate will double by 2015 [8]. The Philippines government has responded by including OFWs in the designated most at-risk populations and by initiating targeted programming among OFWs returning to the country. The government of the Philippines has long required HIV prevention education for overseas workers and has more recently renewed its commitment with the 5th AIDS Medium-Term Plan which seeks to provide more comprehensive HIV/AIDS-related services among migrant populations, including referral services in destination countries and reintegration programmes [8,9].

Economic Impact of Immigration

Several of the top ten countries receiving remittances world-wide are in the Asia Pacific. In 2010, India received \$55 billion in remittances (highest in the world) while the Philippines and Bangladesh received \$21.3 and \$11.1 billion, respectively. Perhaps more significant is the substantial proportion of GDP accounted for by remittances in some countries in the region: Nepal (23% of GDP), the Philippines (12%), Bangladesh (12%) and Sri Lanka (8%) [10]. The growing magnitude and importance of remittances to national economies in the region over the last decade illustrates that the scale of immigration is likely to increase as people seek economic opportunity internationally or otherwise far from their home communities.

Age and Gender of Migrants

Migrants are overwhelmingly young and increasingly female; women comprise about 50% of international migrants in the region [11,12]. For instance, between 2000-2010 the number of documented female migrants from Bangladesh seeking employment overseas increased from 454 to 24,838 [13]. However, due to the large number of long-distance truck drivers and other internal migrants, men still make up a majority of the total, broadly-defined, migrant population in the region.

Why Migrants Are Vulnerable to HIV: CommonlyConfronted Issues

While many migrants and mobile populations have an increased vulnerability to HIV, migrant status itself is not necessarily a risk factor for HIV and migrant groups face different levels of vulnerabilities.

The International Organization for Migration has illustrated the vulnerabilities faced by migrants and mobile populations as a cyclical process (see Figure 2)in which individuals face different types of vulnerability depending on what type of migrant they are and in which part of the cycle they find themselves. The cycle identifies points at which gains can be made in providing services and strengthening the policy environment.

Pre-departure conditions

Cross-cutting factors (age, gender, health, legal status, resources, social capital, etc.)

Conditions of return

Transit conditions

Host community conditions

Figure 2: Phases of Mobility Influencing HIV Vulnerability

Source [14]: "HIV and 'People on the Move': Six Strategies to Reduce Risk and Vulnerability During the Migration Process. Houar-Knipe, et al. International Migration.Oxford, 2013. ISSN: 0020-7985

Discrimination, Harassment and Isolation

Discrimination and stigma directed toward migrants is common across theregion and compounds the vulnerabilities caused by illegal status, lack of social support, and isolation. Whether it takes the form of a restrictive legal environment or is experienced in day-to-day interactions with host country citizens and authorities, the existing vulnerabilities, such as the likelihood of engaging in risk-taking behaviors, are magnified by this discrimination over time [15].A 2007 study in Thailand found that harassment by police was a primary reason migrants chose not to access healthcare [16].

Qualitative data gathered from migrants often reflects a general feeling of fear—during transit, in destination communities and, surprisingly, in source communities. Migrants passing through borders are exploited for bribes and have goods confiscated if they do not have receipts. Bangladeshi women have reported discrimination when returning home from working in India where it was assumed they engaged in sex work. One migrant woman from Bangladesh stated: "After coming back to Bangladesh I felt that people here don't like me, they hate me. They said that I came from Mumbai; they whispered that I am a sex worker. I lived in Mumbai, I should feel ashamed"[17].Living in environments permeated with fear of stigmatization, migrants are less likely to access healthcare resources (if they are available) where they might be turned away [18].

Sexual Violence

Generally, migrant women are more vulnerable to violence than their host country peers because of a lack of community protection, lack of knowledge of rights and relative isolation [2]. Sexual violence can take many forms including rape, being forced into the commercial sex industry and being forced to have sex without condoms increasing the risk to HIV infection [19]. Furthermore, migrants (men and women) experiencing violence and exploitation by employers typically have few legal options to help them.

Gender Inequality and Migration

The effect of gender inequality on vulnerability to HIV is a complex interaction but it is essential for HIV prevention and treatment programs to focus. Although gender norms vary among nations and regions, in general, women of low-income in the Asia Pacific experience inequality in their relationships with spouses or intimate partners, a position, which is usually compounded by a lack of education [20,21]. Such a position

renders women more vulnerable to HIV because they are often economically dependent upon the work of their migrant male partners; this is especially true in regions where there are few opportunities for women to earn income additional to that provided by their partner. The ramifications of gender power imbalance extendto women's freedom to negotiate condom-use with their husbands who may have had unprotected sex with sex workers and other casual partners in the course of their time away from home [22]. A study in rural India found that men with a migrant history were four times more likely to be HIV seropositive than men without a migration history; of the married men with a positive status 62% could be attributed to their out-migration history [23]. Multiple studies have documented the increased risk experienced by the wives of migrant men due to complex socio-cultural factors and isolation from ongoing HIV interventions [23-27] With interventions focused mainly on high prevalence areas where migrants seek work, the wives of migrants left in the community of origin are not the target of HIV outreach activities like prevention, education, counseling and testing [17].

