



The effects of an HIV and AIDS project on migrants at source and destination sites in Nepal, Bangladesh and India: findings from a quasi-experimental study

Fiona Samuels, Miguel Niño-Zarazúa, Mirza Manbira Sultana, Prokriti Nokrek, Navneet Kaur, Nabesh Bohidar and Umesh Gahatraj

Key messages

- Analysis of the 5-year EMPHASIS project in Nepal, Bangladesh and India suggests that HIV and AIDS prevention programmes that focus on peer education for migrants within both their source and destination countries are vital to increase their knowledge on the risks of infection, reduce behaviour that increases these risks and expand their HIV-related service uptake.
- Analysis finds strong evidence that EMPHASIS services have had a positive impact on HIV and AIDS knowledge and communication, on referral mechanisms, on sexual behaviour and condom use and on the creation of an enabling environment to improve working conditions in destination locations and address stigma against migrants and people living with HIV at source locations.
- Effective referral mechanisms that straddle borders can be developed through context-specific partnerships and engagement and through capacity building of HIV and AIDS service providers.
- As well as interventions to prevent HIV infection, it is also essential to create an enabling environment by addressing migrants' rights and entitlements and their safe mobility and by tackling the stigma they face to reduce their vulnerability.

South Asia is home to 2 to 3.5 million of the world's estimated 35.3 million people living with HIV and AIDS (UNAIDS, 2013). While HIV prevalence is low among the general population, it is far higher among most-at-risk groups, such as injecting drug users, male and female sex workers and their clients and men who have sex with men, as well as migrants and their spouses.

While mobility itself is not seen as vulnerability factor for HIV infection, the unsafe conditions under which people migrate exposes them to a greater risk of infection. Not only do policies and programmes in receiving or host countries hinder migrants from accessing health and social services, but cultural factors and their legal status may contribute to the discrimination they face and act as a further barrier to accessing services. Difficult working conditions, loneliness and feelings of powerlessness, together with peer pressure, may lead migrants to engage in risky sexual behaviours that leave them vulnerable to HIV and AIDS.

Similarly, those left at home may also face loneliness and exclusion. They may engage in risky behaviours for livelihood and survival purposes – particularly if the hoped-for remittances from migrants do not materialise – and can also be exposed to HIV infection by returning spouses or partners who may not be aware of their own HIV infection. In addition, if these source communities are not well targeted for HIV and AIDS prevention activities, migrants who come home may well find that their communities are ill-prepared to deal with their potential HIV and AIDS-related needs and vulnerabilities (see, for example, IUSSP, 2009; IOM, 2002).

This briefing focuses on the situation across three South Asian countries, Nepal, Bangladesh and India.

- In Nepal, approximately 50,000 people (0.3% of the total population) were living with HIV and AIDS in 2012, 27% of whom were migrants (UNAIDS, 2012).¹ The majority of Nepalis migrate to India, which has the highest number of people living with HIV (2.1 million) in South Asia (UNAIDS, 2013). According to recent estimates, there are approximately one million Nepalese working in India (GoN, 2004).

- In Bangladesh, with an estimated 8000 people living with HIV (PLHIV), the HIV prevalence is below 0.1% in the general population but rises to 0.7% among the most-at-risk groups, many of whom are also migrants (UNAIDS, 2013 and GoB,2011).
- There are no exact figures on migration to India, although the country's 2001 census found that there were approximately 3 million Bangladeshi migrants in India at that time, representing 60% of total migrants. People from India and Bangladesh regularly cross the porous borders between the two countries through many unofficial transit points – a process eased by the ethno-cultural similarities of the population on both sides of the border.

EMPHASIS (Enhancing Mobile Populations' Access HIV and AIDS Services, Information and Support), led by CARE International UK, was a five-year project (2009-2014²), established to reduce HIV vulnerability and address the challenges faced by cross-border migrants. With a special focus on women, EMPHASIS aims to demonstrate effective good-practice models for HIV prevention, care and support; the impact of the enhanced capacity of government and other service providers; and evidence-based advocacy to reduce HIV vulnerability of populations on the move from Bangladesh and Nepal to India. In addition to these existing interventions, a range of studies have been conducted by EMPHASIS with oversight provided by the Overseas Development Institute (ODI) (see e.g. Sultana et al., 2011; Wagle et al., 2011; Samuels et al., 2012; Samuels and Wagle, 2011; Samuels et al., 2011; Sultana and Kaur, 2013; Sarin, 2013; Samuels et al., 2013) to explore the impact of these interventions over time. Amongst other studies, a baseline (carried out between November 2010 and March 2011) and an endline study (undertaken between February and March 2014) were conducted with migrants and family members of migrants in India, Bangladesh and Nepal. This briefing focuses on the endline study, drawing on the analysis by Ravesloot and Banwart (2014). We provide an overview of the EMPHASIS interventions, followed by a description of the methodology, a profile of respondents and key findings, before concluding with some key programme and policy recommendations.

¹ To put this into context, approximately 15% of Nepalese are migrants (World Bank, 2011).

² It ends in July 2014.

1 EMPHASIS Interventions

The first year (2009) of EMPHASIS activities focused on knowledge building and included carrying out a baseline survey, a service and stakeholder mapping exercise and a vulnerability study. As such, implementation of activities started from year two, 2010, with a different time frame in the three countries.

EMPHASIS provided HIV and safe mobility information and support services at source sites in Bangladesh and Nepal, in transit sites between India and Nepal and in destination sites in India. As of April 2014, a total of 351,423 migrant and their families had been reached at source, transit and destination sites through a range of interventions. These services included, among other things, referrals, with a total of 21,577 people referred to services including those for sexually transmitted infections (STIs) and voluntary counselling and testing (VCT); of these, 12,437 people accessed the services on offer. An additional 10,486 individuals from organisations such as health-service providers, local government, law enforcement agencies, stakeholders at village/transit levels and implementing partners, received training and capacity building (Table 1).

An important aspect of EMPHASIS was the development and testing of models of service provision, particularly for cross-border migrants. The development of cross-border referrals between Nepal and India for people on antiretroviral therapy (ART) was facilitated by informal NGO partnerships and through linkages with government service providers in Nepal and India. Context-specific models to provide VCT and STI services were also developed, including the provision of these services at government health facilities, at STI satellite clinics in Bangladesh and through mobile services in India and Nepal.

EMPHASIS also provided safe mobility interventions at the India-Nepal border based on a range of peer education activities. For example, awareness-raising activities were carried out with rickshaw pullers, hoteliers and law enforcement agencies to reduce the general harassment faced by migrants. Support was also provided to migrants at transit locations by setting-up an emergency fund³ and a migrant information desk. Spouse groups in

³ The emergency fund was developed at transit locations in India and Nepal; funds were collected from migrants and other local people. The fund is used by victims of harassment and is administered by local stakeholders, e.g. hoteliers and transport workers. It is kept in a central and secure location under lock and key.

source locations received support to open bank accounts and the project worked with banking and financial institutions at both source and destination locations to promote the effective use of remittances. EMPHASIS carried out activities to build awareness on the rights and entitlements of employees by sensitising employers on the rights of migrants and forming workers groups at destination; by working with women groups, youth groups, adolescent groups and the children of migrants by encouraging them to visit drop-in centres; and by linking them more closely to institutional services such as vocational training and formal education providers. Given the context for migrants at their destination, the facilitation of women's groups has been critical in building greater awareness.

EMPHASIS implemented all of these interventions through a unique information highway, i.e. by providing identical social and behaviour-change communication (SBCC) materials at different stages of the migration process, coordinating within field teams and through stakeholders and reaching at-risk individuals throughout the continuum of mobility, i.e. across source, transit and destination sites. The approach encompassed a broad range of activities catering to the needs of cross-border mobile populations in the migration cycle across two specific migration corridors⁴, with different strategies for each.

