

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/230873915>

Counting the numbers of males who have sex with males, male sex workers and hijra in Bangladesh to provide HIV prevention...

Book · June 2012

CITATIONS

0

READS

1,645

11 authors, including:



[Sharful Islam Khan](#)

International Centre for Diarrhoeal Disease R...

54 PUBLICATIONS 448 CITATIONS

[SEE PROFILE](#)



[Masud Reza](#)

International Centre for Diarrhoeal Disease R...

22 PUBLICATIONS 223 CITATIONS

[SEE PROFILE](#)



[Gorkey Gourab](#)

International Centre for Diarrhoeal Disease R...

19 PUBLICATIONS 58 CITATIONS

[SEE PROFILE](#)



[Md Nazmul Alam](#)

International Centre for Diarrhoeal Disease R...

13 PUBLICATIONS 2 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Primary Healthcare in Later Life (PHILL) [View project](#)



Currently I am working in conducting HIV serological and behavioural surveillance among FSWs and PWIDs in selected areas in Bangladesh. [View project](#)



Government of the People's Republic of Bangladesh

**COUNTING THE NUMBERS OF MALES
WHO HAVE SEX WITH MALES, MALE SEX
WORKERS AND HIJRA IN BANGLADESH
TO PROVIDE HIV PREVENTION SERVICES**

Conducted by
International Centre For Diarrhoeal Disease
Research, Bangladesh (icddr,b)

2012



জাতীয় এইডস /এসটিডি প্রোগ্রাম
স্বাস্থ্য অধিদপ্তর, স্বাস্থ্য ও পরিবার কল্যাণ মন্ত্রণালয়

**COUNTING THE NUMBERS OF MALES
WHO HAVE SEX WITH MALES, MALE SEX
WORKERS AND HIJRA IN BANGLADESH
TO PROVIDE HIV PREVENTION SERVICES**

**Conducted by
International Centre For Diarrhoeal Disease
Research, Bangladesh (icddr,b)**

2012

**NATIONAL AIDS/STD PROGRAMME
Directorate General of Health Services
Ministry of Health and Family Welfare
Government of the People's Republic of Bangladesh**

PRINT DATE:

June 2012

PARTICIPATORY SITUATION ASSESSMENT CONDUCTED AND REPORT PREPARED BY:

Sharful Islam Khan
Md. Masud Reza
Gorkey Gourab
Md. Iftekher Hussain
Paritosh Kumar Deb
Tanvir Ahmed
Ahmed Shahriar
Md. Nazmul Alam
Md. Shah Alam
A K M Masud Rana
Tasnim Azim

PROJECT FUNDED BY:

The Rolling Continuation Channel (RCC) Global Fund grant for HIV

PRINTED BY:

Dina Offset Printing Press
177/1, Arambagh, Motijheel
Dhaka-1000, Bangladesh

COVER PAGE DESIGNED BY:

Gorkey Gourab

FOREWORD

Bangladesh has triangulated data from different sources to estimate sizes of population groups at higher risk of HIV and the last size estimation of these groups was conducted in 2004. However, at the time very limited data were available on the numbers of males who have sex with males (MSM) and hijra in Bangladesh so that estimation of size of these groups had a wide margin of error. Recently attempts have been made to fill this data gap through the Rolling Continuation Channel (RCC) Global Fund grant for HIV to Bangladesh.

Under the Global Fund RCC grant for HIV, icddr,b with approval from the Bangladesh Country Coordination Mechanism (CCM) started to provide HIV prevention services to MSM and hijra in December 2009. As effective services are based on evidence, therefore ideally before initiation of services appropriate information needs to be available. In this context icddr,b conducted a nationwide assessment in 2010 to determine the numbers of MSM (including sex workers and non-sex workers) and hijra who could be contacted to receive HIV prevention services. This assessment was conducted in consultation with the National AIDS/STD Program (NASP).

Thus, the findings presented in this report have national significance – they have been used to identify locations where services can be setup including the modality of those service outlets and they can be used to update the upcoming national size estimation of populations at higher risk of HIV including MSM and hijra.

NASP is thankful to the Global Fund for its support and will continue its efforts at coordinating and facilitating the national response to HIV and AIDS. NASP is also highly appreciative of the sincere effort of icddr,b and members of target communities for successfully conducting this assessment.

Dr. Md. Abdul Waheed
Line Director NASP and SBTP
Directorate General of Health Services
Ministry of Health and Family Welfare

ACKNOWLEDGEMENT

NASP gratefully acknowledges the role of icddr,b in conducting the Participatory Situation Assessment (PSA) among MSM, MSW and hijra in Bangladesh. This PSA was possible through their collaborative effort with the Government of Bangladesh, non-government organizations working on HIV, MSM and hijra community, and local community members throughout Bangladesh. The support from Family Health International (FHI) and Save the Children throughout the process is also acknowledged.

The investigators from icddr,b were, Sharful Islam Khan, Md. Masud Reza, Gorkey Gourab, Md. Iftekher Hussain, Paritosh Kumar Deb, Tanvir Ahmed, Ahmed Shahriar, Md. Nazmul Alam, Md. Shah Alam, A K M Masud Rana and Tasnim Azim.

Icddr,b worked with the help of its Sub-recipients, Bandhu Social Welfare Society (BSWS) and Light House (LH), and Sub-sub recipients, Organization of Development Program for Underprivileged (ODPUP), Khulna Mukti Seba Sangstha (KMSS), Badhan Hijra Shangha (BHS), Marie Stopes Clinic Society (MSCS) and Padakhep Manabik Unnayan Kendro (PMUK) who extended their full cooperation and support.

From icddr,b a group of energetic researchers worked in this survey and they were: Md. Mahbubur Rahman, Md. Nazmul Alam, Samir Ghosh, Md. Shahgahan Miah, Salma Akhter, Shaikh Mehdi Hasan, Prokash Chandra Sarker, Joya Sikder, Anonnya Bonik, Akul Chandra Halder, Nurul Huda, Tanvir Ahmed (Ayon), Hafizul Islam, Syed Shahnewaz, Md. Tarik Hossain, Abul Quasem George, Md. Dewan Zinnah, Mir Md. Yousuf Kamal, Noor Atiqul Islam, Md. Ahsan Ullah, S. M. Salim Akhter, Mohammad Ahsan Ullah, Khandaker Shohidul Islam, Md. Khokan Mollah, Md. Zakir Hossain, Md. Babul Hasan, Sushen Chandra Mondal, Firoz Ahmed, Parimol Chandra Mohanta, Belayet Hossain Mahe, Md. Razib Mamun, Md. Mamunoor Rashid, Md. Rashedul Azim, Md. Aslam Ali Khan Roni, Alakesh Bepari, Pahari Hijra, Md. Shah Jalal Bhuiyan, Md. Ahsanul Amin, Ripon Chandra Ghosh, Kajol Chandra Banik, Md. Mahbubul Alam, Jhinuk Hijra and Md. Rafiqul Islam Tutul. In addition, Mohammad Sha Al Imran and Md. Alamgir Kabir helped in data entry and analysis and Md. Mustafizur Rahman and Mohammed Ishaque provided management support.

This Participatory Situation Assessment among MSM, MSW and hijra was funded by The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), through the Grant 'Expanding HIV/AIDS Prevention in Bangladesh', under the terms of Grant Agreement No. BAN-202-G13-H-00 with icddr,b. The opinions expressed in this report are those of authors and do not necessarily reflect the views of the Global Fund.

Finally, we gratefully acknowledge the active support from MSM and hijra throughout the PSA. It would not have been possible to conduct the PSA without their involvement.