As international migrants become predominantly female, the gender inequality experienced by female migrants is becoming an increasingly important area of focus. Most women, especially those who migrate to the Gulf States, will become domestic workers—an occupation that often lacks legal protections afforded in other, maledominated, occupations. In addition, domestic workers face the threat of sexual abuse and isolation through the control of their movements, making it difficult to access appropriate healthcare [28].

An important aspect of gender inequality in migration can be seen at the policy making level in Bangladesh, where restrictions were imposed on the freedom of women to migrate internationally (although the restrictions were amended in 2005). Due to these restrictions, estimates of the actual number of Bangladeshi women who have migrated internationally are 10-50 times the official estimate [13]. Without proper documentation and data, it is difficult for authorities to properly plan and provide for the needs of female migrants.

Lack of Healthcare Access

Many of the issues that migrants face culminate to limit access to healthcare services. For international migrants, in addition to legal barriers imposed by host governments, there are language barriers, movement restrictions imposed by employers and authorities, lack of knowledge of health issues and available services, and discrimination by service providers [19]. One study of migrant healthcare access in Thailand asked migrants to list the primary reasons they did not or could not access healthcare, particularly healthcare related to ART. Among the most frequently cited reasons were: fear of harassment and arrest, lack of proper documentation, and having no time off from work [16]. This is particularly concerning as migrants tend to see a decrease in health due to the vulnerabilities caused by the migrant lifestyle [11].

Refugees

Refugee populations are often overlooked inmobility and HIV-related issues. The Asia Pacific has some of the largest refugee camps in the world and in 2012 hosted an estimated 8.4 million refugees [29]. Many of the difficulties in providing services to refugees are well known; less understood is the magnitude in which refugee populations affect HIV incidence rates. Refugee populations are accepted as part of a broad understanding of the definition of migrants and mobile populations yet national HIV plans for migrant populations frequently do not address the needs of refugees. Understanding that refugee populations can affect HIV incidence in asimilar way as other migrant populationswill lead the way towards more effective HIV prevention and treatment programming among refugees [22].

Regional Migratory Corridors: Unique vulnerabilities by geography

The Greater Mekong Sub-Region (GMS)

Thailand, Yunnan and Guangxi Provinces inChina, Vietnam, Cambodia, Myanmar and Lao PDR

The Greater Mekong Sub-Region, comprising of Cambodia, China's Yunnan and Guangxi Provinces, Lao PDR, Myanmar, Thailand and Vietnam, is home to more than 3 million migrants. Primary migrant occupations are low-wage and include construction, agriculture, fishing, and domestic/household work. Available data indicates that HIV prevalence among migrants is generally higher than adult HIV prevalence in host and source countries. For instance, adult HIV prevalence in Thailand is 1.1%, but among migrantsworking in Thailand it is 2.5% and 1.2% respectively in Cambodian and Myanmar migrants[7, 15]. Figure 3 displays primary economic corridors for migrants in the GMS.

GMS: Thailand

As the epicenter of migration and the HIV epidemic in the Greater Mekong Sub-region, Thailand faces a challenging environment for effective interventions. Thailand's growing economy as well as its central geographic location in the GMS have long made it a hub of regional economic migration as well as a host country for refugees. The number of migrants in Thailand is estimated at more than 2.5 million (documented and undocumented) with up to 150,000 more displaced asylum-seekers; nearly 80% (1.5 million) of migrants are from Myanmar. Many migrants from Myanmar are considered refugees and live clustered in, or around, camps, in close proximity to the Thailand-Myanmar border. Poor living conditions and few opportunities for employment can increase the tendency to high-risk behavior [30].

A wide-ranging study of migrant populations in Thailand found HIV prevalence among migrants in ports and industrial sites to be as high as 6-10%, highlighting key vulnerable migrant groups for interventions [31]. Fishermen who frequent Thailand's ports are more likely to visit sex workers in the course of long periods of time away from their home communities, 63.1% of the Myanmar migrant fishermen in Ranong, Thailand reported having sex with a sex worker in the last 12 months. In addition, migrant fishermen in Thailand (and indeed across the region) are more likely to engage in drug and alcohol abuse than migrants in other occupational sectors. For example, a study found 27.7% of Myanmar migrant fishermen reported the use of addictive drugs in the last 12 months [30]. The difficulty of providing prevention and treatment services to such a highly itinerant population compounds their vulnerability to HIV infection.