This innovative strategy was bolstered by evidence-based advocacy that included a series of consultations at national and regional levels around issues of migration and development. These proved instrumental in attracting the policy attention of different stakeholders. Similarly, by carrying out studies on issues related to, among other things, HIV vulnerability, HIV-related services and living conditions at destination, a number of lessons were captured and used to advocate for improved care and support services, particularly for PLHIV throughout the migration cycle. Findings were also used to place migration as a development agenda at national and regional levels.

⁴ Bangladesh to India (Jessore /Satkhira to Kolkata , Mumbai , Delhi) and Nepal to India (Accham/Kanchanpur to Mumbai/Delhi)

Table 1: EMPHASIS interventions (August 2009-July 2014)

Interventions	Sub-components	Target population	Number of beneficiaries (April 2014)	Location
<p>HIV and safe mobility information and support services</p> <p><i>Outcomes : anticipated and actual: Increase knowledge on HIV and AIDS, condom use, safe mobility, and availability of HIV related services.</i></p> <p><i>Reduce risk of HIV through information and behaviour change</i></p>	<p>Peer education through door-to-door outreach (one-to- one and group interactions)</p> <p>Drop-in-centres/ community resource centres - 37 (static) + mobile drop-in-centres(4 to 5 /month)</p>	Migrants and family members	345309	<ul style="list-style-type: none"> Bangladesh as source country: Jessore and Satkhira Indo-Bangladesh border areas: Benapole and Bhomra India as destination: Delhi, Mumbai and West Bengal Indo-Nepal border areas: Gaddachauki/ Banbasa and Dhangadi/ Gaurifanta Nepal as source country: Accham and Kanchanpur
	<p>Referral services</p> <p>Cross-border referral for ART</p> <p>VCT, STI and health camps</p> <p>STI satellite clinics at community clinics and drop-in-centres</p>	Migrants and family members specifically those with STI symptoms and clients diagnosed with STIs	12,437 (+ 100 ART cross border referrals as of March)	<p>All intervention areas in Bangladesh, India and Nepal</p> <p>Between India and Nepal for Nepalese migrants in India</p> <p>All intervention areas in India and Nepal</p> <p>All intervention areas in Bangladesh</p>
	<p>Creating and facilitating women/spouse groups, community support groups/community groups and cultural organisations</p>	Migrant women and spouse of migrants, community stakeholders including local leaders	Total = 116 groups (Bangladesh:35; India: 35; + Nepal: 46)	Selected intervention areas in India , Bangladesh, Nepal
<p>Capacity building of partners and stakeholders</p> <p><i>Outcomes: increase access to HIV- and STI-related services</i></p>	<p>Training and sensitisation of existing service providers.</p> <p>Capacity building of partners, community-based organisations (CBOs), Self-help groups (SHGs), and community support groups (EMPHASIS had a target to improve capacity of 30 organisations but has been able to build the capacity of more than 99 organisations by project end)</p>	Existing service providers (e.g. health service providers, local police officials, border police, hoteliers, transport workers, employers, networks of PLHIV, CBOs, SHGs, and community support groups	10486 individuals of over 99 organisations	All intervention areas in Bangladesh, India and Nepal
<p>Evidence based advocacy</p> <p><i>Outcomes: advocate and influence policies for issues of migrants at local, national and regional level</i></p>	<p>Advocacy events at local, state, national and regional level. Producing policy briefs. Media advocacy. Working with money transfer agencies for safe remittances.</p>	Policy makers, media, remittance agencies	3 reports/6 policy briefs	Bangladesh, India and Nepal

2 Study design and analytical methods

The 2010-2011 baseline survey was conducted in Mumbai, Delhi and Kolkata in India (destinations for Nepali and Bangladeshi migrants); Kanchanpur and Achham in Nepal; and Jessore and Satkhira in Bangladesh (source locations for migrants).⁵ The baseline survey (using individuals as the unit of analysis) collected data from migrant workers (both male and female) living in India, and circular or returnee migrants or their spouses living in Nepal and Bangladesh who had been to India. The identification of migrant workers in India proved to be a challenge, particularly Bangladeshis who were fearful of revealing their national identity because of their often undocumented status. This led enumerators to resort to snowballing techniques⁶ to identify the migrant workers.⁷

After four years of project implementation, an endline survey was carried out in February-March 2014 to assess the impact of the programme. Given the transient and elusive nature of the migrant population, it was not possible to revisit the same respondents who were interviewed during the baseline survey. Instead, the endline survey followed a sampling frame that covered locations where EMPHASIS services had been provided (the 'treatment' group). It also covered locations that had similar socioeconomic characteristics and impact populations with similar migration-related characteristics⁸ that had not received services from EMPHASIS, to serve as the 'control' groups.⁹ From these locations, a random sample was drawn of, respectively, programme beneficiaries and non-beneficiaries.¹⁰ A total of 3,528 interviews were conducted (Table 2). Drawing on the baseline questionnaire, and including additional questions

5 EMPHASIS was a pilot project therefore interventions were designed on a limited scale and only to be implemented in these specific areas

6 Snowball sampling or respondent driven sampling is a non-probability sampling technique where surveyed individuals are the channels to contact more individuals of similar socio economic profiles. The sample group thus grows like a rolling snowball. This sampling technique is often used in hidden populations which are difficult for researchers to access like in the case of unregulated migrant workers. (Heckathorn, 1997; Salganik, and Heckathorn, (2004).

7 For details of the baseline survey sampling frame see Wagle et al. (2011) and Sultana et al. (2011)

8 The EMPHASIS team identified locations that are similar to EMPHASIS locations with an estimated impact population to serve as control groups. Study locations were sampled from those lists. Control and destination locations were distant (2 to 6km) from EMPHASIS locations to avoid possible spillover effects.

9 For EMPHASIS respondents, the project's list of populations who had been reached (the First Contact Form (FCF)) was utilised and a two-stage cluster sample was used. In the control locations, respondents were selected through a random walk exercise. For details of the endline survey sampling frame see Ravesloot and Banwart (2014).

10 As a result of budgetary constraints, Kolkata was not included in the endline survey.

relating to the impact and effect of interventions, the survey questionnaire modules included: socio-demographic characteristics, sexual behaviour, family planning, knowledge and attitudes towards HIV and AIDS, stigma and discrimination and gender norms.

To assess the impact of EMPHASIS services, the sampling frame was designed to allow for comparison both longitudinally (over the lifetime of the project) between baseline and endline surveys and cross-sectionally (or at one point in time) between treatment (or beneficiaries of EMPHASIS) and control groups (non-beneficiaries) at the endline. The analytical methods included:

- t-tests to measure the statistical difference of means between relevant groups,
- propensity score matching (PSM) to measure both the average treatment effect (ATE) of EMPHASIS' services and the average treatment effect on the treated (ATT).¹¹

PSM in a quasi-experimental setting provides robust impact estimates when the assignment to treatment is not random. This is achieved by identifying individuals among the control group who are statistically 'similar' to programme beneficiaries in a range of socio-demographic characteristics (Caliendo and Kopinig, 2005). The resulting estimators can be used to estimate the impact of the project (Dehejia and Wahba, 2002). So, while the t-tests show the statistical difference between treatment and control groups, the ATE and ATT estimates measure the difference in mean of key outcomes between treatment and control groups, and the causal effect or impact among the mobile populations that received EMPHASIS' services, respectively. The results are presented in Section 3.

