Documenting the Undocumented: Use of Respondent Driven Sampling for Surveying Cross Border Undocumented Bangladeshi Migrants in India

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Context

Migration is termed as illegal when any person enters a country's border other than his homeland, often after violating the immigration laws of the host country. The reason of the illegal entry may be for living in the country permanently or temporary. There have been campaigns in many countries since 2007 discouraging the use of the term "illegal immigrant". They are generally based on the argument that the act of immigrating illegally does not make the people themselves illegal. In the United States, a "Drop the I-Word" campaign was launched in 2010 advocating for the use of terms such as "undocumented immigrants" or "unauthorized immigrants" when referring to the foreign nationals who reside in a country illegally (Sen, 2015). Most international mobility — regardless of legal status, whether permanent, temporary, or circular, and whether for work or to join families — also preoccupies the less developed countries, albeit from different perspectives. While developed countries are concerned with their set of problems — threats to security, perceived lack of control, effects on labor markets — less developed countries have their own concerns about unauthorized migration (Papademetriou, 2015). A rough estimate about the share of unauthorized immigrants in the world's immigrant stock might put it at between 15 and 20 percent of the total (between 30 and 40 million immigrants).

Being the most developed of all the South Asian countries, India has always been the most sought destination by immigrants from neighbouring nations. India shares a 4097 km long international boundary with Bangladesh along the eastern states of West Bengal, Assam, Meghalaya and Tripura. Of this around 1500 km is fenced, leaving a major portion of the border porous and easy for infiltration. Over the years lakhs of Bangladeshi people have crossed over into Indian territory. While some have made their way into Assam, Meghalaya, Tripura, Delhi, Mumbai, a major crux of the immigrants have stayed back in West Bengal, a land that is ethnically closest to the one they have left behind (Paul, 2011).

For Bangladeshis, the main pulling factors are better economic opportunities in India. Whereas, at the place of origin, lack of employment and business opportunities, financial difficulties, burden of financial debts, lack of livelihood options and also the absence of family members were reported as the main push factors (Samuels et al., 2011; Sultana, Das, Sultana, Samuels, & Zarazua., 2011). Reasons for a large number of Bangladeshi migrants working in India i.e. approximately 3 million (Census, 2001) are lack of employment at source (Bangladesh), comparatively higher wages at destination (India), low migration cost, porous border and geographic proximity (Taher, 2014). This cross-border movement of people is due to a number of interrelated

factors: economic, environmental, religious and political. Among them economic and environment factors have been the key drivers. Further, the country is also highly prone to natural calamities, such as floods, cyclone, drought, riverbank erosion and landslides (Singh, 2009).

Undocumented migration is a choice driven by extreme poverty and lack of alternative livelihood options at source. Living at the destination is obscured by many challenges ranging from housing arrangement, finding a job and a constant struggle to cope with power structure at destination (CARE, 2014). In a majority of countries, undocumented migrants face complex obstacles, such as a lack of access to healthcare services or social protection (UNAIDS, 2014). The migrants moving to a new environment may face language barriers, risky and dangerous work and housing conditions, violence and harassment, and may be unable or unwilling to access health and social services because of government restrictions and discriminatory attitudes and behaviour of the staffs. They may also face loneliness and depression. All of these vulnerabilities are heightened when the migration is illegal or unauthorized (Samuels et al., 2011). It is apparent from the above discussion that migrants are vulnerable from the very moment they leave the security of home, which even amplifies if the nature of migration is undocumented. These undocumented Bangladeshi migrants generally get engaged in informal sector mostly working as domestic workers, construction labourers, rickshaw pullers and rag pickers (Naujoks, 2009). Bangladeshi men at destination in India are most often casual labourers, work as masons or mechanics, petty traders, vendors, and rickshaw pullers. Nearly half of the women are housewives or else work as domestic servants. Employment is arranged most commonly by a broker or relatives already living at the destination. (Samuels et al., 2011; CARE, 2014)

Mobility is widely recognized as one of the main facilitating conditions for HIV transmission around the world (Decosas & Adrien, 1997; Mabey & Mayaud, 1997; Quinn, 1994). Several studies have shown that people who travel or who have recently migrated tend to be at higher risk for getting infected with HIV and other sexually transmitted diseases/infections (STDs/STIs) (Pison et al., 1993; Nunn et al., 1995; Lagarde et al., 1996; Barongo et al., 1992). Men who stay away from their homes for prolonged periods (mobile men) may lead a risky lifestyle, which makes them more vulnerable to various hazardous health problems including the deadly ones like STIs/ HIV.