GMS: China

In the northern region of the GMS, China's Yunnan and Guangxi provinces remain a focus of regional concern. A study of migrants in China that used Estimation and Projection Package (EPP) model to process prefecture and county-level surveillance data to generate HIV prevalence and epidemic trends for migrant populations in Chinaestimated that HIV prevalence was increasing among migrants from 0.032% in 2000 to 0.087% in 2011 [32]. The study concluded that, although prevalence was low, because of the large absolute number of migrants and their increased participation in high-risk behaviors, the migrant population would have a significant impact on the China's overall HIV epidemic [32]. Understanding how migrants can affect overall HIV prevalence through the experiences of other nations in the region, China has an opportunity to stem increasing incidence in the future.

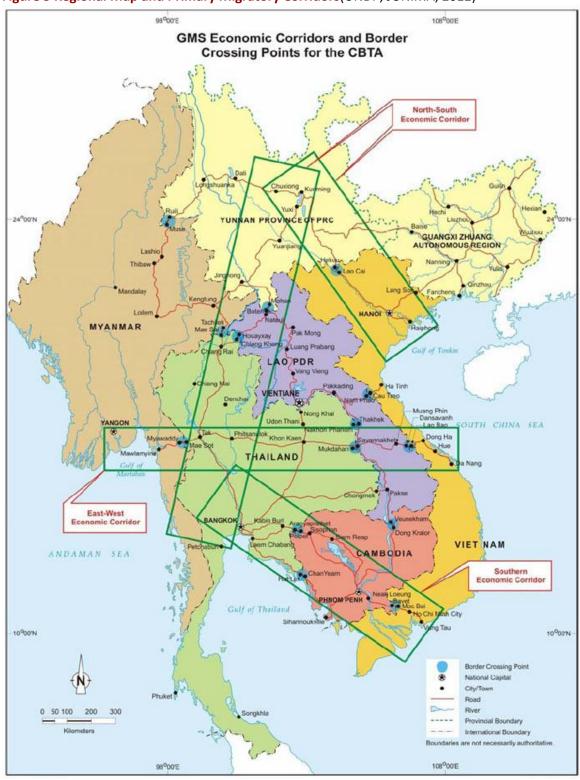
South Asia

Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka

South Asia includes many important migratory corridors including those that are primarily internal (such as those in India) and those with cross international borders. Nepali workers migrate overwhelmingly to India, while Bangladeshi laborers travel to the Gulf States in huge numbers. The complexity of migratory movements,

the huge volume of migrants, and the number of countries involved make holistic, comprehensive HIV-related migratory policy both essential and exceedingly difficult.

Figure 3 Regional Map and Primary Migratory Corridors (UNDP, JUNIMA, 2012)



India

NACO India claims that, "Migration is fueling India's HIV epidemic" [4]. Due to the size of India's migrant population and its current number of PLHIV, the highest in the region, events in India will be at the center of the Asia Pacific regional response. India is both a destination and a source of huge numbers of migrant laborers. It is estimated that 258 million Indian men are migrant laborers. Primary destinations of these internal migrant laborers include: Maharashtra, Andhra Pradesh, Haryana and Karnataka—states that also have high HIV prevalence [33]. The 2001 Indian census calculated that overall 314 million Indians (30% of all Indians) are internal migrants.

While the observed HIV prevalence among single male migrants in India is low; among truck drivers the prevalence is moderate. There is significant inter-site variation within the country, with some sites for single male migrants as well as truck drivers having 0% prevalence, but the highest reported prevalence for single male migrants is 3.85% and for truck drivers 8.06%. Over half of the truck driver sites have a prevalence of >2.0% [34].

Data from 2009 showed that internal male migrants in five states in India were far more likely to purchase sex than were males in the general population. Among migrants, 16-88% reported paying for sex while in comparison 2.2-15% of men in the general population reported paying for sex [22]. Overall, the majority of new HIV infections are transmitted through heterosexual contact and 39% of all estimated PLHIV are women [35]. The trend is for infection to spread from at-risk populations, like sex workers, through their clients, like truck drivers, to the general population [36].

Nepa

Nepal is primarily a migrant source country in the region, although in 2009 there were an estimated 818,700 migrants living in Nepal representing 3% of the Nepali population [5]. The value of remittances to the economy of Nepal cannot be overstated: in 2008, 23% of GDP was attributable to the remittances of migrant workers abroad. Although migration provides significant economic value to Nepal, as in Bangladesh and India restrictive migration policies exist both officially and unofficially. Nepal is unfortunately a major source of women and girls for traffickers in the region with 5000-7000 women and girls between the ages of 10-20 years old trafficked to cities in India every year. Overall, 77.3% and 14.5% of migrants from Nepal live in India or the Gulf States, respectively [5].