ACRONYMS

BAP	Bangladesh AIDS Programme
BSS	Behavioural surveillance surveys
CBO	Community based organisation
CCM	Country Coordination Mechanism
DP	Development Partner
FHI	Family Health International
GF	Global Fund
GoB	Government of Bangladesh
HAIS	HIV/AIDS Intervention Services
HAPP	HIV/AIDS Prevention Project
HATI	HIV/AIDS Targeted Intervention
HIV	Human immunodeficiency virus
IMPACT	Implementing AIDS Prevention and Care
MSM	Males who have sex with males
MSW	Male Sex Worker
NASP	National AIDS/STD Programme
NGO	Non-governmental organization
PSA	Participatory situation assessment
PWID	People who inject drugs
RCC	Rolling Continuation Channel
RDS	Respondent driven sampling
STI	Sexually transmitted infections
TLS	Time location sampling
UNAIDS	Joint United Nations Programme on HIV/AIDS

TABLE OF CONTENTS

Background on HIV prevention service for males who have sex with males, male sex workers and hijra in Bangladesh	1
Understanding the needs of MSM, MSW and hijra	2
Estimated numbers of MSM and hijra – what do we know so far	3
Objectives of this assessment, procedures followed and findings	4
Conclusions	10
References	11
Appendix 1	13
Appendix 2	19

List of table

Table 1: Numbers of MSM, MSW and hijra in 64 districts of Bangladesh	7
--	---

List of Figures

Fig. 1. Chronology of landmark events in the provision of HIV prevention services for MSM, MSM and hijra in Bangladesh	1
Fig. 2. Distribution of MSM in different divisions of Bangladesh	8
Fig. 3. Distribution of MSW in different divisions of Bangladesh	8
Fig. 4. Distribution of hijra in different divisions of Bangladesh	8
Fig. 5. Districts with more than 3000 MSM and MSW (combined)	9
Fig. 6. Districts where 300 or more hijra were found	9

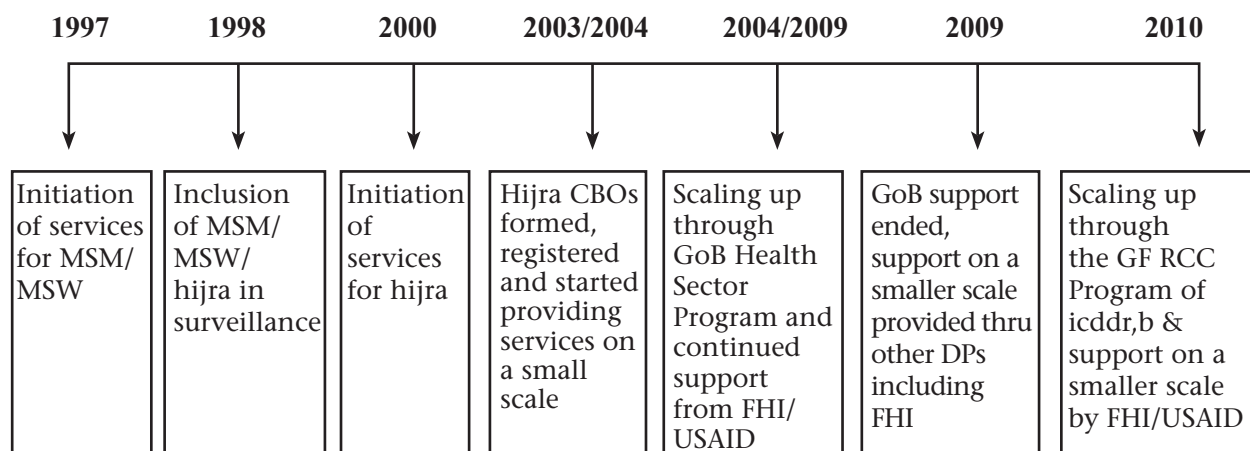
List of boxes

Box. 1. Definitions used in the PSA for MSM, MSW and hijra	4
Box 2. Definitions of sites and spots where MSM and MSW were counted	5

BACKGROUND ON HIV PREVENTION SERVICE FOR MALES WHO HAVE SEX WITH MALES, MALE SEX WORKERS AND HIJRA IN BANGLADESH

Males who have sex with males (MSM), male sex workers (MSW) and transgendered people (hijra) are highly marginalised and stigmatised in most countries and Bangladesh is no exception. Providing services to these hidden populations is a challenge. However, despite this Bangladesh initiated HIV prevention services for MSM and MSW in the late 1990s which was at the time cited as best practice by UNAIDS (UNAIDS, 2006). Amongst the Development Partners (DPs), USAID has provided consistent support starting from 2000 through Family Health International (FHI) under various projects at different time points; from 2000-2005 through the Implementing AIDS Prevention and Care (IMPACT) Project, from 2005-2009 through the Bangladesh AIDS Programme (BAP) and from 2009 to 2013 through Modhumita (Family Health International (FHI), 2007). The Government of Bangladesh provided funds for scaling up of services through its health sector project (HIV/AIDS Prevention Project, HAPP) from 2004 to 2007. HAPP was continued as the HIV/AIDS Targeted Intervention (HATI) Project from 2008 to 2009 which was in turn continued as the HIV/AIDS Intervention Services (HAIS) for another six months (National AIDS Committee, 2006). In addition to these funds smaller scale support was provided by other DPs. Finally, a massive scale up was done through the Rolling Continuation Channel (RCC) of the Global Fund (GF) for HIV since December 2009 with approval from the Bangladesh Country Coordination Mechanism (CCM). Fig. 1 shows the chronology of landmark events in the provision of HIV prevention services for MSM, MSW and hijra in Bangladesh.

Fig. 1 Chronology of landmark events in the provision of HIV prevention services for MSM, MSW and hijra in Bangladesh



CBO = community based organisation, GoB = Government of Bangladesh, DP = Development Partner, GF = Global Fund, RCC = Rolling Continuation Channel

UNDERSTANDING THE NEEDS OF MSM, MSW AND HIJRA

Effective services are based on evidence and therefore ideally before initiation of services appropriate information needs to be available. For hidden and marginalised populations such as MSM, MSW and hijra it is essential to have an understanding of their social structure and norms, their networks, behaviours, health needs, numbers who need those services, how they can be reached, where service centres should be located, etc. Several research studies, surveys and surveillance have been conducted in Bangladesh over the years among MSM, MSW and hijra (Khan, Bhuiya et al., 2004; Khan, Hudson-Rodd et al., 2005; Khan, Hussain et al., 2008; Azim, Khan et al., 2009; Khan, Mohammed et al., 2009) which have provided some insights into these population groups. A basic issue that needs to be taken into consideration while providing services for MSM is that there is considerable heterogeneity in their sexual behaviours on the basis of which MSM in the Indian subcontinent are categorised into different sub-groups (Khan and Khan et al., 2005; Khan, Hudson-Rodd et al., 2005; Dowsett, Grierson et al., 2006). These subgroups are: 'Kothi' who are feminized males; 'Panthi', is the name given by kothi to their sex partners who are usually insertive partners; 'Parik' are the male lovers of kothi, and all parik are panthi, but not all panthi are parik; 'Do-parata' are MSM who practice insertive sex roles with kothi, as well as receptive roles with other panthi or even with kothi. There is often an overlap between kothi and hijra but hijra are distinguished from kothi in that they have a strict social hierarchy where gurus have a number of followers or chelas and the guru-chela relationship is an essential aspect of the hijra culture (Khan, Hussain et al., 2008). Such behavioural categories may have implications on vulnerability to and risk for HIV and sexually transmitted infections (STIs) and hence service delivery design.

Behavioural surveillance surveys (BSS) and HIV surveillance have confirmed that although HIV prevalence is low, risk behaviour is high and the networks of risk are fairly widespread (Azim, Khan et al., 2009). High rates of active syphilis have been recorded in hijra (Govt. of Bangladesh, 2011). These findings suggest that there is time to prevent an HIV epidemic but given the high rates of STIs and risk behaviours, HIV prevention services must be targeted appropriately.