11 In the absence of a randomised experimental design, PSM allows an estimation of the impact of EMPHASIS while accounting for the effect of covariates that predict the receipt of such services. The covariates included in the estimation of the propensity score were: sex, age and marital status of respondents, their education and level of income in past 30 days, the number of dependents, the number of visits home each year, and whether the respondent ever had sexual intercourse. For survey respondents in destination locations a dummy variable was included to control for those respondents who lived with family in India, whereas in source locations, controls for household size and remittance recipients were added.

Table 2: Sample size of baseline and endline surveys					
	Baseline (2011)	Endline-control (2014)	Endline-treatment (2014)	Number of EMPHASIS locations	Number of control locations
Source country					
Nepal	550	466	448	28	20
Bangladesh	550	444	443	36	13
Destination country					
India Nepali migrant population (NMP)	573	473	417	33	15
India (Bangla-speaking population (BSP))	472	411	426		
Total	2145	1794	1734	97	48

3 Study Findings

3.1 Migrant profiles

This section presents profiles of migrants from the endline survey (for details of profiles of migrants at baseline please see Sultana et al., 2011 and Wagle et al., 2011). Similarities in terms of demographics were found across the EMPHASIS beneficiaries and the control group at endline. For example, among the Nepalese migrants surveyed, at source location, 10% of the control group and 9% of the treatment group were single and 90% of the control group and 88% of the treatment group were married. Similarly, a relatively homogeneous level of income was observed between the control and treatment groups across source and destination locations. For example, the average household monthly income in source countries was in the order of \$50 to \$90 among the Nepalese and Bangladeshis from treatment and control groups, respectively. Income levels were almost as twice as high among Bangladeshi and Nepalese migrant workers living in India.

When comparing the levels of education there is a small and statistically insignificant difference between EMPHASIS' beneficiaries and the control groups in both source and destination locations. In India, for example, 64.5% and 64.3% of the Nepalese migrant workers in treatment and control locations, respectively, reported that they had attended middle-school levels or less. The only significant difference was observed within the Bangladeshi migrant workers at source and at

destination locations: in both cases the EMPHASIS' beneficiaries reported a higher level of education.

The Nepali- and Bengali-speaking populations at destination, living in both treatment and control locations, reported similar numbers of people (three to four) sleeping in one room. In all locations, the most common type of household structure was a *kutcha* – a dwelling made of mud and hay, often with a tin roof, with the exception of the Nepali migrant population (NMP) in India, who lived primarily in a *pucca* made primarily of brick/block walls with tin-roofs or tiles.

The migratory status of respondents varied between those in Nepal and Bangladesh (the source countries) and those in India (the destination country). While in India, current migrants dominated the sub-sample. In Nepal and Bangladesh, however, respondents included return migrants, circular migrants, and family members of migrants.¹² Bangladesh reported the largest number of return migrants while the majority of respondents in Nepal were either spouses or the family members of migrants. Nearly 60% of return migrants were female, and 34% of circular Bangladeshi migrants were female.

In India a greater percentage of Nepali EMPHASIS' beneficiaries (63%) had remitted money to family and friends in Nepal in the past 12 months than those in the control group (33%). A greater proportion of EMPHASIS Bengali-speaking

¹² Circular migrants are defined as those who return home four times a year, or once a year for three months at a time. Return migrants are those who have permanently returned home and do not intend to return to India for work, while current migrants are those who do not return home regularly.

beneficiaries in India (29%) also remitted money to their families; however, this difference was not statistically significant relative to the proportion reported from the control group (28%). On average, both control and treatment populations sent money to their home locations around five times each year, regardless of their country of origin or whether they had received services from EMPHASIS.

In the next sections we explore the impact of EMPHASIS's services on four key aspects:

- HIV and AIDS knowledge and communication
- referral (for STI and VCT) mechanisms
- sexual behaviour and condom use
- the creation of an enabling environment, e.g. improvement of working conditions at destination and addressing stigma against migrants and PLHIV at source.

As mentioned, the baseline survey resorted to snowballing techniques to collect data, which may well have introduced bias in the results. Therefore, comparison between the endline treatment and control groups is the preferred approach, and we report the difference between the treatment group and the baseline group for comparative purposes only.¹³ Overall, the results show strong evidence that EMPHASIS' services have had a positive and large impact on nearly all key programme objectives and outcome indicators.

3.2 HIV and AIDS knowledge and communication

Stigma and discrimination, prejudices and negative attitudes towards those affected by HIV and AIDS remain major obstacles to the prevention and treatment of the disease. As part of its objectives, EMPHASIS aimed to improve both knowledge and social-behaviour change communication about HIV and AIDS. HIV-related services were provided through door-to-door outreach and drop-in-centres/community resource centres, to improve knowledge, attitudes and behaviours. Specific interventions included:

- awareness raising on modes of transmission; misconceptions; linkages between HIV and

13 PSM was also applied to measure impact against baseline when compared to endline (treatment) but it was used only for the log frame outcome indicators and the findings have not been referred in the text. However, endline control shows a higher impact than endline control for most of the indicators when comparing baseline with endline treatment (Annexes 1 and 2)

STIs; prevention of HIV and STIs through condom use and other means of HIV prevention, including information on blood transfusions and needle exchanges;

- building skills on communication between spouses on HIV and AIDs and condom use.

The findings from the endline survey show encouraging results in these two areas. To measure EMPHASIS's success in improving HIV and AIDS knowledge, two indicators were used: first, the ability of a migrant worker to identify two or more modes of HIV transmission correctly, and second, the extent to which migrant workers were able to reject two or more misconceptions of HIV transmission.

In terms of the first indicator, the impact of the EMPHASIS project has been large and statistically significant, with a magnitude of the impact varying from 18% to 50%, depending on whether the Nepalese and Bangladeshi populations that receive benefits from EMPHASIS were at source or destination locations (see Annexes 1 and 2). In the Nepal source areas, for example, treated individuals were 50% more likely to name at least two modes of transmission. The impact of the EMPHASIS project was also positive and large in relation to the second indicator, with 40% of Bangladeshis' at source able to reject at least two misconceptions of HIV transmission. The difference in impact size seems to depend on the location of residence, with the only exception being the Nepalese population at source locations where EMPHASIS's impact turned out to be insignificant (see Annexes 1 and 2).

In terms of awareness about HIV and AIDS prevention and methods of testing, the results show that between 90% and 98% of programme beneficiaries were aware of HIV and AIDS. The lowest awareness level was observed among the control group living in India, with awareness levels of just 55% and 51% for the Nepalese and Bangladeshi populations, respectively. EMPHASIS' beneficiaries, particularly those living in Nepal and Bangladesh, were also more likely to know that HIV can be prevented, and be confident that tests are easily available, compared to the control groups at source.