Against this background, it has been proposed to study the process of cross border migration from Bangladesh and explore how cross border migration enhances the STI/HIV vulnerability among Bangladeshi migrants living in the city of Kolkata in West Bengal. For this study a special type of sampling i.e. Respondent driven sampling was applied. In this present paper author tries to show how Respondent driven sampling was applied in the two selected places of Madhyamgram and Garden Reach to collect data from the Bangladeshi migrants who are often very hard to reach. Grony and Napierala (2015) found that in comparison to the effectiveness of empirical migration research, RDS enabled faster data collection and also generated higher quality data. It has been also shown in the paper that how RDS used social network properties of population to enable peers to recruit their peers. Specifically, this present paper outlines an attempt to gather data on cross border Bangladeshi Migrants in Kolkata by applying Respondent Driven Sampling.

RDS has been effectively applied in varied international contexts with numerous socially marginalized groups, including undocumented immigrants, sex workers, men who have sex with men (MSM), and illicit drug users (Johnston and Sabin, 2010; Malekinejad et al., 2008; Montealegre et al., 2013; Robinson et al., 2006; Wang et al., 2005). Montealegre et al., (2013) found that between 2005 and 2011, 87 RDS studies were conducted in 15 countries in LAC (68 % in South America, 18 % in Mexico and Central America, and 14 % in the Caribbean). The target populations were primarily men who have sex with men (43 %), sex workers (29 %), and drug users (26 %). Smith et al., (2015) adapted RDS to sample newly arrived migrants from Pakistan and Poland to UK. Khamsirwatchara et al., (2011) and Wangoomsarb et al., (2011) worked with RDS among registered as well as undocumented migrants on the Thailand-Cambodia Border. RDS was also used to capture depression among internal migrant workers in China by Qui et al., (2011). Applying RDS to study MSMs (Men having sex with men) is also common. Carballo-Dieguez et al., (2011) used RDS among the MSMs in Argentina, Wirtz et al., (2016) in Moscow, Russia and Lachowsky et al., (2016) in Vancouver, Canada. Yeka et al., (2006) reported on the lessons learned from implementing RDS to recruit men who have sex with men and female sex workers in two urban centers in Papua New Guinea. Simic et al., (2006) and Johnston et al., (2006) applied RDS to conduct study among FSWs (Female Sex Workers) in Eastern Europe and Vietnam respectively. IDUs (Injecting Drug User) were studied with the help of this sampling in US-Mexico border cities and in Russia by Frost et al., (2006) and Stormer et al., (2006) respectively. RDS has been utilized extensively in HIV research among injection drug users (Burt et al., 2010;Lansky et al., 2012; Malekinejad et al., 2008).Kimani et al., (2015) found RDS to be an useful tool in recruiting methamphetamine smokers in Cape Town.

Data and Methods

The broader study on the Cross border Bangladeshi migrants is based on primary data collected from 400 (200 male and 200 female) undocumented Bangladeshi Migrants in Garden Reach and Madhyamgram areas of Kolkata. The data collection was done during November 2015 to March 2016. The primary survey encompasses both qualitative and quantitative techniques of data collection.

Sample size

The proposed study will be exploratory in nature and will collect Primary data. The following formula was used to calculate the sample size

$n = 1/\alpha^2 * q/p * (1+f) * D$

Where,

p (approximate prevalence) is 30% (30% of migrants are at elevated risk of STI/HIV in Kolkata according to EMPHASIS Base line Survey, 2011)

q= 1-p,

α (the maximum permissible error in the estimate) = 10%

D (design effect) = 1.5 and

f (non-response rate) = 10%

The calculated sample size becomes 379.5. After rounding off, the proposed sample for the research would be 400 (approximately).

Within Kolkata, the Bangladeshi migrant population is not evenly distributed. They are concentrated in some pockets of Madhyamgram, Barasat, Machhalandpur, Cossipore, Rajabazar, Garden Reach. They are also found in the transit areas of Bongaon and Petrapole. This study will be conducted in two selected areas- Garden Reach (situated in proper Kolkata) and Madhyamgram (suburban of Metropolitan City Kolkata and nearer to transit areas of Bongaon and Petrapole). 200 respondents (100 male and 100 female) from Madhyamgram and 200 respondents (100 male and 100 female) from Garden Reach were to be interviewed for the proposed study. Madhyamgram and Garden Reach are selected purposively because most Bangladeshi migrants are concentrated here.