ESTIMATED NUMBERS OF MSM AND HIJRA – WHAT DO WE KNOW SO FAR

In late 2003 the Government of Bangladesh with technical assistance from FHI Bangladesh undertook an exercise to estimate the sizes of the different population groups considered to be most at risk for HIV in the country and these included people who inject drugs (PWID), female and male sex workers, hijra, MSM, clients of sex workers, and returnee external migrants (Reddy, 2008). Briefly, the methodology followed was collection of secondary data on sizes of these population groups from all available sources which was then compiled and reviewed and assessed by the Working Group and triangulated with other information. In most cases appropriate multipliers were used to inflate the size data from interventions to obtain sizes for the entire group in the city or district and not just in the intervention areas. This was further extrapolated to the entire country. At the time, information on MSM/MSW was available only from 11 cities of 10 districts and for hijra this was available from five cities of four districts. Using this methodology, the estimated numbers obtained for the country were 40,000-150,000 for MSM (including MSW) and 10,000-15,000 for hijra. The report clearly stated that there was a paucity of information on the numbers of MSM, MSW and hijra in different parts of Bangladesh so that the extrapolation may not be realistic.

Recently an attempt was made by NASP to update the size estimates for all at-risk population groups but as relevant new information was not available for MSM, MSW and hijra, the size estimation exercise for these groups was not conducted. Thus it is clear that there is a need for better information on numbers of MSM, MSW and hijra in Bangladesh.

OBJECTIVES OF THIS ASSESSMENT, PROCEDURES FOLLOWED AND FINDINGS

As a reliable estimate of the numbers of MSM, MSW and hijra were not available in the country, prior to initiating the scaling up of services for these population groups through the GF RCC Programme, a country wide participatory situation assessment (PSA) was conducted in 2010. An objective of the PSA was to assess the numbers of MSM, MSW and hijra in Bangladesh who can be contacted for HIV prevention services in different geographical areas of the country.

Participatory situation assessment is a useful method for hidden and stigmatized population groups such as MSM, MSW and hijra as it ensures involvement of the community concerned and those who may directly or indirectly be affected by the behaviours. Such community involvement enhances reach and acceptability of the assessment procedures and findings. For this purpose the PSA team included 35 field interviewers of whom 16 belonged to the MSM and/or hijra community. Also, local MSM and hijra guides were employed alongside the teams who had in-depth knowledge regarding their communities in their respective localities.

In order to count MSM, MSW and hijra it was important to keep in mind that these population groups often overlap. Strict definitions were therefore followed during the counting process in the PSA. The definitions used in the PSA are provided in Box 1.

Box. 1. Definitions used in the PSA for MSM, MSW and hijra

MSM: Males who have sex with males but do not sell sex.

MSW: Male who sell sex in exchange of money or compulsory gift. Therefore all MSW are MSM, but not all MSM sell sex.

Hijra: Those who identify themselves as belonging to a traditional hijra sub-culture and belong to the guru-chela hijra hierarchy. Sometimes kothi (feminised MSM) identify themselves as hijra because of their effeminate behaviour. Some kothi may want to be labelled as hijra and such overlapping identities may lead to double counting. Therefore, a more strict definition was employed such that only those hijra who not only identified themselves as hijra but were part of the hijra culture and within the guru-chela hijra hierarchy were included in this group.

It is well recognised that no single method is adequate to determine sizes of hidden population groups and for this reason triangulation of findings using different methodologies is recommended (UNAIDS/FHI, 2003). Suitability of methods varies with the context; thus for populations that frequent visible venues on a regular basis capture-recapture or time location sampling (TLS) may be used. For others, who are more hidden and do not regularly visit fixed sites or venues, chain referral methods such as the nomination method or respondent driven sampling (RDS) may be more appropriate (UNAIDS/FHI, 2003). Considering these the PSA employed multiple methods:

- i. Information was collected through secondary sources
- ii. Qualitative methods including Key Informant Interviews (KIIs), Focus Group Discussions (FGDs) and informal discussions (for MSM, MSW and hijra) were also employed
- iii. Time location sampling was used for MSM and MSW only
- iv. Nomination method – the standard method was used for MSM and MSW and a modified nomination method was used for hijra; birit-based approach

- i. Initially secondary data were collected which included relevant documents from various national and international organizations i.e. National AIDS/STD Programme (NASP), research organizations, NGOs providing HIV prevention services, etc. These were collected from the central offices and where relevant also from field offices. The documents included various programme reports at different intervals, surveillance reports (serological and BSS), size estimation report, targets of different programmes, mother lists etc. In addition, documents that described the context including scientific papers (journal articles, working papers, monographs), NGO (national and international) newsletters, annual reports, etc. were also collected.
- ii. Qualitative methods were used throughout the PSA in order to obtain an idea about the local context and possible numbers of the target populations. Thus KIIs were conducted in each district and upazila¹ with individuals known to be experts/knowledgeable on MSM, MSW and hijra and who were available and willing to be interviewed. For the same reasons FGDs and/or informal discussions were conducted with MSM, MSW, staff of NGOs, gatekeepers, pimps of female sex workers (in some instances), etc. Through these methods information obtained on the possible numbers of MSM, MSW and hijra were triangulated to calculate the upper limit (i.e. indirect count) of the range of numbers of these populations.
- iii. Time Location Sampling (TLS) has been applied to assess the number of MSW and MSM (clients of MSW) in different countries ([Magnani, Sabin et al., 2005](#); [Ramirez-Valles, Heckathorn et al., 2005](#); [Raymond, Ick et al., 2007](#)). In the PSA this method was employed in those cities/towns where MSM and MSW gathered in identifiable spots or sites. For hijra, TLS was not used. Prior to doing this definitions for spots and sites were fixed as shown in Box 2. The TLS process involved an initial mapping of the area (city/town/upazila where applicable). The team collected information about the sites/spots where MSW and MSM could be found. If an HIV intervention programme was available in the area, the concerned NGO's list of sites/spots was used along with information obtained through FGDs and KIIs with key stakeholders. Where there were no HIV intervention programmes, sites/spots were mapped using information obtained through informal interviews, FGDs and KIIs with available MSM and MSW, their networks and different stakeholders from the area. In addition to identification of sites/spots the timeframe during which MSM and MSW gathered at those sites/spots was ascertained (including the busiest time, when the most number of MSW and MSM visited the place). After listing all possible sites/spots, smaller teams (composed of a team member and one or more trained local guide) visited spots to directly count the numbers of MSM and MSW available at those spots at the chosen time frame.

Box 2. Definitions of sites and spots where MSM and MSW were counted

Spot: Public location where individuals identifying themselves as MSM or MSW were likely to gather during a particular time period. There were two categories of spots:

- Sex trade spots: places where MSM or MSW gathered for seeking partners for buying or selling sex
- Social gathering spots, places where MSM or MSW gathered primarily to socialize with other members of their community which could also lead to finding both commercial and non-commercial sex partners

Site: An area or locality that consisted of several spots where members of MSM or MSW could be found.

¹Sub-District council, one of the local government tiers in Bangladesh (As-Saber, S. N. and M. F. Rabbi, 2009).

- iv. The nomination method is a chain sampling method (Thomson and Collins, 2002) which has been used in different settings to explore hard to reach populations around the world (UNAIDS/FHI, 2003). In Bangladesh, it was successfully applied to assess the number of residence-based female sex workers which is another population group that is highly marginalised and hidden (Govt. of Bangladesh, 2009). The standard procedure is to nominate a “seed” from the community (in this case MSM, MSW or hijra) who then identify his/her network members and the network members are then contacted who in turn identify more members and this is continued till saturation is reached.

In the PSA, the standard nomination method was used for MSM and MSW and a modified method was used for hijra which was birit based.

The team members selected MSM and MSW seeds from spots or in the absence of spots, through their peer networks. Each of the selected seeds was then asked to provide information on the MSM and MSW members in their network to enable the assessment team to contact them. Those that could be contacted were considered as the 1st wave of population. Each member accessed in the 1st wave was in turn asked to identify and provide information on his network members which generated the 2nd wave. In order to eliminate duplication team members gathered together every night to identify and remove similar information through peer debriefing sessions with the help of guides from the community before proceeding to the next wave. This process continued till the network was saturated, i.e. when it was apparent that the same individuals were being repeatedly named.