Regarding attitudes towards PLHIV, the analysis show that a larger percentage of the treatment group at source and destination locations than among the corresponding control groups felt that PLHIV had the right to the same health care as others (Figure

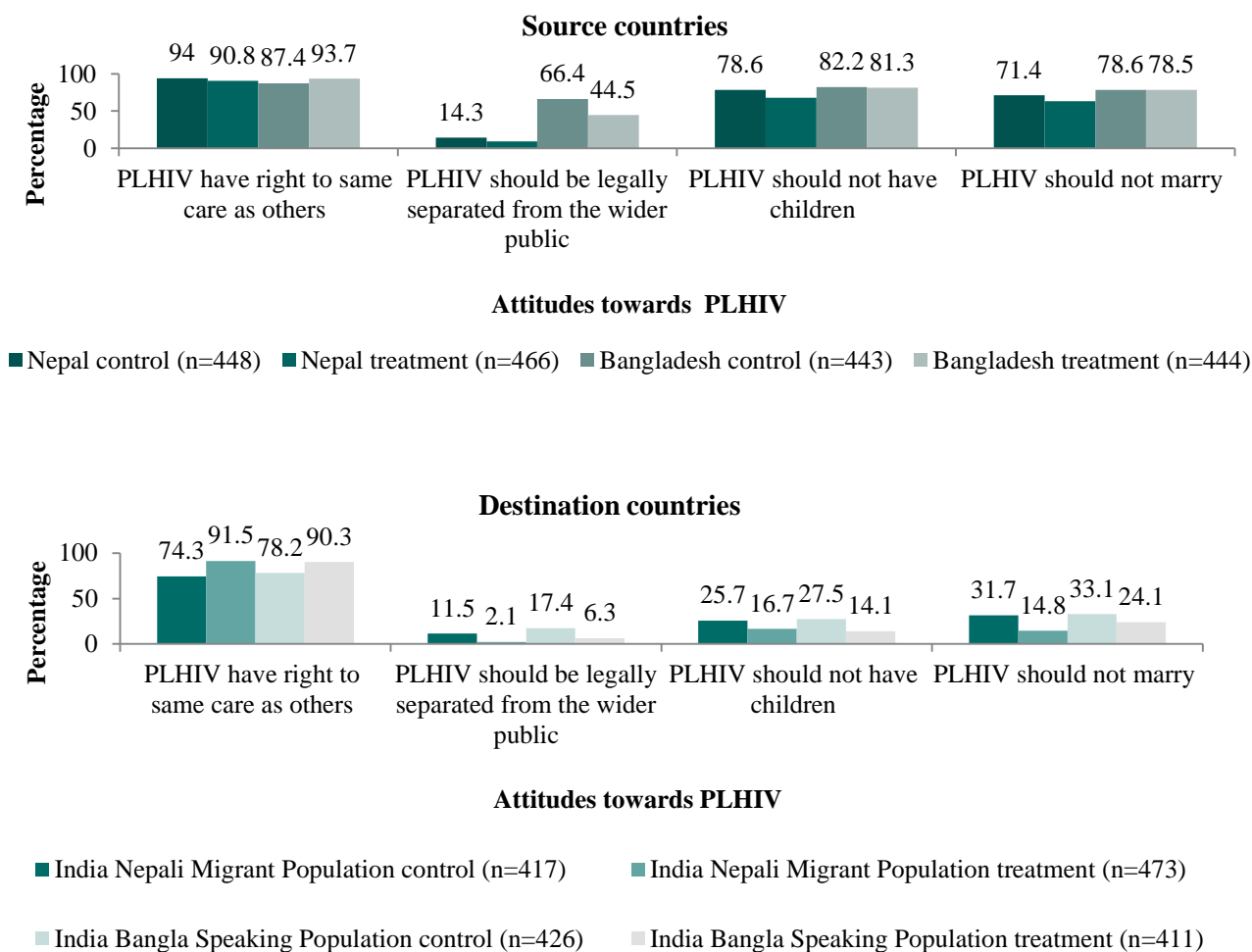
1).¹⁴ Similarly, fewer programme beneficiaries than those among the control group felt that PLHIV should be separated from the public for public health reasons, should not have children and should not marry.

Finally, as also reported elsewhere (Samuels et al., 2014) large strides were made in Nepal and Bangladesh on the communication of HIV concerns between migrant workers and their spouses. In all three countries, the difference between the treatment and the control groups was statistically significant: in India 50% of Nepali respondents exposed to EMPHASIS interventions could discuss HIV- and AIDS-related issues with their spouses, compared to only 26% in the control group. In Nepal, 85% of EMPHASIS beneficiaries felt they could discuss these issues with their spouses

compared to only 27% in the control group. In India, 48% of Bangladeshi migrants who had been exposed to interventions could discuss these issues with their spouses compared to only 8% in the control group. Finally in Bangladesh, almost 60% of respondents exposed to EMPHASIS were able to discuss HIV and AIDS-related issues with their spouses compared to only 21% in the control group.

The impact of EMPHASIS on this indicator is large and statistically significant, with a magnitude of the impact varying from 36.2% to 69.8% (see Annexes 1 and 2). It is clear, therefore, that the coordination EMPHASIS has achieved by targeting male migrants at destination and their spouses at source has led to an increased communication between spouses.

Figure 1: Attitudes towards people living with HIV and AIDS (PLHIV)



Source: Endline survey

14 All figures shows multiples responses and only descriptive statistics are shown.

3.3 Referral mechanisms

The referral for VCT and STI services (within countries and only for treatment groups) included:

- linkages with government and non-government service provider organisations, including the development of a formal memorandum of understanding (MOU) between EMPHASIS and the service provider
- referral and, depending on need, accompanied referral ¹⁵ from an outreach worker with a referral slip
- follow-up with service providers
- referral of seropositive VCT clients for treatment, care and support
- capacity building of service providers on HIV-related services.

Regarding the promotion of referral to VCT services and integrated counselling and testing centres (ICTC), which were key components of the EMPHASIS project, the analysis shows that in both Bangladesh and Nepal, about 19.3% and 16% of the treatment groups were reported to have been referred to VCT/ICTC services. EMPHASIS beneficiaries in India (29.4% of Nepali Migrant Population {NMP} and 44.3% of the Bangla-speaking population {BSP}) were reported to have received higher referrals services than those in source locations. Similarly, referral for STI in both Bangladesh and Nepal was 10.4% and 42.4% while at destination locations among NMP and BSP it was 13.8% and 28.3%.



¹⁵ This refers to EMPHASIS beneficiaries being accompanied by a member of the EMPHASIS outreach team.

3.4 Sexual behaviour and condom use

Sexual behaviour, condom use and prevention of HIV and STI through safer sexual practices was an essential component of peer education which includes:

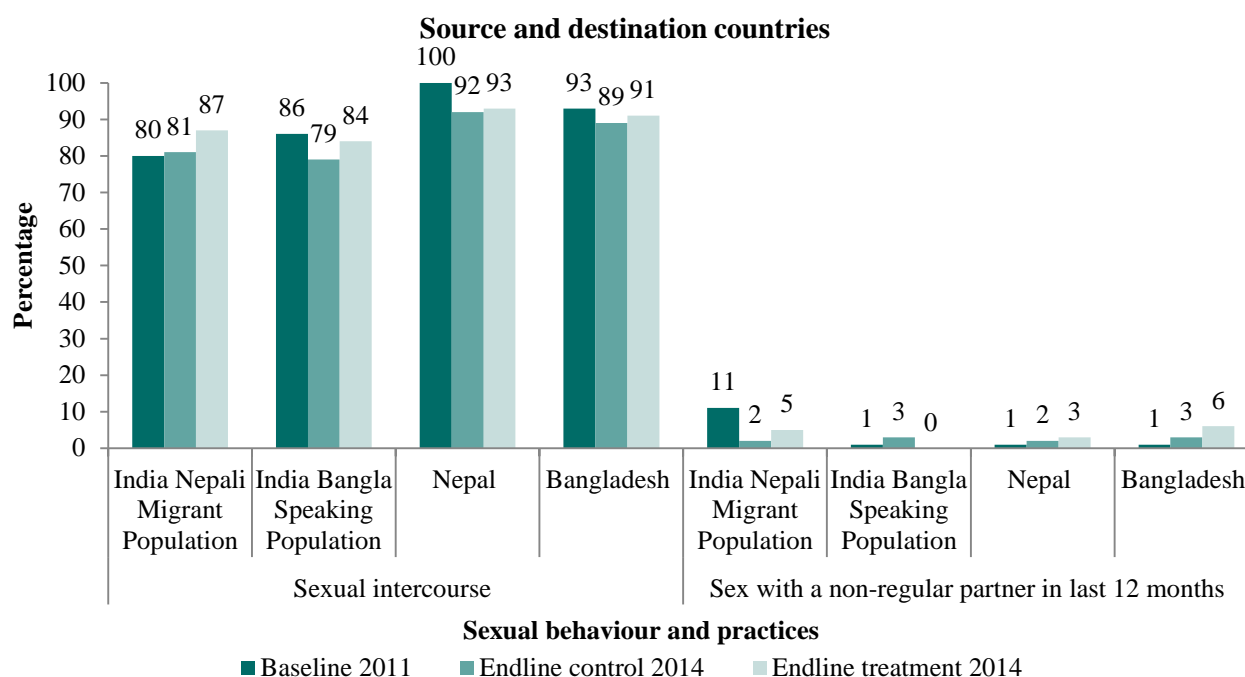
- condom promotion for dual purposes (STI/HIV prevention and family planning)
- demonstration of the correct use of condoms
- condom negotiation with a male partner
- prevention of potentially high HIV risk behaviour (multiple partners, injecting drug use, sex work).