Sampling design

Migrants are usually considered hard-to-reach for research purposes since they face threats of fear of identification or sometimes mix up so easily with the native that differentiation cannot be done. Undocumented or illegal migrants are even tough to be mapped and interviewed. In 1997, respondent driven sampling (RDS) was introduced as an alternative method to recruit and to provide generalizable estimates of hard-to-reach populations. Several aspects of RDS make is suitable for sampling migrant populations, especially those that are most hidden and are least likely to participate in surveys using other sampling strategies. Respondent Driven Sampling (RDS) was used in the present study.

Respondent Driven Sampling and Migrant Populations

RDS combines "snowball sampling" with a mathematical model that weights the sample to compensate for the fact that the sample was collected in a non-random way. It is a widely used method for sampling from hard-to-reach human populations, especially from groups that are the most at-risk.

Migrants make up a diverse category of persons who share the common factor of having moved within or between countries at some point of time. People can migrate alone, in groups, or with family. Migrants share certain characteristics that make them particularly difficult to survey because migrant populations introduces problems of inclusion, identification, access, motivation and trust in the data production process particular to this group (Johnston and Tyldum, 2015). Specialised surveys targeting migrants are also challenging as there are few sampling frames available that enable us to identify migrants and distinguish from non migrants. Challenges of access are produced by for instance linguistic barriers, or problem of finding migrants at home or limited spare time rendering them less motivated to participate in survey. Challenges of marginalisation, xenophobia and racism,

can make minority groups distrustful of person or institution representing the majority. Lack of trust and fears of revealing their identity may prevent the migrant group to provide information to an interviewer.

Respondent Driven sampling (RDS) addresses many of the challenges associated with sampling migrants. It does not rely pre-existing sampling frames, but uses the respondents' social networks to identify, recruit, and build trust among potential participants. It draws on the systematic use of incentives and peer pressure to motivate participation and recruitment. Thus data are collected through a peer-referral process in which current sample members harness existing social networks to recruit additional sample members. Basically RDS is a modified form of chain-referral sampling, wherein peers recruit their peers using coupons with unique code numbers (Heckathorn, 1997; 2002). According to Johnston & Malekinejad (2014), relying on migrant populations to recruit other migrants by identifying them as members of their own group is often a feasible strategy (as cited in Johnston, 2014). Sampling migrants using RDS is most likely the best option for accessing migrants (Johnston, 2014).

How Respondent Driven Sampling works among migrants

The migrant populations are often hard-to-reach because of language differences, time constraints due to long or irregular working hours, lack of trust due to marginalisation, racism and stigma (IOM, 2001). According to Groenewold and Bilsborrow (2008), data from census, registers, border admission, duration of work permit or other administrative systems are inconsistent across countries and capture limited information on migrants. Mostly efforts to capture information from sizable samples of migrant populations have has relied on household surveys (Mc Kenzie and Mistiaen, 2009).

An incentive not only for the participation but also for recruitment, encourages traditionally hesitant individuals to participate in the survey, thereby reducing non response. Additionally, the social pressure from a trusted peer, who is incentivized to recruit his or her peers, results in higher response rates. Also the coupons with unique number or codes allow respondents to remain anonymous, also reducing the non-response bias. This is why this type of sampling is appropriate among the migrants.

Assumptions of RDS

There are several assumptions of RDS (Heckathorn, 2007) are mentioned below.

- The respondents know one another as members of the target population and the recruitment ties are reciprocal. The target population must be socially networked and know (to be able to recruit) persons in that social network who also know them.
- There should be sufficient cross-over between sub-groups and that networks are dense enough to sustain a chain referral process.

- Sampling occurs with replacement. Sampling with replacement requires that the sample size to be small in relation to the population size.

- Respondents are recruited from one's network at random. RDS assumes that respondents recruit as though they are choosing randomly from the pool of people they know who are eligible for recruitment.

- Respondents can accurately report their personal network size, defined as the number of relatives, friends, and acquaintances who fall within the target population.

- Though RDS's assumption is that respondent recruits a single peer, however, to avoid recruitment chains from terminating, RDS allows for respondents to recruit slightly more, usually two or three.