Nomination was used in conjunction with TLS in those areas where MSM and MSW gathered in identifiable spots. TLS was conducted in 122 locations which include towns/cities and upazila/thana.

An issue of concern was double counting irrespective of the method used. The methods employed to avoid double counting were several. In TLS, there was always a possibility that an MSM or MSW may leave one spot and move to another and thus he could possibly be counted twice. A way to avoid this was that if an MSW or MSM left a spot, the team member would request information of his next destination. If he was going to visit another spot, this information was communicated immediately over mobile phone to the team member present at that spot who was also provided some clues such as dress, name, physical appearance, etc. In the nomination method, the same individuals may have been identified in different waves and the method employed for reducing duplication has been described above. Where both TLS and nomination methods were used, each of the individuals contacted through the nomination method was asked whether he had visited the spots covered by the assessment team on that particular day or the day before in order to avoid double counting.

The hijra community is organized around a traditional occupation (badhai or collecting money from the markets, and blessing the new born) and follows a hierarchical system where there are defined roles, rules and regulations. The guru (teacher) has chela (disciples) and all chela must be linked to a guru. A chela is thus identified by her link to her guru and a guru is recognized by the number of chela under her leadership. This relationship is the fundamental basis of the hijra community (Khan, Parveen et al., 2007). As part of the tradition, a hijra guru collects money through her chela from a delineated area or locality called birit which is under her purview. Without the guru’s approval the chela cannot collect money from households or from markets and a guru and her chela do not cross the boundaries of their birit. Therefore, for a hijra guru it is possible to report the exact number of hijra chela who are working in her birit. Not all hijra chela restrict themselves to being a badhai hijra; many sell sex which is not a traditional hijra activity. Nonetheless, most hijra sex workers are under a guru in order to continue belonging to the hijra community. A guru not only knows all hijra in her birit, but she also knows the number of kothi, who are feminised males who join the hijra community for some social occasions such as Eid.

Knowing this background of the strict guru-chela hierarchy enabled the PSA team to modify the nomination method for counting hijra using the birit as a unit. For counting the numbers of hijra an initial list of guru was developed through a series of consultations with the hijra community in each district. A birit under each guru was then identified and the number of hijra under the guru was listed. All listed hijra within a birit were invited to attend a session at the guru’s residence and some others were contacted over mobile phones.

This PSA covered all seven divisions and 64 districts of Bangladesh. All metropolitan cities and all district level towns were covered. Where information gathered through qualitative methods suggested that MSM, MSW or hijra may be accessible in upazilas, those upazilas were visited. The different methods used for counting MSM/MSW and hijra in the different geographical areas are shown in Appendix 1.

Numbers were calculated to determine upper (indirect count) and lower (direct count) limits of MSM, MSW and hijra. The lower limit included those who were either seen or contacted (such as through mobile phone) by the team members using TLS and nomination methods and this therefore can be considered as a direct count. The upper limit was generated through triangulation of information obtained through qualitative methods (KIIs, FGDs and informal interviews) and secondary sources. Outliers identified through the triangulation process were excluded and an average figure from the remaining numbers was used as the maximum number. Therefore this can be considered as an indirect count.

Using the methods described, the numbers that were obtained from all of Bangladesh through this process of counting are shown in Table 1:

Table 1: Numbers of MSM, MSW and hijra in 64 districts of Bangladesh

Population group	Lower limit (Direct count)	Upper limit (Indirect count)
MSM	21,833	1,10,581
MSW	11,134	32,484
Hijra	4,504	8,882

Figs. 2-4 show the indirect counts for each population group and the proportions calculated based on the total numbers obtained through indirect counting. It is to be kept in mind that MSM are a particularly hidden population and the MSM who were included in the counting process were the most visible and networked. It is therefore likely that the MSM number is an underestimate however, these visible MSM are also more likely to access services. Across the Divisions, for all population groups, the highest numbers (indirect count) were found in Dhaka (58,766 for MSM, 13,184 for MSW and 2,759 for hijra). Rajshahi (14,382 for MSM, 5,503 for MSW and 1,575 for hijra), Chittagong (12,242 for MSM, 3,576 for MSW and 1,309 for hijra) and Sylhet (6,544 for MSM, 3,298 and 1,406 for hijra) also had substantial numbers.