EMPHASIS services did not include family planning as a core component of their activities, but the dual use of condom (for HIV and STI prevention and for family planning) was discussed during peer education in all three countries, and other family planning methods were discussed in Bangladesh and India.

Sexual behaviour was explored both at baseline and endline. More respondents at baseline reported to have been sexually active than either the treatment or control groups at endline. Between 80% and 100% of respondents had *ever* had sexual intercourse. A very low percentage of respondents reported that they had had sex with a non-regular partner, including commercial sex workers, in the past 12 months (Figure 2). The low response rate is consistent among groups and across baseline and endline surveys, and may reflect the sensitive nature of the question and, as such, limits our ability to provide reliable estimates of this type of risk sexual behaviour and condom use.

Figure 2: Sexual behaviour and practices



Source: baseline and endline surveys.

We were, however able to capture large and statistically significant differences between married endline EMPHASIS beneficiaries and the corresponding control group in relation to condom use with regular sexual partners or spouses. Among married Nepali EMPHASIS beneficiaries at source, 62% had used condoms with regular partners or spouses, compared to only 7.1% for the control

group. Similarly, while only 12% of married respondents from the Bangladesh control group had used condoms, this rose to 41% amongst those exposed to EMPHASIS interventions. In India, 42% of married Nepali migrants exposed to EMPHASIS had used condoms compared to only 28% among the control group. Finally, 40% of married Bangladeshis exposed to the EMPHASIS interventions used condoms, compared to only 13% for the control group (Table 3).

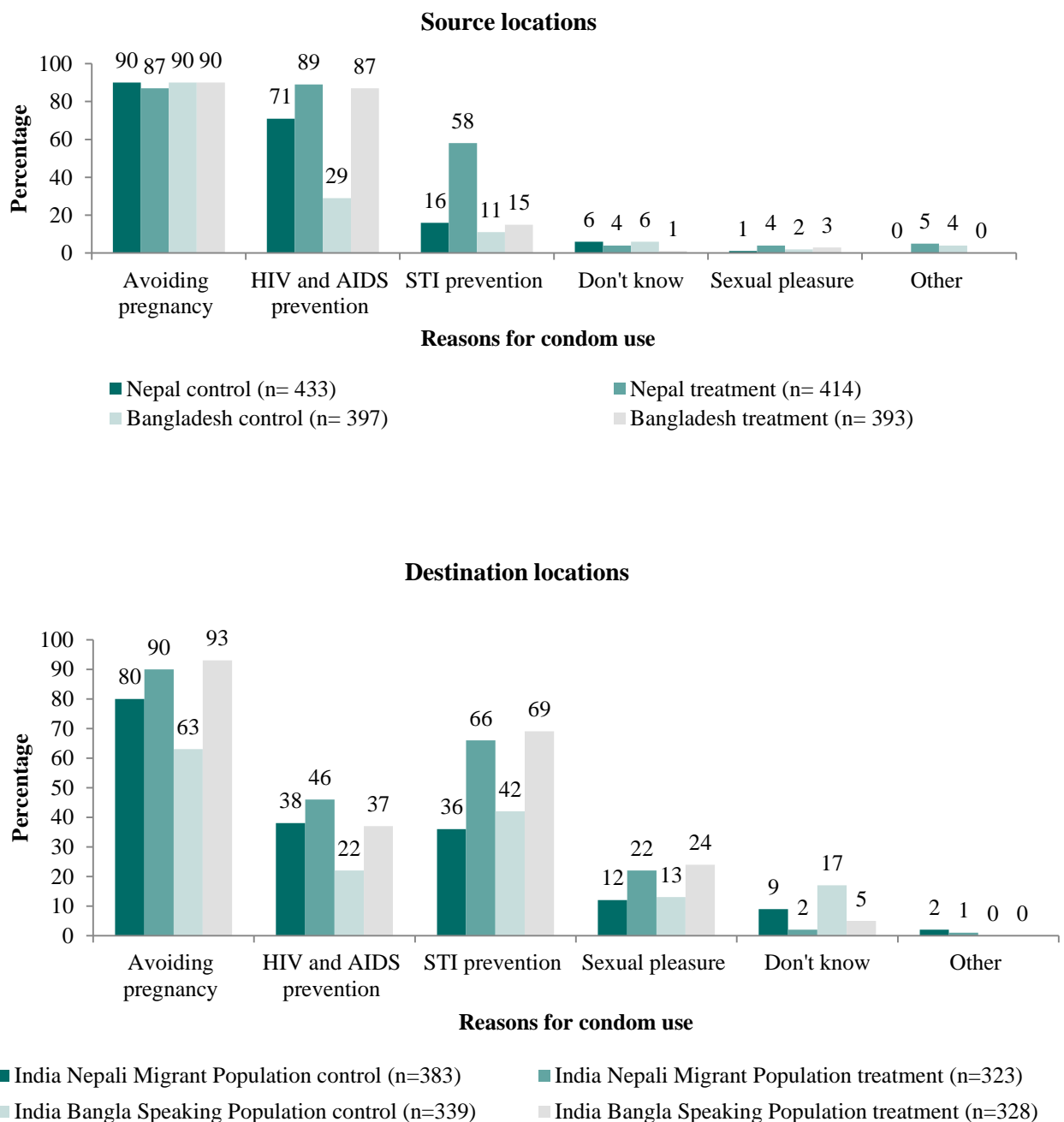
Table 3: Condom use across groups and locations, endline survey

	Source locations				Destination locations			
	Nepal		Bangladesh		India: Nepali migrant population (NMP)		India: Bangla-speaking population (BSP)	
	Control	Treatment	Control	Treatment	Control	Treatment	Control	Treatment
During last intercourse with partner	7.1	62.3***	11.8	40.7***	27.5	41.9***	13	39.3***
During every intercourse with partner	0	22.6***	2.4	22.9***	8.4	8.7	2.3	7.2***
Sometimes during intercourse with partner	26.2	37.7**	35.5	45.3***	23.3	37.6***	11.5	42.1***
Never use condom during intercourse with partner	69	39.6**	62	31.9**	63	49.3***	84	48.6***
Sample size ^{1/}	42	53	245	252	250	290	257	286
1/ Because of missing data, refusals to answer and 'don't know' responses, the sample size across indicators is not identical								
Statistically significant differences between groups at the 10% (*) , 5%(**) or 1% (***) levels								

When asked to give reasons for condom use, the largest percentages of the treatment groups (90% and 93% of Bangladeshis at source and destination locations, respectively), 87% and 90% of Nepali groups at source and destination locations, respectively), control groups (90% and 63% of Bangladeshis at source and destination respectively), and 90% and 80% of Nepali groups (at source and destination locations, respectively)

reported to have used condoms to prevent pregnancies. A larger percentage of the treatment group also reported using condoms to prevent HIV and AIDS and STIs, compared to the control group. This was a consistent observation across the Nepalese and Bangladeshi populations at both source and destination locations. The results provide strong evidence that EMPHASIS has been effective in lowering risky sexual behaviours among its service beneficiaries (Figure 3).