The HIV epidemic in Nepal is considered to be concentrated with the estimated 2012 national HIV prevalence at 0.30% [7]. Prevalence among key populations is far higher. However, in 2011 the greatest burden of estimated PLHIV was found among women (27.3%) and malelabour migrants (27%) [37]. According to the results of one study, between 22-38% of Nepali women trafficked to India returned to Nepal HIV-positive with girls who were trafficked while under the age of 15 at the highest risk of infection [38]. Of particular concern is the spread of HIV among the spouses of migrants who remain in Nepal. There is increasing evidence that not only the migrant workers, but their spouses as well have a higher risk and are also vulnerable for HIV infection [37]. Figure 4illustrates the burden of infection across risk populations and clearly demonstrates the burden among women.

70,000 Remaining female population Remaining male population 60,000 ■ Clients of FSWs Male labour migrants Estimated number of infections 50,000 ■ Female sex workers Other MSM MSW. TG and their clients ■ People who inject drugs 40,000 30,000 20,000 10,000 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014

Figure 4:Estimated distribution of HIV infections among risk groups aged 15-49 years: 1980-2015

Source [37]: (Ministry of Heath and Population, Nepal 2012)

Legal Status and the Rights of Migrants

All countries in the Asia Pacific have now listed migrants and mobile populations as vulnerable groups in their respective national HIV response plans. Although not all countries have signed onto various international agreements which affect the rights of migrants in transit or while in host countries, progress has been made as both the positive economic impact of migrant laborers and their effect on the spread of HIV has been acknowledged by national governments and country coordinating mechanisms. Countries like Fiji, China and Mongolia made progress towards zero discrimination on entry, stay and residence of migrants [39]. However, official ratification of international conventions protecting the migrants should not be taken at face value. Monitoring of enforcement and implementation is essential in guaranteeing migrants' rights.

In 2011, the nations of the GMS signed the Memorandum of Understanding on Joint Action to Reduce HIV Vulnerability Associated with Population Movement [15]. The Joint Action Plan details the ways countries will work together to improve treatment, care and support of migrants within their borders. These steps include: creating cross-border bodies to harmonize HIV/AIDS policies and referral protocols regarding migrants; drafting legislation which protects migrants from Cambodia, Lao PDR and Vietnam; and the creation of Migrant Worker Resource Centres (MRCs) to provide support and knowledge to migrants on a wide range of issues affecting their vulnerability to HIV infection. Harmonizing treatment policies is especially important because adherence to ART regimens is essential for positive long-term health outcomes and the reduction of the emerging HIV drug resistance (HIVDR).

Mandatory HIV Testing

Many source countries in the region (e.g. India, Indonesia, Nepal, the Philippines, Bangladesh) have enacted policies protecting their citizens from mandatory HIV testing but enforcement is problematic and testing is often a condition for employment. Additionally, a number of organizations have projects focused on easing access to healthcare for migrants and for an end to mandatory HIV testing, for example the Coordination of Action Research on AIDS and Mobility (CARAM Asia). The facilities where migrant testing is currently performed, whether in private clinics or government-approved programs, do not usually provide follow-up counseling and

frequently migrants are not informed of their test results [22]. Furthermore, for those migrants travelling internationally, the period of pre-departure testing and screening is a missed opportunity for counseling and education of migrants. Many studies show that migrants' knowledge of HIV is poor yet the period in which it would be easiest to educate migrants on HIV and HIV prevention is underutilized [11].

Despite repeated calls by international migrant rights organizations for such violations of human rights to end, mandatory testing is ongoing. The nations of the Gulf Cooperation Council (Saudi Arabia, Qatar, Bahrain, Kuwait, Oman and the UAE) are increasingly important destination countries for migrants from the Asia Pacific and each of them require HIV testing when migrants renew their visas. Those who test positive are summarily deported and their status is shared with testing clinics around the region where they are designated as "permanently unfit" for employment. Among the issues surrounding mandatory testing is that migrants often contract HIV in the host country—but are treated as criminals through detention and deportation. Compounding the problem of mandatory testing and deportations is the fact that many migrants who test HIV-positive are not notified of their status [19].

Migrant Access to Anti-Retroviral Therapy (ART)

With the identification of migrant populations as key populations at-risk for HIV in mostAsia Pacific nations, strides have been made in providing ART to migrants and other mobile populations. Migrants who are living with HIV have the burden of double stigma; they are discriminated against for being a migrant as well as having HIV. This hinders their access to HIV prevention, care and treatment services including access to ART. Health care providers do seem discriminate against patients and there is usually a lack of reliable and affordable access to health care. ART treatment in particular requires registration in local residential area of the individuals but unfortunately the nature of migrants does not permit access to medicines from any of such ART center. Hence it increased their reliability on privately available ART which are costly. There are economic concerns like the costs of medical treatment; cost of transportation to the healthcare facilities and the fear of loss of income and these factors also hamper migrants' access to health care. Other barriers to health care include the fear of being arrested and harassed by the police when travelling; sometimes they are forced to pay bribes. There are also work related issues that are more specific for migrants: the employers have a lot of power over the migrants, sick leave is rarely allowed and many migrants work long shifts; this makes it almost impossible to follow ART [15, 16]. For seafarers and plantation workers the physical distance is also a barrier to follow ART.