Fig. 2. Distribution of MSM in different divisions of Bangladesh

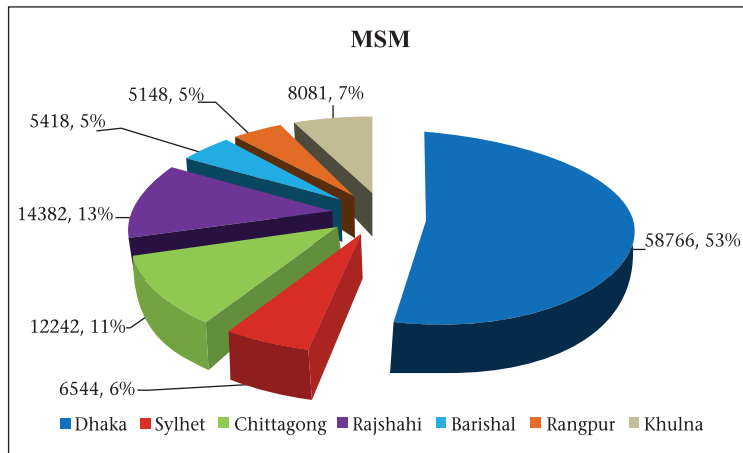


Fig. 3. Distribution of MSW in different divisions of Bangladesh

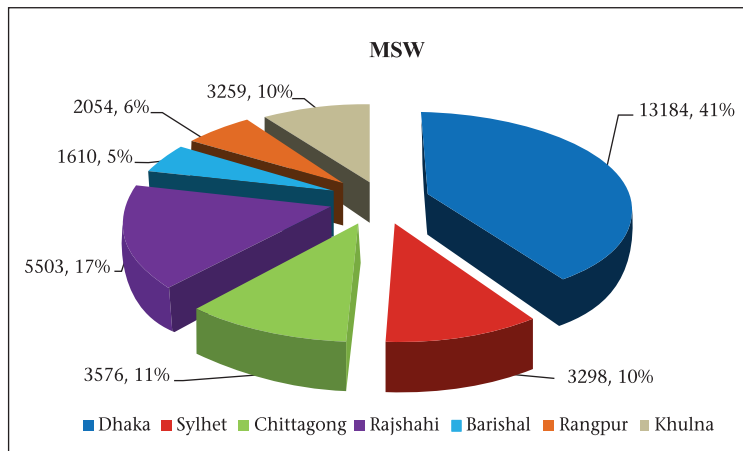
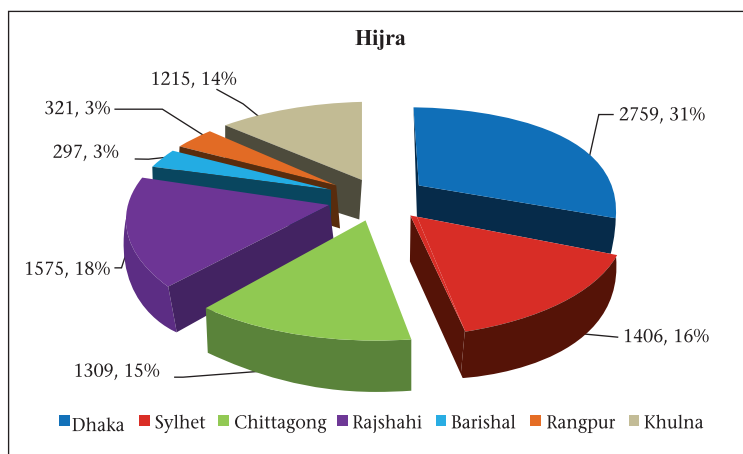
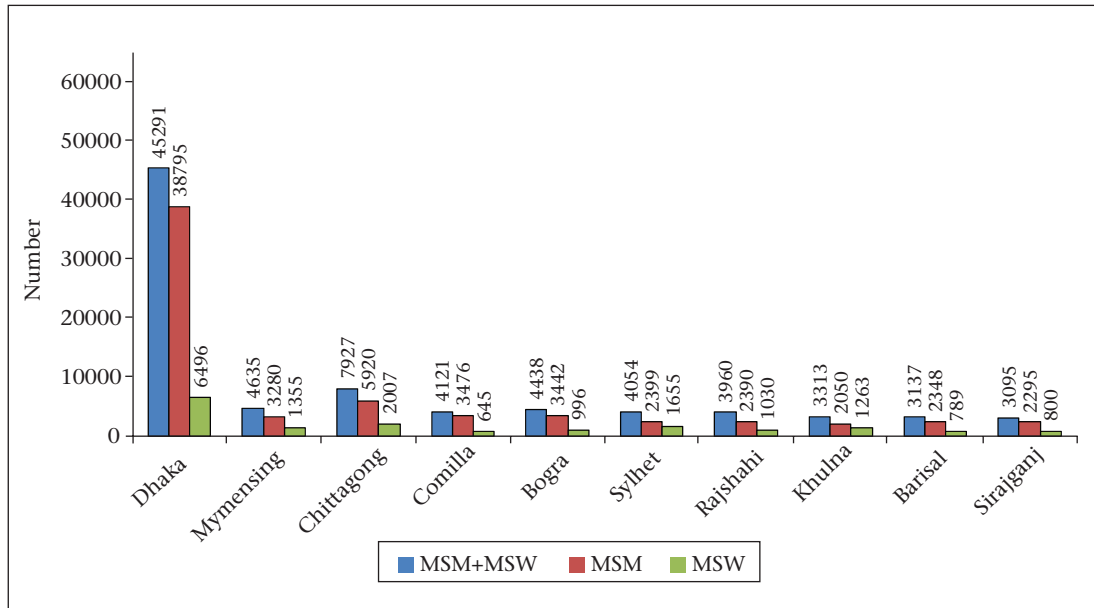


Fig. 4. Distribution of hijra in different divisions of Bangladesh



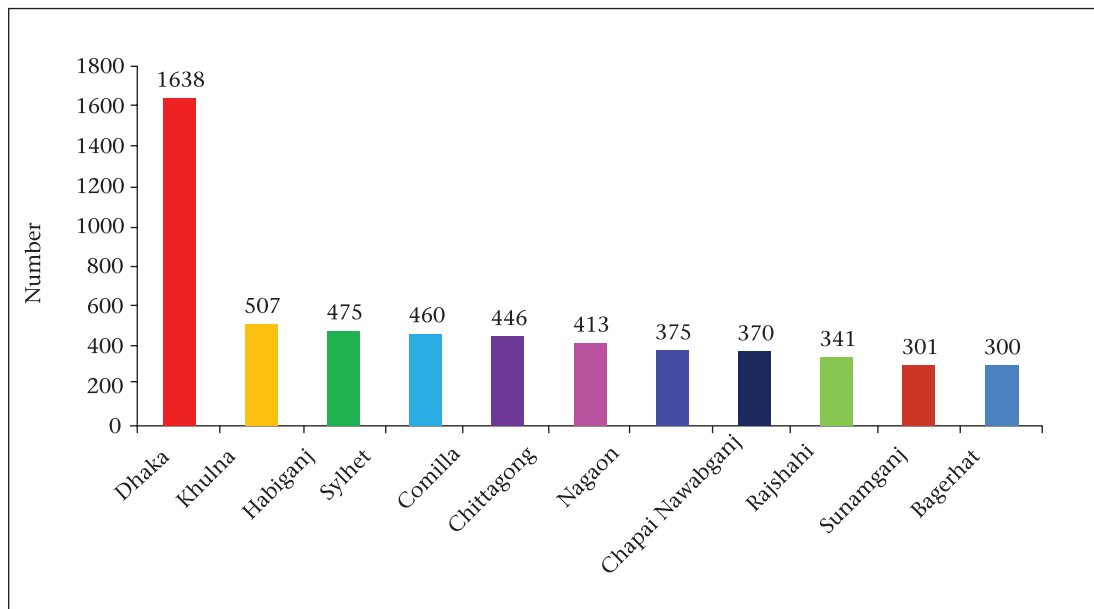
District wise distribution varied for the different population groups and details are provided in Appendix 2. Dhaka had the highest numbers of MSM and MSW (combined). Besides Dhaka, only nine districts had more than 3,000 MSM and MSW (combined) (Fig. 5).

Fig. 5. Districts with more than 3,000 MSM and MSW (combined)



Among 64 districts, only 11 districts had 300 or more hijra. Apart from Dhaka (which had the highest number of hijra), relatively high numbers of hijra who were concentrated in localities were found only in Sylhet, Habigonj, Sunamgonj, Khulna, Chittagong and Comilla (Fig. 6). In other districts, hijra were scattered across districts and finding more than 50 hijra in a city or upazila was rare. So that although for a district, the cumulative number of hijra was 150-200, these numbers were obtained from several upazilas and not from a single area.

Fig. 6. Districts where 300 or more hijra were found



A breakdown of the numbers in different districts within each of the seven Divisions is provided in Appendix 2.

CONCLUSIONS

For the first time in Bangladesh numbers of MSM, MSW and hijra who can be contacted for HIV prevention services in the entire country have been estimated. The methods used for obtaining these numbers were multiple and were adapted to suit the context e.g. the birit based approach for hijra. Application of these methods and modifications were possible by utilising and triangulating available information in the country on these population groups. The numbers reported here fill a gap in information that is required to update the national size estimates of MSM, MSW and hijra and to ascertain where service centres need to be established. However, it must be kept in mind that for MSM (mainly clients of male sex workers), as they are particularly hidden, these numbers are likely an underestimate. However, those who have been counted are likely to be accessible for providing services. It is also important to keep in mind that numbers are never fixed as populations are mobile and sexual identities are often fluid (Asthana and Oostvogels, 2001). Given these realities, HIV prevention services that are established for these population groups need to be flexible so that appropriate changes to service delivery mechanisms can be made as and when required.

