STD/HIV Spread Among Asian Country’s An Outcome Of Migration

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Abstract: Migration has been in existence from evolution of civilization in search of better prospect. A systematic review was conducted on migration & STD spread. Utilized Identifying strategies were to address these sociocultural burdens & meet their need approaching migration & HIV spread. As system and literature review of published articles was conducted from the last 17 years from 2000 to 2017. A total of 43 articles were retrieved and reviewed using electronic database on migration & STD spread. Simultaneously various search engines were utilized for literature resources e.g. -Pub Med, Google using key term: - migration & health, migration & STD, migration & HIV.

Keyword: <Migration, Sexually Transmitted Disease (STD), Human Immune deficiency Virus (HIV) Sexually Transmitted Infection (STI)>

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I. INTRODUCTION

The patterns of migration among south Asian countries are observed to be major out flow of population from rural to urban set up. Countries like India, Pakistan, Nepal where most of its population is concentrated into rural setup. Where migration is likely to took place for verity of reasons, such as in search of better fortune, due to lack of basic amenity in rural setup, less chances of earning livelihood in rural setup, individual social status, mere availability of daily guaranteed work etc. attracts huge number of population toward urban setup from rural part of these south Asian countries. The sociocultural determinants most often associated with HIV risk are: cultural norms, family separation, and low social support. Rural part of these country’s where basic amenities of daily life either lacks or are completely absent, is a main reason behind increase number of migration from rural to urban setup. Although the attraction for better fortunes has also been the significant reason behind migration. Though chronologically in India there has always been existence of migration time to time either as result of war or famine or other similar causes. In ancient India, there were many great urban centres. For example, around 300 BC, it is estimated that Pailiputra (the present Patna) had 270 thousand people, Mathura had 60 thousand, 48 thousand people lived in Vindisha, 40 thousand each in Vaishali and Kaushambi, and 38 thousand lived in Ujjain. At the death of the Emperor Akbar, India had a population of 100 million in medieval times and Agra was perhaps one of the largest cities in the world. In pre-colonial times, the reasons for the circulation of populations were mainly for religious and trade purposes. Migration, on account of military movements, also played an important role. People also travelled in search of pastures with their cattle. Nomadic migration, even for short distances, was an important feature outside the Gangetic valley. This practice is still found in some parts of Rajasthan and Madhya Pradesh located in central India and is one of the earliest forms of circulation in the history of human migration. Several occupations such as transport & industrial establishment also favours continuous migration. Where varying intellect are employed. Safe sexual practice & other health issue among them is always a matter of concern. Trend of occurrence of STD from various aspect such as social, religious, literacy, travel, wealth, age group, pattern of migration & duration of stay in migrated destination along with their origin place will always remain a matter of quest. Reflecting fluctuating trend of sexual practice among migratory population of India& other south Asian country’s, having similar socio cultural profile shows that their migrant population are at utmost risk of STD spread. Several previously conducted studies highlight the risk of contamination of migrant population from unprotected sex was emerging either from exposure to commercial sex worker at migrated place, or practice of unsafe sex at the place of origin with multiple partner. Not only this but few of them were reported to be having intercourse with left behind wives of migrants or among their female relatives, similarly few of them...
were found to be frequent visitors of commercial sex worker too & from migratory as well as their destination of origin.

Study based on southern part on India in praksham district of Andhra Pradesh. It was observed that short distance of migratory destination from origin place played a key role in having frequent intercourse with multiple sex partner, whether as denial of condom use reflected the will of migrants despite of their knowledge of protective awareness. [2] Based on World Bank report on country migratory profile it has been seen that emerging trend is on rise among developing country’s or among low income group countries. Based on report of World Bank migratory pattern of Several south Asian countries from year 1960 till year 2015 are illustrated below. [3]

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Migratory percentage</th>
<th>Year</th>
<th>Migratory percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>1960</td>
<td>92%</td>
<td>2015</td>
<td>73%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1960</td>
<td>95%</td>
<td>2015</td>
<td>66%</td>
</tr>
<tr>
<td>Bhutan</td>
<td>1960</td>
<td>96%</td>
<td>2015</td>
<td>61%</td>
</tr>
<tr>
<td>India</td>
<td>1960</td>
<td>82%</td>
<td>2015</td>
<td>67%</td>
</tr>
<tr>
<td>Maldives</td>
<td>1960</td>
<td>89%</td>
<td>2015</td>
<td>54%</td>
</tr>
<tr>
<td>Nepal</td>
<td>1960</td>
<td>97%</td>
<td>2015</td>
<td>81%</td>
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<tr>
<td>Pakistan</td>
<td>1960</td>
<td>78%</td>
<td>2015</td>
<td>61%</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1960</td>
<td>84%</td>
<td>2015</td>
<td>82%</td>
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</tbody>
</table>

Observing Indian scenario the overlapping of poverty and internal migration is clearly reflected with high poverty levels found in most lead source states: Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand and Orissa. [4]

II. OBJECTIVE

Overall, entire research tends to confirm significance of migration on spread of STD/HIV among Asian migrants & their exposed sexual contacts. With prime objective of finding association between migrations & spread of STD to & from migratory destination to place of origin.