Improving access requires a two-pronged approach that includes national treatment programs and cross-border cooperation between destination and source countries. Approaching ART access in this way allows treatment programs to reach internal and international migrants while cross-border cooperation improves adherence to ART after returning to home communities across an international border.

Knowledge of ART and how one can benefit from treatment tends to be low among migrant populations further pointing to the need for increased outreach activities. One study documented that only 10% of Nepalese migrants in India were aware of the availability of HIV treatment [17]. These low rates of ART knowledge were found across the region: just 14% of spouses in Nepal had heard of ART while just 20% of study respondents had heard of ART in Bangladesh [40].

As the primary migrantdestination country in the GMS, Thailand's policies play an outsize role in confronting the spread of HIV among migrants in the region. Thailand's national HIV response strategy for 2012-2016 guarantees the provision of ART for any individual with HIV regardless of migratory status [41]. A migrant sub-population that has garnered the attention of Thai HIV treatment initiatives is migrant women who are pregnant. In response to high prevalence among pregnant migrant women, the Thai government enacted programs specifically targeting pregnant migrant women who are HIV-positive [42]. However, due to the high mobility of

migrant women, adherence to treatment regimens was difficult to maintain [31]. GMS nations are continuously working on cross-border strategies against language barriers, treatment variation and continued stigmatization provide better access to ART.

Countries in South Asia face similar barriers to ensuring ART to migrants and havebeen making efforts to deepen their knowledge and strengthen cross-border cooperation. Cost of treatment also continues to be a barrier even in places where ART is free, such as at government-run clinics in India, because hidden costs such as transportation to clinics remain [43].

Much like the countries of the GMS, Bangladesh, Nepal and India are moving toward improved regional cooperation on HIV in migrant populations but more work remains to be done in South Asia. For instance, national policies do not address cross border HIV vulnerability and national programming in these nations do not yet contain migrant inclusive strategies to confront HIV in both source and destination regions [44].

Countries also face barriers for internal migrants needing consistent treatment. For example, India's ration card system, which allows individuals to access healthcare, among other social services in their state, are often not accepted in other states—making ART adherence problematic for internal migrants [43].

Key Messages on HIV and Migration

Vulnerability Reduction and Risk Reduction

Migration *per se* is not a risk factor for HIV infection. However, a wide variety of underlying factors and conditions associated to migration make migrants more vulnerable and more likely to engage in risky behaviors. Interventions that target these root causes are a necessary aspect of HIV prevention. Root causes include shaky legal status for migrants, controls on freedom of movement in destination countries and poverty, compounded by lack of health care access. Addressing poverty and violence against women at the same time as addressing condom usage, for instance, will aid in closing the gap between vulnerability and risk reduction programming. Many countries can offer social protection schemes and set up bilateral agreements for cross border assistance on social protection. For internal migrants specifically, strengthening social protection schemes and making it easier for migrants to access their schemes even when they are not on home soil is extremely critical. For single women particularly, there could be shelters and access to sexual, reproductive health care and other protection mechanisms that guarantee equal rights in the source as well as destinations.

Healthcare Access

Relaxing restrictions on migrant access to national healthcare services will help maintain good health as well as promote prevention and treatment of HIV. In addition, STIs such as syphilis that heighten the risk of HIV transmission can be treated. Promoting access to basic healthcare for migrants in destination regions will require multi-sectoral, cross-border cooperation. Strengthening the ART tracking within a country for internal migrants will facilitate the reduction of loss to Follow Up. For cross border migrants this issue is far more complex and political and this will continue to plague this sector unless a strong and open partnership exists between countries.

End to gender inequality in migration

Female migrants suffer injustice disproportionately in comparison to males. Women often face mandatory pregnancy testing and punitive action in destination countries if they become pregnant and are frequently barred from seeking reproductive health services. If they do seek healthcare for pregnancy, they risk termination of their employment and being deported. Though all the nations of Southeast Asia are signatories to the

Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) these and other discriminatory actions towards women continue [19].