REFERENCES

- As-Saber, S. N. and M. F. Rabbi (2009). "Democratisation of the Upazila Parishad and Its Impact on Responsiveness and Accountability: Myths versus Realities." Journal of Administration & Governance 4(2): 53-71.
- Asthana, S. and R. Oostvogels (2001). "The social construction of male 'homosexuality' in India: implications for HIV transmission and prevention." Social Science and Medicine 52: 707-721.
- Azim, T., S. I. Khan, et al., (2009). 20 years of HIV in Bangladesh: experiences and way forward. Dhaka, The World Bank, UNAIDS.
- Dowsett, G., J. Grierson, et al., (2006). A review of knowledge about the sexual networks and Behaviour of men who have sex with men in Asia. Monograph Services Number 59. Melbourne, Australia., Australian Research Centre in Sex, Health and Society. La Trobe University.
- Family Health International (FHI) (2007). Bangladesh Final Report September 1997–September 2007 for USAID's Implementing AIDS Prevention and Care (IMPACT) Project. Virginia, Family Health International.
- Govt. of Bangladesh (2009). Understanding the operational dynamics and possible HIV interventions for residence-based female sex workers in two divisional cities in Bangladesh. Dhaka, ICDDR,B & Save the Children - USA.
- Govt. of Bangladesh (2011). National HIV Serological Surveillance, 2011, Bangladesh, 9th Round Technical Report. Dhaka, National AIDS/STD Programme, Directorate General of Health Services, Ministry of Health and Family Welfare, Govt. of Bangladesh.
- Khan, S., S. I. Khan, et al., (2005). In their own words: the formulation of sexual and health-related behaviour among young men in Bangladesh, Naz Foundation International, ICDDR,B, The Catalyst Consortium.
- Khan, S. I., A. Bhuiya, et al., (2004). "Application of the Capture-Recapture Method for Estimating Number of Mobile Male Sex Workers in a Port City of Bangladesh." Journal of Health Population and Nutrition 22(1): 19-26.
- Khan, S. I., N. Hudson-Rodd, et al., (2005). "Men who have sex with men's sexual relation with women in Bangladesh." Culture, health & sexuality 7(2): 159-169.
- Khan, S. I., M. I. Hussain, et al., (2008). "Not to stigmatize but to humanize sexual lives of the transgender (hijra) in Bangladesh: condom chat in the AIDS era." Journal of LGBT Health Research 4(2-3): 127-141.
- Khan, S. I., Mohammed, et al., (2009). "Living on the extreme margin: social exclusion of the transgender population (hijra) in Bangladesh." Journal of health, population and nutrition 27(4): 1-11.
- Khan, S. I., S. Parveen, et al., (2007). Final report on socialization and sexuality constructions of hijra: implications for STIs/HIV intervention. Dhaka, ICDDR,B.
- Magnani, R., K. Sabin, et al., (2005). "Review of sampling hard-to-reach and hidden populations for HIV surveillance." AIDS 19(suppl 2): S67-72.
- National AIDS Committee (2006). UNGASS indicators country report. Directorate General of Health Services, National AIDS/STD Programme. Dhaka, Ministry of Health and Family Welfare, Govt. of Bangladesh.
- Ramirez-Valles, J., D. D. Heckathorn, et al., (2005). "From Networks to Populations: The Development

and Application of Respondent-Driven Sampling Among IDUs and Latino Gay Men.” AIDS and Behavior 9(4): 387-402.

Raymond, H. F., T. Ick, et al., (2007). Resource Guide: Time Location Sampling (TLS). San Francisco, San Francisco Department of Public Health HIV Epidemiology Section, Behavioral Surveillance Unit.

Reddy, A. (2008). A synthesis of HIV situation in Bangladesh: an epidemic in transition. Dhaka, Bangladesh, Family Health International.

Thomson, S. K. and L. M. Collins (2002). “Adaptive sampling in research on high risk-related behavior.” Drug Alcohol Dependence 68(suppl.1): S57-67.

UNAIDS (2006). HIV and men who have sex with men in asia and the pacific. UNAIDS best practice collection. Geneva, UNAIDS.

UNAIDS/FHI (2003). Estimating the size of populations at risk for HIV. Bali, UNAIDS/FHI/IMPACT.

Appendix 1: List of cities/towns/upazila/thana visited under PSA and methods used to assess the numbers of MSM/MSW and hijra

Division	District	Upazila and/or thana	Methods used to assess the number MSM/MSW				Modified nomination for hijra	
			Qualitative	Secondary field data	TLS*	Nomination		
Dhaka	Dhaka	Adabor	√		√	√	√	
		Airport	√		√	√	√	
		Ashulia	√			√	√	
		Badda	√			√	√	
		Bongshal	√	√		√	√	√
		Cantonment	√			√	√	√
		Chakbazar	√			√	√	√
		DakshinKhan	√	√		√	√	√
		Darus Salam	√			√	√	√
		Demra	√			√	√	√
		Dhamrai	√	√			√	√
		Dhanmondi	√			√	√	√
		Dohar	√				√	√
		Gendaria	√			√	√	√
		Gulshan	√			√	√	√
		Hazaribagh	√	√		√	√	√
		Jatrabari	√			√	√	√
		Kadamtoli	√			√	√	√
		Kafrul	√			√	√	
		Kamrangirchar	√	√		√	√	√
		Keraniganj	√			√	√	√
		Khilgaon	√			√	√	√
		Khilkhet	√			√	√	√
		Kolabagan	√			√	√	
		Kotowali	√	√		√	√	√
		Lalbagh	√			√	√	√
		Mirpur	√	√		√	√	√
		Mohammadpur	√			√	√	√
		Motijhil	√			√	√	√
		Nawabganj	√				√	√
		New market	√			√	√	
		Pallabi	√			√	√	√
		Polton	√			√	√	
		Ramna	√			√	√	√
		Rampura	√			√	√	
		Sabujbagh	√			√	√	√
		Savar	√				√	√
		Shah Ali	√			√	√	√
		Shahbagh	√			√	√	
		Sher-e-Bangla nagar	√			√	√	
Shyampur	√			√	√	√		
Sutrapur	√			√	√	√		
Tejgoan (RA)	√			√	√			
Tejgoan Industrial Area	√			√	√	√		

Division	District	Upazila and/or thana	Methods used to assess the number MSM/MSW				Modified nomination for hijra
			Qualitative	Secondary field data	TLS*	Nomination	
		Turag	√		√	√	√
		Uttara	√		√	√	√
		Uttarkahan	√		√	√	
	Rajbari	Rajbari Sadar	√		√	√	√
		Goalandaghat	√			√	√
		Pangsha	√			√	
	Faridpur	Faridpur Sadar upazila	√			√	√
	Gopalganj	Gopalganj Sadar	√			√	√
		Tungipara	√			√	
	Madaripur	Madaripur Sadar	√			√	√
		Rajoir upzila	√			√	
	Shariatpur	Shariatpur Sadar	√			√	√
		Naria upzila	√			√	√
		Bhedarganj	√			√	√
	Narayan-ganj	Narayananj Sadar	√	√	√	√	√
		Rupganj	√		√	√	√
		Sonargaon	√		√	√	√
		Bondor	√			√	√
		Fatuulla	√		√	√	√
	Gazipur	Joydevpur	√		√	√	√
		Kaliakoier	√			√	√
		Kaligonj	√			√	√
		Tongi	√			√	√
		Shreepur	√			√	√
	Tangail	Tangail Sadar	√			√	√
		Mirzapur	√			√	√
		Kalihati	√			√	√
		Basail	√			√	√
		Madhupur	√			√	√
	Jamalpur	Jamalpur Sadar	√		√	√	√
		Sarishabari	√			√	
		Mathergonj	√			√	
Islampur		√			√		
Melandoho		√			√	√	
Mymensingh	Mymensingh Sadar	√	√	√	√	√	
	Muktagacha	√			√		
	Dhobaura	√			√		
	Ishwarganj	√			√	√	
Kishoreganj	Kishoreganj Sadar	√			√	√	
	Karimganj	√			√	√	
	Pakundia	√			√	√	
	Bajitpur	√			√	√	
	Bhairab	√		√	√	√	
Netrokona	Netrokona Sadar	√		√	√	√	
	Modon	√			√	√	
	Kendua	√		√	√	√	
	Mohangonj	√			√	√	
	Durgapur	√			√	√	