Figure 3: Reasons for condom use

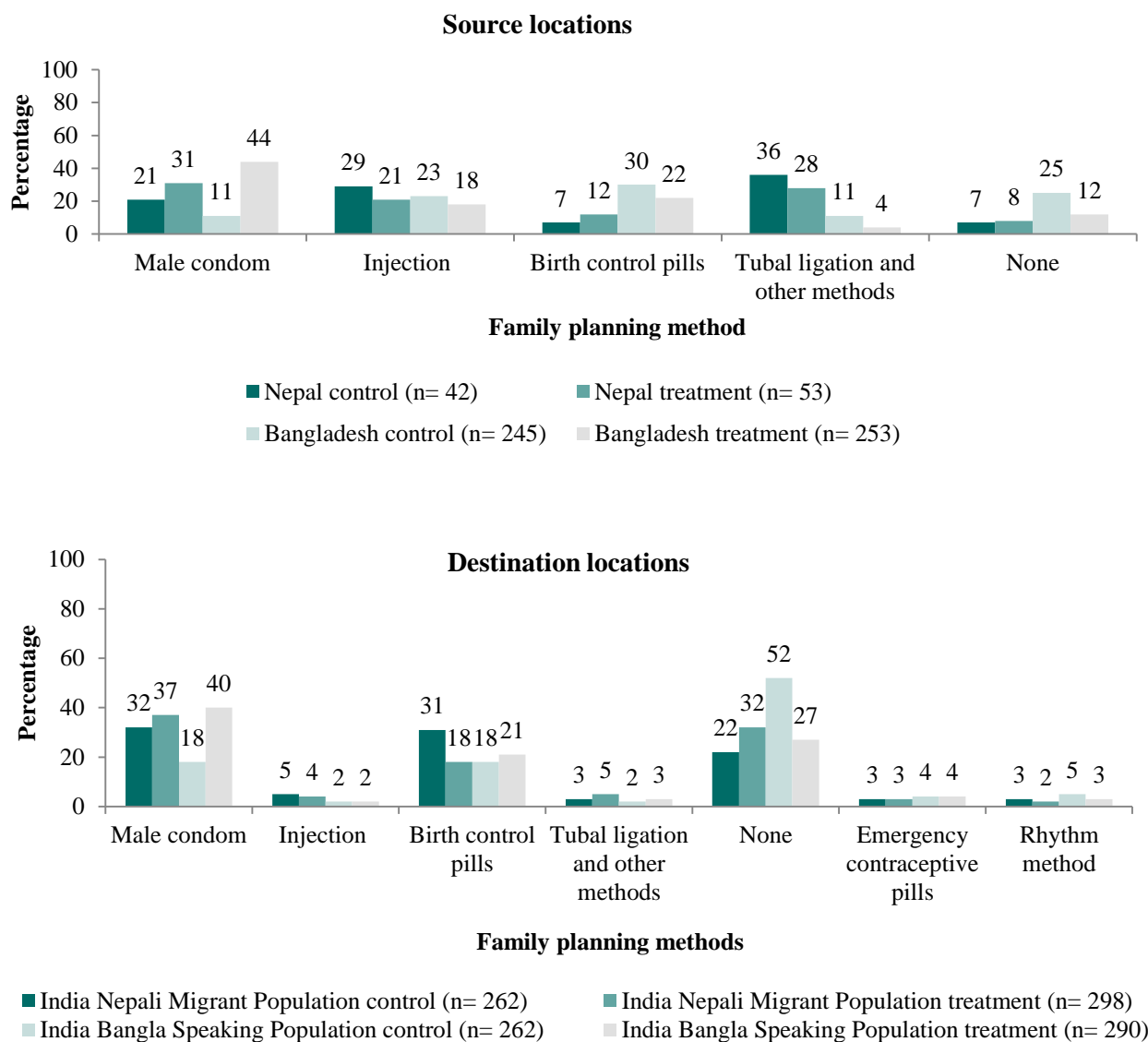


In relation to family planning, the results indicate that a larger percentage of programme beneficiaries both at source and destination locations used male condoms as a form of family planning relative to the control group, followed by injection and birth control pills.

In India, for example, condoms were the most common form of family planning with the exception of 52% among the Bangladeshi population in control locations who used no form of family planning. In Bangladesh, only 12% of the treatment group reported that they had not used any method of family planning, compared with over

25% among the control group. In both source countries the control groups were more likely to use injections as a method for family planning than the treatment groups. Tubal ligation was the most common form of family planning (36%) in control areas of Nepal. In contrast, in treatment locations, 31% of Nepali migrant workers used condoms as the primary form of family planning, compared with 21% of the corresponding control groups. This difference was even more marked among Bangladeshi migrants: 44% of the treatment group versus 11% of the control group (Figure 4).

Figure 4: Main family planning methods used



Source: Endline survey

3.5 Creating an enabling environment

Creating a safe and inclusive environment for cross-border mobile populations at destination was also a key focus of the EMPHASIS project. EMPHASIS endeavoured to create such an environment by sensitising employers on the benefits of good working conditions and, in turn, these employers invited the EMPHASIS team to sensitise their workers on HIV and AIDS and other health issues. This resulted, in some cases, in the introduction of flexible working hours for women employees, pay for overtime, separate toilet facilities for women, strict action against molesters and the provision of provident fund benefits and accidental insurance for migrants. In turn, an enabling environment for migrants, particularly women, was created at source through the formation of community support groups.

The project endline research explored aspects related to equitable access to services and entitlements as well as how cross-border migrants felt about the environment around them. Overall study results show that EMPHASIS's services have had, in general, a positive and statistically significant impact on workers' rights and entitlements for Nepali migrants and Bangla-speaking populations in India. This can be seen through a number of indicators, including accident compensation and health care benefits from employers, and the receipt of overtime pay similar to the pay received by Indian workers (see Annexes 1 and 2). These results have been driven, very largely, by the effect on male Nepalese migrants. Therefore, while 50% of Nepalese migrants exposed to EMPHASIS interventions reported receiving the same kind of overtime pay as their India counterparts, only 24% of respondents in the control group reported such parity. However, in the case of accident compensation, the responses from both Nepalese and Bangladeshi men show that the EMPHASIS project has had a positive and statistically significant impact.

In the destination locations, the impact of EMPHASIS – although positive overall – is significant only for men (particularly those from Nepal). As most of the women at the destination are either self-employed or work as domestic workers, the impact has been more limited. Similarly, the weaker effect observed among the Bangladeshi population at destination seems to be associated with the undocumented migratory status of that group, which limited the possibility of improving

their rights and entitlements. Here, the significant improvement for Bangladeshi men in terms of accident compensation indicates the success of the project's strategy of focusing on the rights of workers instead of focusing on identities.



Endline data in particular showed that the presence of community support groups was common (74.7% - Nepal and 41.9% -Bangladesh) in the EMPHASIS (treatment group) source areas. In both Bangladesh and Nepal, the data show that over 90% of respondents who said that they knew about a community support group also received support from that group.¹⁶

4 Conclusions and recommendations

When comparing the beneficiaries of EMPHASIS services with the control group, there is strong evidence that EMPHASIS interventions achieved positive and significant impacts on vulnerable migrant populations. Positive effects were found across key programme objectives, outcome indicators, and locations in Bangladesh, Nepal and India. Programme beneficiaries consistently reported the following:

- Improved knowledge about HIV and AIDS prevention and testing methods
- A lowering of risky sexual behaviours
- Better communication about HIV and AIDS concerns between migrant workers and their spouses
- Better attitudes towards PLHIV
- Greater access to VCT/ICTC referral services

¹⁶ Community support groups provided support to create an enabling environment for the project in all three countries, but specific support to PLHIV was ensured only in Nepal.