Comprehensive Cross-Border Strategies

Rights-based pre-departure testing and screening is an excellent opportunity to provide HIV prevention, education and outreach services. Nations in the region need to develop and effectively implement policies that take advantage of that opportunity with pre-departure training and targeted interventions at high-volume transit sites such as ports and border crossings. These interventions, like HIV testing, should be voluntary and not arequirement when crossing borders. Indonesia, the Philippines and Cambodia have mandatory predeparture training that is supposed to include a discussion of HIV risk and prevention yet the protocol is not always followed [19]. Nations around the region need to agree to a standardized pre-departure training for all migrants which will facilitate delivery of appropriate HIV prevention information as well as knowledge of migrant rights [22,45]. The host countries should guarantee access to HIV services as well. Thailand has taken steps to givePLHIV living in Thailand access to ART regardless their nationality. Agreements with neighboring countries like Cambodia are made to allow migrants tobring a three-month supply of ART when returning to their home-country [41]. International bodies such as the South Asian Association for Regional Cooperation (SAARC) and the Association of Southeast Asian Nations (ASEAN) must continue to address issues of HIV and migration both diplomatically and through the creation of regional programming and harmonized national policies [46]. The goal to have HIV services seamlessly crossing borders and to create a continuum of care for migrants starts with international agreements and taking migrants and PLHIV out of illegality.

Strengthen Data Collection

While the great majority of national AIDS control organizations have placed migrants among key populations at risk, little is known about migrants in comparison to other key populations. National governments and HIV/AIDS organizations must make a concerted effort to collect data on migrant demographics, patterns of movement, social and sexual behavior, prevalence and barriers to healthcare access [46]. Such data is essential for developing an appropriately targeted response. Using quality data, programs can use limited resources in the most cost-efficient manner to positively impact the rising number of HIV positive migrants and their partners in source countries.

Interventions Must Be Nuanced

Interventions should be nuanced for migrants' different backgrounds and needs. Seafarers, for instance, require a very different intervention approach from domestic workers. Without a multifaceted rights-based approach addressing migrant populationswithin their specific context, interventions run the risk of missing key portions of the mobile population. However, targeted interventions must be prioritized to those migrant populations that are most vulnerable in order to use limited resources cost effectively. For example, men who pay for sex represent the largest infected population in Asia and male migrants pay for sex at a higher frequency than the general population and, therefore, put their wives and partners at increased risk. Although married women have traditionally been viewed as a low-risk population, because in general they only have sex with their husbands, it is essential that interventions be targeted specifically to prevent intimate partner transmission to them [2,20]. Interventions at transit points are an effective way to reach mobile populations. Railway stations, bus stations and heavily trafficked corridors should be identified for outreach and prevention before migrants are diffused among the broader population.

References

- 1. LoweD, &FrancisC. (2006). Protecting people on the move. *Family Health International*. Retrieved from: http://www.hivpolicy.org/Library/HPP000953.pdf
- 2. Asia-Pacific RCM. Situation report on international migration in South and South-West Asia. Retrieved from: http://www.rcm-asiapacific-un.org/pdf/Situation_report.pdf
- 3. ESCAP. (2012). *Statistical yearbook for Asia and the Pacific 2012: Country profiles*. Retrieved from: http://www.uis.unesco.org/Library/Documents/statistical-yearbook-asia-pacific-country-profiles-education-2012-en.pdf
- 4. Sinha K. (2013). Mass economic migration: The greatest threat to HIV control in India. *BMJ [Internet]*, Jan 29, 346,f474–f474. Retrieved from: http://www.bmj.com/content/346/bmj.f474.full?sid=1096940c-4a48-48d4-aec8-22bd24027778
- 5. UNDP, ILO. (2010).*HIV / AIDSand mobility in South Asia*.Retrieved from: http://www.migration4development.org/sites/m4d.emakina-eu.net/files/hiv_and_mobility_in_south_asia_web.pdf
- 6. HIV and AIDS Data Hub for Asia and the Pacific. *Proportion of migrants among reported HIV cases, selected countries: 2011-2012*. Retrieved from: https://www.slideboom.com/presentations/download/838278/Migrants.
- UNAIDS. (2013). Global report: UNAIDS report on the global AIDS epidemic, 2013. Retrieved from: http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2013/gr2013/UNAIDS_G lobal_Report_2013_en.pdf
- 8. PNAC. (2012). *Global AIDS response progress report*.Retrieved from: http://www.unaids.org/en/dataanalysis/knowyourresponse/countryprogressreports/2012countries/ce_PH_Narrative_Report.pdf
- 9. UNRTF. (2008). HIV / AIDS & mobility in South-East Asia, 66. Retrieved from: http://www.undp.org/content/dam/undp/library/hivaids/English/HIV-2008-Mobility-SoutheastAsia.pdf
- 10. APMM (2013). Global migration report 2012: Trends, patterns and conditions of migration, 1–136. Retrieved from:
 - http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCYQFjAA&url=http%3A%2F%2Fwww.apmigrants.org%2Fdownloads%3Fdir%3DJSROOT%252FPublications%252FFeatured%2BResearches%26download_file%3DJSROOT%252FPublications%252FFeatured%2BResearches%252FGMR%2B2012.pdf&ei=6jljU7m3NMbsrAfO5oHYBg&usg=AFQjCNFbvfuaCGQEoVZ6JryB6JsGeKlrBw&bvm=bv.62922401,d.bmk
- 11. Calderon, J., Rijks, B., & Agunias, D. (2012). *Asian labour migrants and health: Exploring policy routes*. Retrieved from http://www.migrationpolicy.org/pubs/MigrationandHealth.pdf
- 12. Henning S. (2011). *International migration and development in Asia and the Pacific: Key issues and recommendations for action*, June, 28–30. Retrieved from: http://www.un.org/esa/population/migration/presentation-escwa.pdf
- 13. IOM. (2012). HIV and Bangladeshi women migrant workers: An assessment of vulnerabilities and gaps in services. Retrieved from:

 http://www.aidsdatahub.org/sites/default/files/documents/Bangladeshi HIV report.pdf
- 14. Houar-Knipe, M., Zalduondo, B., Samuels, F., Molesworth, &K., Sehgal, S. (2013). HIV and 'people on the move': Six strategies to reduce risk and vulnerability during the migration process. *International Migration*, Oxford, ISSN: 0020-7985
- 15. UNDP, JUNIMA, & ADB. (2012). Meeting report: Consultation on the memorandum of understanding to reduce HIV vulnerability associated with population movement. Retrieved from: http://www.aidsdatahub.org/sites/default/files/documents/GMSMOU_Consultation_Meeting_Report_2012.pdf

- 16. Saether, S.T., Chawphrae, U., Zaw, M.M., Keizer, C., & Wolffersl. (2007). Migrants' access to antiretroviral therapy in Thailand. *Tropical Medicine & International Health*, 12(8), 999–1008. doi:10.1111/j.1365-3156.2007.01879.x
- 17. Samuels, F., Niño-Zarazúa, M., Wagle, S., Sultana, T., & Sultana, M.M. (2011). *Vulnerabilities of movement: Cross-border mobility between India, Nepal and Bangladesh*, November. Retrieved from: http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Vulnerabilities+of+movement:+cross-border+mobility+between+India,+Nepal+and+Bangladesh#0
- 18. Samuels, F., Wagle, S., Sultana, T., Sultana, M.M., Kaur, N.,&Chatterjee, S. (2012). *Stories of harassment, violence and discrimination: Migrant experiences between India, Nepal and Bangladesh*. Retrieved from: http://www.aidsdatahub.org/sites/default/files/documents/Stories of Harassment.pdf
- 19. Sciortino, R. (2013). Labour migration, gender, and sexual and reproductive health and rights. *Arrow for Change*, 19(1), 1–28. Retrieved from: http://www.arrow.org.my/uploads/20121218025358 v19n1.pdf
- 20. UNAIDS. (2009). *HIV transmission in intimate partner relationships in India*. Retrieved from: http://www.hivpolicy.org/Library/HPP001633.pdf
- 21. Commission on AIDS in Asia. (2008). *Redefining AIDS in Asia: Crafting an effective response*. Retrieved from: http://www.aidsdatahub.org/sites/default/files/documents/Report_of_the_Commission_on_AIDS_in_Asia_2008.pdf.pdf
- 22. UNAIDS. (2011). HIV in Asia and the Pacific: Getting to zero. Bangkok, UNAIDS. Retrieved from: http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/20110826_AP GettingToZero en.pdf
- 23. Saggurti, N., Mahapatra, B., Sabarwal, S., Ghosh, S., & Johri, A. (2012). Male out-migration: A factor for the spread of HIV infection among married men and women in rural India. *PloS One*, 7(9), e43222. doi:10.1371/journal.pone.0043222
- 24. Sarin, E., Nayak, H., Das, M., &Nanda, P. (2013). HIV testing among pregnant wives of migrant men in a rural district of India: Urgent call for scale up. *Women Health*, *53(4)*, 369–83.
- 25. Saggurti, N., Mahapatra, B., Swain, S.N., &Jain, A.K. (2011). Male migration and risky sexual behavior in rural India: Is the place of origin critical for HIV prevention programs? *BMC Public Health*, 11, Suppl 6. doi:10.1186/1471-2458-11-S6-S6
- 26. Ganju, D., Mahapatra, B., &Saggurti, N. (2013). Male migrants' non-spousal sexual partnerships in the place of origin: An in-depth investigation in two rural settings of India. *Culture, Health & Sexuality*, 15(3), 341–57. doi:10.1080/13691058.2012.756932
- 27. Dave, S.S., Copas, A., Richens, J., White, R.G., Kosambiya, J.K., Desai, V.K., & Stephenson. J.M. (2012). HIV and STI prevalence and determinants among male migrant workers in India. *PloS One*, 7(8), e43576. doi:10.1371/journal.pone.0043576
- 28. UNDP Regional Centre in Colombo. *HIV vulnerabilities of migrant women: From Asia to the Arab States*. 2008. Retrieved from: http://www.caramasia.org/docs/publications/reports/HIV Vulnerabilities of Migrant Women.pdf
- 29. UNHCR. (2012). *UNHCR global report 2012: Asia and the Pacific regional summary*. Retrieved from: http://www.unhcr.org/cgi-bin/texis/vtx/home/opendocPDFViewer.html?docid=51b1d6250&query=asia%20pacific
- 30. IOM. (2008). *Migration and HIV/AIDS in Thailand : A desk review of migrant labour sectors*. Retrieved from: http://publications.iom.int/bookstore/free/Migration and HIV AIDS in Thailand.pdf
- 31. Jitthai,N., Yongpanichkul, S.,&Bijaisoradat, M. (2010). *Migration and HIV/AIDS in Thailand: Triangulation of biological, behavioural and programmatic response data in selected provinces*. Retrieved from: http://www.aidsdatahub.org/sites/default/files/documents/Migration_and_HIV_AIDS_in_Thailand_Triangulation of Biolgical. IOM, MOPH, UNAIDS and CSEARHAP (2010).pdf
- 32. Meng, X., Wang, L., &Chan, S., (2011). Estimation and projection of the HIV epidemic trend among the migrant population in China. *Biomedical Environmental Science*, 24(4). doi:10.3967/0895