III. MATERIAL AND METHODS

The policy determinants most often associated with HIV risk were: prolonged and/or frequent absence, financial status, and difficult working and housing conditions. Five research priorities were identified including [1] risks associated with migrants contaminating from STD at migrated destination & spreading further at origin place among their healthy sexual contact, [2] pattern of accessibility & outreach till origin to migratory destination, [3] Mechanisms and strategies of primary STD infection, [4] mechanisms of STD spread among immigrant families or their exposed sexual contact, [5] Health promotion strategies that lacks among immigrant populations. The health and behaviour factors most often associated with HIV risk were: substance use, other STIs, mental health problems, no HIV testing, and needle use. The sexual practices most often associated with increased HIV risk were: limited condom use, multiple partnering, and clients of sex workers, low HIV knowledge, and low perceived HIV risk.

Recommencements identified in the reviewed papers includes advocating for change in pattern of migrants lifestyle, their habits, literacy status, social development, & promotion of safe sexual practice altogether, In order to achieve the goal of eradicating risk of STD spread due to migration. However, in this regard to better inform the development, implementation, and evaluation of multilevel interventions, additional research is needed that overcomes prior methodological limitations and focuses on building new contextually tailored interventions and policies.

To address our main study aim we conducted a literature review using a systematic approach to examine peer-reviewed literature related to migration & health. We also found associated risk factors behind emergence & spread of STD among migrant population within the literature reviewed.

3.1 Search strategy

Our literature search was conducted using Pub Med, Google, & various other search engines along with some other literary resources. E.g. UNICEF, UN database, who, world bank, national portal of India, labour bureau of India & others. Which combines synonyms for Migration & Health, Migration & STD, Migrant Health, Migration & Infectious Disease with Emphasis on India.

English language articles using the following key words in various combinations were searched: HIV, AIDS, migrant, migrants, labour migrants, mobility and migration & then relevantly utilized. To capture our three main concepts migration & its association in STD spread. Additional Gray literature were retrieved from

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various websites e.g.- (WHO, UN, world bank, National Portal of India) Associated finding were critically analyzed in the context of searching relation Among migration & STD. We limited our search to articles written in English over the last 17 years starting from year 2000 till 2017. The search was designed to retrieve articles on a wide range of subtopics within the main topic but without being exhaustive, as would be required for a complete systematic review.

3.2 Article selection

We conducted a three-stage screening process starting with a title review followed by an abstract review and ending with a full-text article review.

In our title review stage it was independently reviewed the journal article titles to determine whether they were relevant or irrelevant.

The authors independently screened the abstracts of the several articles and determined that relevant met eligibility. Those who were deemed to be opinion pieces were excluded as they were deemed to be opinion pieces, and few article were deemed to be irrelevant. After excluding these articles & relevant articles were included. The reviewers then developed a data abstraction form and independently applied it to three eligible articles. They then reviewed their findings and developed an initial list of categories of barriers (e.g., migratory pattern & sexual practice).

They independently abstracted information from 10 to 12 articles each and met to review the tool, finalizing the list of categories of migration. At this stage, one category was removed and four were added, yielding the finalized abstraction tool.

Authors met to review all of the data and consolidate the themes into categories for both migration and STD spread.

(Fig.1) Flowchart of the article Retrieval process
IV. RESULTS

4.1 Migratory sample: - The final categories for migration identified from the literature represent the multiple levels where the migration corresponding to sexual health for immigrants exists. These categories include favourable factors influencing migration, risk factors for emergence of STD among migratory population, at migratory destination. Trend of Safety precaution with commercial sex worker. Mode of sexual practice, & several other associated risk factors enhancing STD emergence among them e.g.- drug abuse through infected needle. The reviewed articles represent the conclusion drawn from variety of study design’s along with varying trend of migration from South Asian countries & its association in STD spread. Out of them few most populous country e.g. – India & China were found to be on same risk pattern as well as their other small neighbouring countries. Such as Nepal, Myanmar, Thailand, Pakistan etc were found to be depicting the same trend of STD spread among their internal & abroad migrant population. Those men who internally migrated to Mumbai, India & those who did not reside with their wives or families exhibited more risky sexual behaviours.[12] Family separation due to migration also affected those wives who were left behind by their husbands. While comparing Chinese wives of migrants population to Chinese wives of non-migrant population, migrants’ wives had higher rates of multi-partnering, similarly higher rates of HIV infection and lower rates of condom use.[12] A study of fishermen in the Gulf of Thailand and Adaman Sea shows that prior STI was significantly related to current HIV prevalence.[12] These fishermen in the Gulf of Thailand and the Adaman Sea reflected an association concerning needles which showed that migrants with tattoos had higher HIV
prevalence.[12] Drawing conclusion from China’s migrant population 47 % of surveyed job seekers had sex outside of a monogamous relationship since leaving their place of origin.[12] In a Bangladesh trucking industry survey, 54 % of the respondents had sex with at least one sex worker in the last year.[12] Seafarers in Thailand stated that sex workers were easy to find. Their motivation for visiting sex workers was driven by three factors: loneliness and time out at sea, receiving a single payment for their work when arriving at a harbour, and strong peer pressure from co-workers.[12] Among internal male labour migrants in China, study showed that only 37 % knew that condom use could prevent HIV transmission and 38 % knew that regular use of antibiotics could not prevent HIV infection. [12] Nepalese migrants returned from India after work stated that despite their risky sexual behaviours, they did not feel they were at risk for HIV as they only selected healthy looking women for sex.[12] Study based on Nepalese migrant labours reflected important finding & associated pattern