Division	District	Upazila and/or thana	Methods used to assess the number MSM/MSW				Modified nomination for hijra
			Qualitative	Secondary field data	TLS*	Nomination	
	Sherpur	Sherpur Sadar	√			√	√
		Nalitabari	√			√	√
		Nokla	√			√	√
		Jhinaigathi	√			√	√
	Narsingdi	Narsingdi Sadar	√		√	√	√
		Raipura	√			√	√
		Shibpur	√			√	√
		Polash	√			√	√
		Belavo	√			√	√
	Munshiganj	Munshiganj Sadar	√		√	√	
		Tungibari	√			√	√
		Shreenagar	√			√	√
	Manikgonj	Manikgonj Sadar	√			√	√
		Ghior	√			√	√
		Singair	√			√	√
		Saturia	√			√	√
	Sylhet	Kotwali & Daksin Surma	√	√	√	√	√
		Jaintapur	√			√	
		Companygonj	√			√	√
		Bishwanath	√			√	
	Sunamgonj	Sunamgonj Sadar	√	√	√	√	√
		Tahirpur	√			√	√
		Derai	√			√	
	Habiganj	Habiganj Sadar	√	√		√	√
		Nabiganj	√			√	√
		Ajmirigonj	√			√	
	Maulavibazar	Maulavibazar Sadar	√	√		√	√
		Sreemangal	√	√		√	√
		Sherpur	√			√	√
		Kulaura	√			√	
	Chittagong	Chittagong city corporation	√	√	√	√	√
		Anwara	√			√	√
		Patia	√			√	√
Hat Hazari		√			√		
Shita Kundo		√			√	√	
Mirsarai Thana		√			√	√	
Chandanaish		√			√	√	
Pahartali		√			√	√	
Chandpur	Chandpur Sadar	√			√	√	
	Lakshmipur	√	√		√	√	
Noakhali	Noakhali Sadar	√	√		√	√	
Feni	Feni Sadar	√			√	√	
Comilla	Comilla Sadar	√	√	√	√	√	
	Laksam upzila	√	√		√	√	

Division	District	Upazila and/or thana	Methods used to assess the number MSM/MSW				Modified nomination for hijra
			Qualitative	Secondary field data	TLS*	Nomination	
		Companygonj	√			√	√
	Brahmanbaria	Brahmanbaria Sadar	√	√		√	√
		Akhawra	√			√	√
		Kasba	√			√	√
		Ashugonj	√			√	
		Cox's Bazar Sadar	√	√	√	√	√
	Cox's Bazar	Teknaf	√			√	√
		Ramu	√		√	√	√
		Ukhia	√			√	√
		Rangamati	Rangamati Sadar	√			√
	Bandarban	Bandarban Sadar	√		√	√	√
Khagrachhari	Khagrachhari Sadar	√			√	√	
Rajshai	Joypurhat	Joypurhat Sadar	√			√	√
		Akkelpur	√			√	√
		Kalai	√			√	√
		Khetlal	√			√	√
		Panchbibi	√			√	√
	Bogra	Bogra Sadar	√		√	√	√
		Sherpur	√			√	√
		Dhupchachia	√			√	√
		Shibgonj	√	√		√	
	Natore	Natore Sadar	√	√	√	√	√
		Gurudaspur	√		√	√	
		Boroigram	√		√	√	√
		Shingra	√		√	√	√
		Lalpur	√		√	√	
		Noldanga	√	√	√	√	
		Bagatipara	√		√	√	
		Sirajgonj Sadar	√		√	√	√
	Sirajgonj	Belkuchi	√		√	√	√
		Shahjadpur	√		√	√	
		Ullapara	√		√	√	√
		Raiganj	√		√	√	√
		Tarash	√		√	√	√
		Noagaon Sadar	√	√	√	√	√
	Noagaon	Atrai	√		√	√	√
		Raninagar	√		√	√	√
		Mohadevpur	√	√		√	
		Patnitola	√		√	√	√
		Manda	√	√		√	
		Pabna Sadar	√		√	√	√
	Pabna	Iswardi	√		√	√	√
Santhia		√		√	√	√	
Bera		√		√	√	√	
Atghoria		√		√	√	√	

Division	District	Upazila and/or thana	Methods used to assess the number MSM/MSW				Modified nomination for hijra
			Qualitative	Secondary field data	TLS*	Nomination	
		Shujanagar	√		√	√	√
		Bhangura	√		√	√	
		Chatmohar	√		√	√	√
		Faridpur	√		√	√	√
		Ataikula	√			√	√
	Chapai Nababganj	Chapai Nababganj Sadar	√	√	√	√	√
		Gomostapur	√		√	√	
		Shibganj	√		√	√	√
	Rajshahi	Rajshahi city corporation	√	√	√	√	√
		Puthia	√		√	√	√
		Bagha	√		√	√	√
		Baghmara	√		√	√	√
		Paba	√		√	√	√
		Durgapur	√		√	√	√
		Mohanpur	√		√	√	√
		Tanore	√		√	√	√
	Rangpur	Rangpur	Rangpur Sadar	√		√	√
Pirgonj			√			√	
Mithapukur			√			√	
Gangachara			√			√	
Kaunia			√			√	
Taragonj			√			√	
Pirgachha			√			√	
Panchagarh		Panchagarh Sadar	√			√	√
		Tetulia	√			√	
Thakurgaon		Thakurgaon Sadar	√			√	√
Dinajpur		Dinajpur Sadar	√		√	√	√
		Hili (Hakimpur)	√			√	√
		Parbotipur	√			√	√
		Birampur	√			√	√
		Fulbari	√			√	√
Gaibandha		Gaibandha Sadar	√		√	√	√
		Palashbari	√			√	√
		Gobindagonj	√			√	√
Kurigram		Kurigram Sadar	√		√	√	√
		Chilmari	√			√	
		Nagashar	√			√	
		Ulipur	√			√	
Lalmonirhat		Lalmonirhat Sadar	√		√	√	√
		Kaligonj	√			√	
		Patgram	√			√	√
Nilphamari		Nilphamari Sadar	√			√	√
		Domar	√			√	
		Dimla	√			√	√
		Jaldhaka	√			√	√

Division	District	Upazila and/or thana	Methods used to assess the number MSM/MSW				Modified nomination for hijra
			Qualitative	Secondary field data	TLS*	Nomination	
Barishal	Barisal	Barisal Sadar	√		√	√	√
	Patuakhali	Patuakhali Sadar	√		√	√	√
		Kalapara	√			√	
	Bhola	Bhola Sador	√			√	√
		Charfassion	√			√	√
	Borguna	Borguna Sadar	√			√	√
		Amtoli	√			√	√
	Jhalokathi	Jhalokathi Sador	√		√	√	√
		Nolsity	√			√	√
	Pirojpur	Pirojpur Sador	√		√	√	
		Kowkhali	√			√	√
		Madbaria	√			√	
		Nazirpur	√			√	
	Khulna	Chuadanga	Chuadanga Sadar	√			√
Jhenaidah		Jhenaidah Sadar	√			√	√
Meherpur		Meherpur Sadar	√			√	√
Khulna		Khulna Sadar	√	√	√	√	√
		Batiaghata	√	√		√	√
		Dacope	√	√		√	√
		Dumuria	√	√		√	√
		Dighalia	√	√		√	√
Bagerhat		Bagerhat Sadar	√		√	√	√
		Mongla	√			√	√
Satkhira		Satkhira Sadar	√			√	√
		Shyamnagar	√			√	√
Narail		Narail Sadar	√			√	√
		Lohagara	√			√	
		Kalia	√			√	
Magura		Magura Sadar	√	√	√	√	√
Kushtia		Kushtia Sadar	√		√	√	√
		Kumarkhali	√		√	√	√
		Mirpur	√		√	√	√
		Khoksha	√			√	√
		Veramara	√		√	√	√
		Doulatpur	√		√	√	√
Jessore		Jessore Sadar	√		√	√	√
	Chougacha	√		√	√	√	
	Bagherpara	√		√	√	√	
	Monirampur	√		√	√	√	
	Sharsha	√		√	√	√	

*TLS = time location sampling

Note: Qualitative methods refer to Key Informants Interviews (KII), Focus group Discussions (FGD) and informal discussions