Respondent Driven Sampling as applied for surveying Undocumented Bangladeshi Migrants in Kolkata

Recruitment of respondents for the present study was initiated with a small, diverse and influential group of both male and female migrants called 'seeds'. The seeds in this study were selected purposefully (not randomely). But due to this the bias is introduced in the sample. And to reduce this bias, the seeds are expected to initiate long chains of multiple waves of recruits to ensure that the sample reaches equilibrium: the point at which the sample is no longer influenced by the initial (biased) seeds. For this study the seeds were selected with the help of local heads of the areas. Researcher had done several meetings with the local experienced people and met the migrants who had the ability and characteristics to become seeds and those who were well known in the areas. Those migrants were chosen as the seeds who seemed to be more enthusiastic, helpful, were available during my survey period and who were knowledgeable about the significance and quality of my research. Communication skills of the seeds were also important characteristics which the seeds should have had. Each seed received a set of recruitment coupons to recruit his/her peers. Eligible recruits who finished the survey process were also given a set of coupons to recruit their peers. The recruited peers of seeds who completed the survey became Wave 1 respondents, and the recruits of the wave 1 respondents became Wave 2 respondents. This process continued till Wave 3 in which the sample size of 400 migrants was reached. The Waves produced by effective seeds made up the recruitment chains. Six seeds (3 for female migrants and 3 for male migrants) were selected at Madhyamgram and Garden Reach each. In three waves there were a total of 40 respondents from one seed (Figure 1); thus from three seeds of male/female migrants there were 120 respondents which covered 100 sample size calculated for male or female migrants at one place of either Madhyamgram or Garden Reach. Later RDSAT 3.0 software was used to give weight to the sample for further analysis required in the broader study on the undocumented migrants.

Inclusion and Exclusion criteria

The respondents were any male or female Bangladeshi migrant in age group 15-49 and who is staying at the place for at least last three months. These migrants should have gone and came back from Bangladesh at least once in the last three to four years or were new migrants. This criterion was

applied to get information on harassments at the border based on their recent experiences. Migrants who came to India many years ago and staying at Kolkata for more than last four years were excluded since the migrants who are staying in Kolkata for many years may hold identity cards and voter id cards of India and their living arrangement and working condition at destination, as well as their overall experience as a migrants may be different from those who lack any sort of social entitlements.

Conclusion

For the study on the Bangladeshi cross border migrants and their several vulnerabilities, field work and survey would not have been fulfilled and completed without applying RDS. By applying RDS in the concerned study, it was felt that RDS is an appropriate and useful method for collecting survey data many type of migrant population that are difficult to sample through traditional sampling techniques. But it was also very crucial to engage in an initial formative assessment to get to know the social structure of the migrant community to be researched, before designing the RDS study. Application of RDS in the survey/fieldwork had some shortcomings which needs to be taken in to account. RDS often relies on a double incentive structure, where respondents receive one incentive for participating in the survey, and additional incentives for recruiting new respondents. But in this study, incentives was not provided to the seeds or respondents of wave 1, 2 or 3. That is why the researcher faced some problems in case of few respondents who did not want to give interview without any incentives. Researcher also identified some reluctance to participate as well as mistrust among the respondents. But in most cases researcher tried to convince the respondents that their participation would be very helpful for completion of the study and researcher would take the interviews very quickly without wasting their time. RDS was difficult to implement for sampling the newly arrived migrants. Researcher had to take special initiative and had meetings with the seeds so that newly arrived migrants are not left out totally. In spite of some limitations and problems faced by the researcher while the survey, Respondent Driven Sampling was very beneficial for mapping and interviewing the undocumented Bangladeshi migrants and for completing the study among them.

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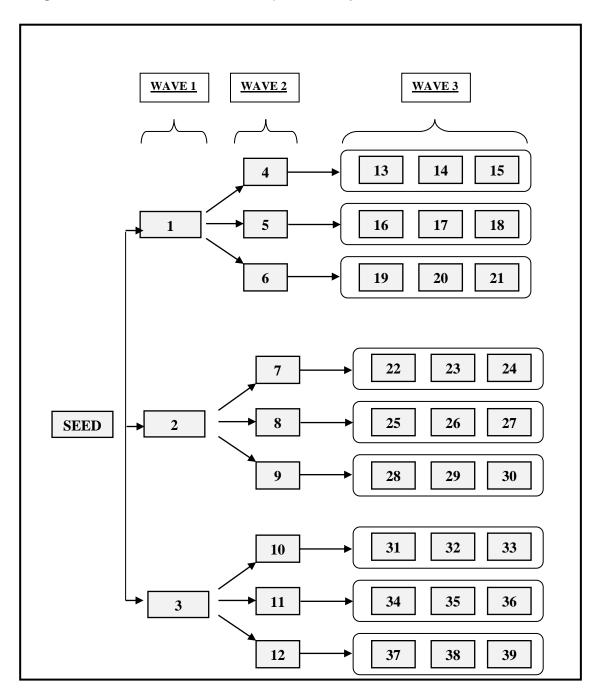
Figure 1: Recruitment Chain in RDS adopted in survey. Illustration of Seed and Waves