- Stronger awareness of worker rights and entitlements
- Improved working conditions at destination.

The results show that EMPHASIS has been effective in providing HIV prevention, care and support service throughout the migration cycle i.e. at source, transit and destination locations.



Broadly speaking, our findings suggest that the policy instruments and programme approaches adopted by EMPHASIS were successful in their intended objectives and there would be value in scaling-up, replicating and sharing the lessons from the programme more widely. Eight critical recommendations emerge from the EMPHASIS programme as a whole:

- A comprehensive approach is important, working at and across different levels, including with the migrants themselves and their spouses, but also with policy makers in different sectors including health and labour and foreign affairs.

- Working in source, transit and destination sites, while challenging, is critical for achieving positive policy results. Such an approach not only helps migrants living with HIV who are on antiretroviral therapy to continue accessing treatment as they cross borders, but also improves communication and dialogue around HIV and AIDS among migrants at destination and between spouses by providing information, services and raising awareness about HIV and AIDS. This can, in turn also lead to less risky behaviours.

- Joint collaborations between governments at different levels and non-government health-service providers are important to improve cooperation and enhance the comparative advantages of each.

- Common interest groups among women spouses at source and women migrants at destination are critical to bring about positive changes in terms of safer mobility, safe remittance and spousal communication about HIV.

- Services such as cross-border antiretroviral therapy referrals and safe remittances require linkages between source and destination service providers and government and non-government institutions.

- Awareness-raising is needed at all levels – and for all kinds of actors – about the discrimination, stigma and harassment faced by migrants, their rights and entitlements as well as their potential risks and vulnerabilities, including those related to HIV.

- Awareness-raising can take different forms and be provided in different ways, e.g. through support groups at both source (spouse groups) and destination, through information desks (at transit points) or/and through drop-in-centres. Their features will depend on the context and specific needs.

- Finally, not only is high level national commitment vital to deal with the vulnerabilities of migrants and HIV and AIDS, but regional approaches are also necessary in order to support increased dialogue and coordination across borders.

Annex 1: EMPHASIS key indicators (Nepali migrant populations at source and destination)

Indicator	Point estimates			Difference in means (t-test)		Average treatment effect (ATE)		Average treatment effect on the treated (ATT)	
	BL ¹⁷ (2011)	EL (CTRL)	EL (IP)	Difference to BL	Difference to CTRL	Difference to BL	Difference to CTRL	BL - EL Treatment	CTRL - EL Treatment
India (NMP)¹⁸									
Percentage of respondents who can identify at least two major modes of transmission of HIV	75.9	90.0	96.4	20.5***	6.4***	19.7***	20.1***	20.7***	21.0***
<i>Sample size</i>	506	229	96						
Percentage of respondents who reject at least 2 major misconceptions about HIV transmission	88.1	97.8	99.6	11.4***	1.7**	12.2***	19.3***	12.7***	20.1***
<i>Sample size</i>	506	229	445						
Percentage of respondents who can discuss HIV with their spouse and partners	24.3	26.0	49.5	25.2***	23.4***	25.4***	35.4***	20***	36.2***
<i>Sample size</i>	383	123	281						
Percentage of respondents reporting having used a condom with non-regular partner on the last occasion of having sex	83.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Sample size</i>	61	7	25						
Percentage of migrants currently in India who are provided accident compensation from their employer	4.3	1.2	8.7	4.3***	7.5***	1.5	7.1***	1.7	7.9***
<i>Sample size</i>	530	417	473						
Percentage of migrants currently in India who are provided health care benefits from their employer	6.8	0.7	5.9	-0.9	5.2***	-3.9**	5.4***	-4.1**	5.5***
<i>Sample size</i>	530	417	473						
Percentage of migrants currently in India who receive same type of overtime pay as their Indian counterparts?	65.7	23.7	50.1	-15.6***	26.4***	-23.6***	13.2***	-22.7***	10.0***

17 BL refers to baseline; EL to endline.

18 NMP = Nepalese migrant population; BSP = Bangla-speaking population

<i>Sample size</i>	530	417	473						
Nepal									
Percentage of respondents who can identify at least two major modes of transmission of HIV	91.4	83.3	95.4	4.0**	12.1***	13.9***	14.5***	13.7***	18.2***
<i>Sample size</i>	406	420	435						
Percentage of respondents who reject at least 2 major misconceptions about HIV transmission	90.1	95.7	97.9	7.8***	2.2*	16***	3.3	15.7***	3.4
<i>Sample size</i>	406	420	435						
Percentage of respondents who can discuss HIV with their spouse and partners	49.2	26.8	84.6	35.4***	57.8***	25.7***	66.9***	23.6***	69.8***
<i>Sample size</i> [†]	392	41	52						
Percentage of respondents reporting having used a condom with non-regular partner on the last occasion of having sex	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Sample size</i>	4	14	17						
Statistically significant at the 10% (*), 5%(**) or 1%(***) levels									
[†] The endline survey did not ask questions around spousal issues if the respondent stated they had never been in a sexual relationship. In Nepal, upon completion of fieldwork, it was discovered there was a misunderstanding on the definition of ‘sexual relationship.’									

Annex 2: EMPHASIS key indicators (Bangla-speaking population at source and destination)

Indicator	Point estimates			Difference in means (t-test)		Average treatment effect (ATE)		Average treatment effect on the treated (ATT)	
	BL (2011)	EL (CTRL)	EL (IP)	Difference to BL	Difference to CTRL	Difference to BL	Difference to CTRL	BL - EL Treatment	CTRL - EL Treatment
India (BSP)									
Percentage of respondents who can identify at least two major modes of transmission of HIV	62.5	90.3	98.4	35.8***	8.0***	33.5***	35.7***	29.1***	35.5***
<i>Sample size</i>	379	217	368						
Percentage of respondents who reject at least 2 major misconceptions about HIV transmission	35.9	97.7	99.2	63.3***	1.5	57.6***	34.7***	55.4***	35.6***
<i>Sample size</i>	379	217	368						
Percentage of respondents who can discuss HIV with their spouse and partners	22.6	8.3	48.1	25.5***	39.8***	26.2***	39.6***	21.7***	41.1***
<i>Sample size</i>	301	133	258						
Percentage of respondents reporting having used a condom with non-regular partner on the last occasion of having sex	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Sample size</i>	3	11	3						
Percentage of migrants currently in India who are provided accident compensation from their employer	0.3	1.2	10.0	9.7***	8.8***	6.6***	7.2***	9.8***	9.1***
<i>Sample size</i>	324	426	411						
Percentage of migrants currently in India who are provided health care benefits from their employer	0.3	0.9	1.2	0.9	0.3	0.9	0.2	1.8	1.0
<i>Sample size</i>	324	426	411						
Percentage of migrants currently in India who receive same type of overtime pay as their Indian counterparts	66.0	21.8	27.5	-38.6***	5.7*	-35.5***	3.7	-35.2***	4.9
<i>Sample size</i>	324	426	411						