Appendix 2: Geographical distribution of MSM, MSW and hijra in PSA

Divisions & Districts	Population groups	Estimated number of MSM, MSW and hijra	
		Lower Limit or Direct Count	Upper Limit or Indirect Count
Dhaka Division			
Dhaka Metropolitan area Total	MSM	1,488	35,355
	MSW	1,247	5,490
	Hijra	854	1,307
Outside of Dhaka Metropolitan area Total	MSM	337	3,440
	MSW	193	1,006
	Hijra	196	331
Dhaka District Total	MSM	1,825	38,795
	MSW	1,440	6,496
	Hijra	1,050	1,638
Rajbari District Total	MSM	382	1,800
	MSW	152	590
	Hijra	16	70
Faridpur District Total	MSM	78	1,100
	MSW	35	450
	Hijra	5	45
Gopalganj District Total	MSM	58	310
	MSW	21	55
	Hijra	3	20
Madaripur District Total	MSM	66	350
	MSW	19	140
	Hijra	5	45
Shariatpur District Total	MSM	182	650
	MSW	42	107
	Hijra	28	41
Narayanganj District Total	MSM	263	1,570
	MSW	161	620
	Hijra	26	119
Gazipur District Total	MSM	172	1,460
	MSW	100	365
	Hijra	67	201
Tangail District Total	MSM	250	875
	MSW	63	325
	Hijra	43	116
Jamalpur District Total	MSM	181	1,480
	MSW	162	495
	Hijra	13	56
Mymensingh District Total	MSM	790	3,280
	MSW	895	1,355
	Hijra	21	89
Kishoreganj District Total	MSM	751	2,685
	MSW	307	747
	Hijra	36	59

Divisions & Districts	Population groups	Estimated number of MSM, MSW and hijra	
		Lower Limit or Direct Count	Upper Limit or Indirect Count
Netrokona District Total	MSM	771	1,950
	MSW	459	782
	Hijra	23	85
Sherpur District Total	MSM	265	545
	MSW	58	155
	Hijra	27	86
Narsingdhi District Total	MSM	537	1,015
	MSW	146	260
	Hijra	41	59
Munshiganj District Total	MSM	120	321
	MSW	59	82
	Hijra	1	1
Manikgonj District Total	MSM	458	580
	MSW	130	160
	Hijra	22	29
Dhaka Division Total	MSM	7,149	58,766
	MSW	4,249	13,184
	Hijra	1,427	2,759
Sylhet Division			
Sylhet District Total	MSM	495	2,399
	MSW	326	1,655
	Hijra	353	460
Sunamgonj District Total	MSM	319	1,455
	MSW	343	863
	Hijra	257	301
Habiganj District Total	MSM	622	1,340
	MSW	162	360
	Hijra	320	475
Maulvibazar District Total	MSM	370	1,350
	MSW	239	420
	Hijra	46	170
Sylhet Division Total	MSM	1,806	6,544
	MSW	1,070	3,298
	Hijra	976	1,406
Chittagong Division			
Chittagong District Total	MSM	592	5,920
	MSW	372	2,007
	Hijra	283	413
Chandpur District Total	MSM	185	240
	MSW	15	25
	Hijra	40	50
Lakshmipur District Total	MSM	50	60
	MSW	14	20
	Hijra	25	40

Divisions & Districts	Population groups	Estimated number of MSM, MSW and hijra	
		Lower Limit or Direct Count	Upper Limit or Indirect Count
Noakhali District Total	MSM	238	650
	MSW	17	90
	Hijra	20	25
Feni District Total	MSM	20	250
	MSW	15	128
	Hijra	37	55
Comilla District Total	MSM	500	3,476
	MSW	309	645
	Hijra	191	446
Brahmanbaria District Total	MSM	50	350
	MSW	32	87
	Hijra	31	78
Cox's Bazar District Total	MSM	499	900
	MSW	201	450
	Hijra	54	161
Rangamati District Total	MSM	117	183
	MSW	44	76
	Hijra	10	16
Bandarban District Total	MSM	59	88
	MSW	19	28
	Hijra	4	5
Khagrachhari District Total	MSM	6	125
	MSW	7	20
	Hijra	2	20
Chittagong Division Total	MSM	2,316	12,242
	MSW	1,045	3,576
	Hijra	697	1,309
Rajshahi Division			
Joypurhat District Total	MSM	415	915
	MSW	241	529
	Hijra	60	120
Bogra District Total	MSM	743	3,442
	MSW	578	996
	Hijra	45	125
Natore District Total	MSM	228	1,160
	MSW	146	495
	Hijra	30	87
Sirajgonj District Total	MSM	445	2,295
	MSW	238	800
	Hijra	42	110
Naogaon District Total	MSM	253	910
	MSW	113	495
	Hijra	89	375

Divisions & Districts	Population groups	Estimated number of MSM, MSW and hijra	
		Lower Limit or Direct Count	Upper Limit or Indirect Count
Pabna District Total	MSM	265	1,810
	MSW	206	633
	Hijra	23	47
Chapai Nababganj District Total	MSM	242	920
	MSW	90	525
	Hijra	62	370
Rajshahi District Total	MSM	631	2,930
	MSW	300	1,030
	Hijra	155	341
Rajshahi Division Total	MSM	3,222	14,382
	MSW	1,912	5,503
	Hijra	506	1,575
Barisal Division			
Barisal District Total	MSM	1,564	2,348
	MSW	524	789
	Hijra	126	164
Patuakhali District Total	MSM	813	1,135
	MSW	248	326
	Hijra	17	23
Bhola District Total	MSM	31	205
	MSW	25	45
	Hijra	18	23
Borguna District Total	MSM	174	254
	MSW	39	53
	Hijra	46	58
Jhalokati District Total	MSM	435	645
	MSW	125	160
	Hijra	19	29
Pirojpur District Total	MSM	610	831
	MSW	156	237
	Hijra	0	0
Barisal Division Total	MSM	3,627	5,418
	MSW	1,117	1,610
	Hijra	226	297
Rangpur Division			
Rangpur District Total	MSM	400	1,480
	MSW	208	540
	Hijra	6	36
Panchagarh District Total	MSM	38	110
	MSW	8	40
	Hijra	2	10
Thakurgaon District Total	MSM	9	50
	MSW	8	30
	Hijra	2	10

Divisions & Districts	Population groups	Estimated number of MSM, MSW and hijra	
		Lower Limit or Direct Count	Upper Limit or Indirect Count
Dinajpur District Total	MSM	366	1,975
	MSW	440	975
	Hijra	58	170
Gaibandha District Total	MSM	287	354
	MSW	90	118
	Hijra	57	75
Kurigram District Total	MSM	268	379
	MSW	93	117
	Hijra	2	4
Lalmonirhat District Total	MSM	84	525
	MSW	50	180
	Hijra	3	6
Nilphamari District Total	MSM	213	275
	MSW	45	54
	Hijra	7	10
Rangpur Division Total	MSM	1,665	5,148
	MSW	942	2,054
	Hijra	137	321
Khulna division			
Chuadanga District Total	MSM	158	213
	MSW	38	49
	Hijra	9	9
Jhenaidah District Total	MSM	162	223
	MSW	50	63
	Hijra	15	19
Meherpur District Total	MSM	66	90
	MSW	14	19
	Hijra	9	11
Khulna District Total	MSM	617	2,050
	MSW	243	1,263
	Hijra	252	507
Bagerhat District Total	MSM	154	1,450
	MSW	109	500
	Hijra	130	300
Satkhira District Total	MSM	391	850
	MSW	126	230
	Hijra	55	195
Narail District Total	MSM	264	600
	MSW	51	130
	Hijra	15	50
Magura District Total	MSM	70	700
	MSW	36	200
	Hijra	7	40

Divisions & Districts	Population groups	Estimated number of MSM, MSW and hijra	
		Lower Limit or Direct Count	Upper Limit or Indirect Count
Kushtia District Total	MSM	66	1,030
	MSW	67	340
	Hijra	17	31
Jessore District Total	MSM	100	875
	MSW	65	465
	Hijra	26	53
Khulna Division Total	MSM	2,048	8,081
	MSW	799	3,259
	Hijra	535	1,215
NATIONAL	MSM	21,833	110,581
	MSW	11,134	32,484
	Hijra	4,504	8,882



NATIONAL AIDS/STD PROGRAMME
Directorate General of Health Services
Ministry of Health and Family Welfare