- 33. Saggurti, N., Verma, R.K., Jain, A., RamaRao, S., Kumar, K.A., &Subbiah, A. (2008). HIV risk behaviours among contracted and non-contracted male migrant workers in India: Potential role of labour contractors and contractual systems in HIV prevention. *AIDS LondEngl*, Dec, 22, Suppl 5, 127–136.
- 34. NACO. (2012). HIV sentinel surveillance 2010-11: A technical brief.Retrieved from: http://www.naco.gov.in/upload/Surveillance/Reports & Publication/HSS 2010-11_Technical Brief_30 Nov 12.pdf
- 35. NACO, DAC. (2013). *Annual Report 2012-2013*. Retrieved from: http://www.naco.gov.in/upload/Publication/Annual Report/Annual report 2012-13 English.pdf
- 36. AVERT. (2013). HIV & AIDS impact in India. Retrieved from: http://www.avert.org/hiv-india.htm
- 37. Ministry of Health and Population. (2012). *Nepal Country Progress Report 2012*. Retrieved from: http://www.unaids.org/en/dataanalysis/knowyourresponse/countryprogressreports/2012countries/ce_NP_Narrative_Report.pdf
- 38. Silverman, J.G., Decker,M.R., Gupta, J., Maheshwari, A., Willis, B.M., & Ra,A. (2007). HIV prevalence and predictors of infection in sex-trafficked Nepalese girls and women. *The Journal of the American Medical Association*, *298*(5), 536–42. doi:10.1001/jama.298.5.536
- 39. UNAIDS, HIV and AIDS Data Hub for Asia and the Pacific, UNODC, UNFPA, & UNDP. (2013). *Punitive laws hindering the HIV response in Asia and the Pacific in July 2013*.
- 40. Sultana, T., Das, A., Sultana, M.M., Samuels, F., & Zarazua, M.N. (2011). *Vulnerability to HIV & AIDS: A social research on cross border mobile population from Bangladesh to India*, 0–56. Retrieved from: http://www.care-emphasis.org/report/5_5_Vulnerability to HIV & AIDS, A social Research on Cross Border Mobile Population from Bangladesh to India- Report.pdf
- 41. UNAIDS. (2012). Thailand and neighbouring countries get together to help provide HIV treatment for thousands of migrants in need. Retrieved from: http://www.unaids.org/en/resources/presscentre/featurestories/2012/may/20120502seamigrants/
- 42. IOM. (2009). Financing healthcare for migrants: A case study from Thailand.
- 43. Todrys, K.W., & Amon, J.J. Within but without: Human rights and access to HIV prevention and treatment for internal migrants. *Globalization and Health*, 2009, 5, 17. doi:10.1186/1744-8603-5-17
- 44. Shantamay, C., (2012). Enhancing mobile populations' access to HIV & AIDS services, information and support (EMPHASIS).
- 45. ILO, IOM & UNAIDS. (2008). *HIV and international labour migration*. Retrieved from: http://www.iom.int/jahia/webdav/shared/shared/mainsite/activities/health/hiv-population/ILO-IOM-UNAIDS-Policy-Brief-HIV-and-International-Labour-Migration-2008.pdf
- 46. Samuels, F., &Wagle, S. (2011). Population mobility and HIV and AIDS: Review of laws, policies and treaties between Bangladesh, Nepal and India, (June). Retrieved from: http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7108.pdf