Bangladesh									
Percentage of respondents who can identify at least two major modes of transmission of HIV	66.2	44.7	86.6	20.4***	41.9***	31.0***	51.4***	29.5***	49.8***
<i>Sample size</i>	293	311	438						
Percentage of respondents who reject at least 2 major misconceptions about HIV transmission	46.8	65.3	89.5	42.7***	24.2***	48.8***	41.7***	45.6***	40.5***
<i>Sample size</i>	293	311	438						
Percentage of respondents who can discuss HIV with their spouse and partners	28.6	21.5	58.6	30.0***	37.1***	28.8***	38.3***	29.8***	38.5***
<i>Sample size</i>	273	191	246						
Percentage of respondents reporting having used a condom with non-regular partner on the last occasion of having sex	N/A	30.6	63.2	N/A	32.6***	N/A	2.0	N/A	2.3
<i>Sample size</i>	3	36	45						
Statistically significant at the 10% (*), 5%(**) or 1%(***) levels									

References

- Caliendo, M., and Kopinig, S. (2005) Some Practical Guidance for the Implementation of Propensity Score Matching. IZA Discussion Series.
- Dehejia, R. H., and Wahba, S. (2002) 'Propensity Score-Matching Methods for Nonexperimental Causal Studies'. *The Review of Economics and Statistics*.
- GoN (2004) 'Nepal Living Standards Survey 2003/2004'. Kathmandu: Central Bureau of Statistics, Government of Nepal.
- Heckathorn, D. D. (1997) "Respondent-Driven Sampling: A New Approach to the Study of Hidden Populations" in: *Social Problems* 44 (2): 174–199.
- IOM (2002) 'IOM Position Paper on HIV & AIDS and Migration'. MC/INF/252. Geneva: International Organization for Migration. Available at: www.iom.ch/jahia/webdav/shared/shared/mainsite/about_iom/en/council/84/Mcinf252.pdf
- IUSSP (2009) Migration and HIV/AIDS in India. Paris: International Union for the Scientific Study of Population. Available at: <http://iussp2009.princeton.edu/papers/91868>
- Ravesloot, B. and Banwart, L.O. (2014) EMPHASIS End-line Survey Report. Nepal: CARE Nepal
- Salganik, M.J. and Heckathorn D.D. (2004) "Sampling and Estimation in Hidden Populations Using Respondent-Driven Sampling" in: *Sociological Methodology* 34 (1): 193–239.
- Samuels, F., Sarin, E., Sultana, M., Kaur, N. (2014) Fighting HIV on all fronts: reducing vulnerability by targeting migrant, their spouses and families in source and destination countries'.
- Samuels, F., Sultana, M., Nokrek, P., Taher, A., Bohidar, N., Gautam, B. and Devkota, P. (2013) 'Pathways to health services for cross-border migrants living with HIV: Nepalese and Bangladeshis at home and in destination sites in India'. ODI Project Briefing No. 81. London: Overseas Development Institute.
- Samuels, F., Wagle, S., Sultana, T., Sultana, M., Kaur, N. and Chatterjee, S. (2012) 'Stories of harassment, violence and discrimination: migrant experiences between India, Nepal and Bangladesh'. ODI Project Briefing No. 70. London: Overseas Development Institute.
- Samuels, F., Niño-Zarazúa, M., Wagle, S., Sultana, T. and Sultana, M. (2011) 'Vulnerabilities of movement: cross-border mobility between India, Nepal and Bangladesh'. ODI Background Note. London: Overseas Development Institute.
- Samuels, F. and Wagle, S. (2011) 'Population mobility and HIV and AIDS: review of laws, policies and treaties between Bangladesh, Nepal and India'. ODI Background Note. London: Overseas Development Institute.
- Sarin, E. (2013) 'A qualitative study comparing the effects and outcomes of HIV-related interventions for Nepalese migrants – at source, transit and destination'. Delhi: Care India.
- Sultana, M. and Kaur, N. (2013) 'Journeys: experiences of Nepalese and Bangladeshi cross-border migrants living with HIV'. Dhaka: Care Bangladesh.
- Sultana, T., Das, A., Sultana, M., Samuels, F. and Niño-Zarazúa, M. (2011) Vulnerability to HIV & AIDS: A social Research on Cross Border Mobile Population from Bangladesh to India EMPHASIS Project. Lalitpur, Nepal, CARE
- Wagle, S., Bohidar, N., Samuels, F., Niño-Zarazúa, M. and Chakraborty, S. (2011) Vulnerability to HIV & AIDS: A Social Research on Cross Border Mobile Populations from Nepal to India. EMPHASIS Baseline. Lalitpur, Nepal, CARE.
- UNAIDS (2013) 'UNAIDS report on global AIDS epidemic 2013'
- GoB (2011)'National HIV Serological Surveillance, 2011' Dhaka: NASP, DGHS, MoHFW



ODI is the UK's leading independent think tank on international development and humanitarian issues.

Our mission is to inspire and inform policy and practice which lead to the reduction of poverty, the alleviation of suffering and the achievement of sustainable livelihoods.

We do this by locking together high-quality applied research, practical policy advice and policy-focused dissemination and debate.

We work with partners in the public and private sectors, in both developing and developed countries.

Pictures:

Page 9: 'We are linked with health services through EMPHASIS' © Chris Martin and EMPHASIS, India, 2012

Page 9: 'I am empowered as I am a member of self-help group and am able to negotiate condom with my husband' © John Spoul and EMPHASIS, Jessore, Bangladesh, 2011

Page 13: 'I am empowered after working with EMPHASIS as a peer educator' © Chris Martin and EMPHASIS, India, 2012

Page 14: 'I was stigmatized due to migration ...but it helped me to provide education to my children' © John Spoul and EMPHASIS, Jessore, Bangladesh, 2011

Readers are encouraged to reproduce material from ODI Reports for their own publications, as long as they are not being sold commercially. As copyright holder, ODI requests due acknowledgement and a copy of the publication. For online use, we ask readers to link to the original resource on the ODI website. The views presented in this paper are those of the author(s) and do not necessarily represent the views of ODI.

© Overseas Development Institute 2014. This work is licensed under a Creative Commons Attribution Non-Commercial Licence (CC BY-NC 3.0).

ISSN: 2052-7209

Overseas Development Institute
203 Blackfriars Road
London SE1 8NJ
Tel +44 (0)20 7922 0300
Fax +44 (0)20 7922 0399

Author contacts

Fiona Samuels, Research Fellow, ODI (f.samuels@odi.org.uk), Miguel Niño-Zarazúa, Research Fellow, United Nations University's World Institute for Development Economics Research (UNU-WIDER) (Miguel@wider.unu.edu), Mirza Manbira Sultana, Regional Research Manager, CARE Bangladesh (mirza@co.care.org), Prokriti Nokrek, Technical Coordinator-M&E and documentation, CARE Bangladesh (prokriti@bd.care.org), Navneet Kaur, Acting Team Leader, CARE India (nkaur@careindia.org), Nabesh Bohidar, Regional Monitoring and Knowledge Manager, CARE India (nabesh.bohidar@co.care.org), Umesh Gahatraj, M&E officer, CARE Nepal (umeshg@np.care.org)

Acknowledgements

This briefing draws on a report entitled: 'EMPHASIS End-line Survey Report' authored by Bruce Ravesloot and Lloyd Banwart of Technical Assistance to NGO's (TANGO International). We would like to acknowledge support for the study fieldwork from all EMPHASIS implementing partner staff, particularly Outreach workers and Peer educators and CARE EMPHASIS staff in Bangladesh, India and Nepal. We would also like to acknowledge the contributions of John Lakeman of CARE International UK in the study design and report.

Project

Led by CARE International UK, EMPHASIS (Enhancing Mobile Populations' Access to HIV and AIDS Services, Information and Support) is a five-year project (2009 – 2014) funded by the Big Lottery Fund UK, and implemented by CARE country offices in India, Bangladesh and Nepal. For more information please visit: www.care-emphasis.org