The respondents ranged from those aged 20 years to 53 years with mean age 30.27 years. Only 3.6% of the respondents were illiterate. About 85% were ever married with the average age at marriage being 22.88 years. More than half of the respondents were from rural areas in the origin country. Saudi Arabia, Malaysia, UAE and Qatar were found to be the popular countries of migratory destination.

The median length of employment was 36 months with the range of 136 months. 17% of the respondents had worked for less than 2 years, 56% for 2 - 4 years, 19% for 4 - 6 years and 7% for more than 6 years. Complete male setting accommodation was common for workers in overseas with 88% respondents living in male only setting, 11% in male - female mixed setting and around 1% living separately

Around 50% of the respondents had sex with paid/unpaid partner while in abroad. Among 54 respondents having sex, 23 had sex with non-spousal unpaid partners, 27 with the commercial sex workers, and 4 with both paid and unpaid partners. None of the respondents reported having sexual relation with males

For majority of the respondents, co-working female friends were their unpaid sex partners. The average frequency of sex was 4 times per month. Out of 54 respondents who had sexual relation while abroad, 61.1% of them always used condom during sex, 37.04% sometimes used condom and 1.85% never used condom.

Among 21 respondents who didn’t always use condom, 15 were from Gulf countries and 6 were from Non - Gulf countries.

All of the respondents who mentioned difficulty in finding condom as the reason for not use of condom always were from Gulf countries.

The majority of the respondents disagreed with the view that condoms are not to be used with spouse but only with Commercial Sex Worker (CSW) whereas only 14.5% agreed the view. More than half of the respondents (57.3%) perceived themselves to be at no risk of HIV. However, in case of their friends, only 21.8% perceived their friends to be at no risk of HIV.

The risk perception of HIV for oneself was found higher with increase in educational status. Out of 4 respondents with no formal education, 3 (75%) kept themselves at no risk of HIV/AIDS whereas among 19 respondents with primary education, 10 (53.62%) kept them at some risk of HIV. Similarly, 36 (41%) out of 87 respondents with secondary and higher studies combined kept themselves at some risk of HIV.

Out of total respondents in the age group 25 - 29 years, 56.4% had sexual intercourse with non-spousal paid/unpaid partners while in abroad. Similarly, this was 48% for respondents in the age group 30 - 39 years. The majority of the respondents (93.6%) had never been diagnosed with a Sexually Transmitted Infection (STI). Only 6.4% were diagnosed with any STI till the date of interview. Similarly 68.2% of the respondents had ever knowingly had an HIV test and 50.9% had planned to do HIV test after returning from abroad.

Among the total respondents, only 7% had ever used Voluntary Counselling and Testing (VCT) service. Those 93% respondents who had never used VCT service had also not heard of the service. There is not much difference in the pattern of sexual activities being performed regardless of the country law among the respondents who had sexual relation abroad, 83.3% had knowingly done HIV test. Less percentage of respondents (22.22%) who perceived themselves at no risk had sexual relation in abroad whereas majority of those who perceived themselves at some risk (mild, moderate and high), had sex with paid/unpaid partner in abroad.

It was found that respondents were almost equally likely to be involved in having sex in overseas despite their marital status and their status of drinking alcohol. However, 62.8% of smokers had sex while 42.7 non smokers had sex. Those having mixed setting accommodation were more likely to have sex with paid/unpaid partner compared to those living in complete male setting.[5] Study among Myanmar migrant fishermen in Thailand found that longer duration of stay (1 - 4 years), negative attitude towards HIV/AIDS and condom use were statistically associated with practice of unsafe sex with sex workers.

Only 61.1% of those who had sex with paid/unpaid partner always used condom and remaining 38.9% which is still a high proportion sometimes or never used condom though 87.3% of the respondents disagreed the view that ‘condoms are not safe’. 52.7% of the respondents disagreed that condoms are not to be used with spouse but only with wife however 44.5% agreed and 2.7% didn’t know about it representing those who had never used
condom. This finding is important because the sexual habit of workers while in overseas directly affects the wives when they return back, in the context when still around 50% of the total respondents have the attitude that condoms are not to be used with wife but only with sex workers.

In connection to this, 92.7% of the respondents said that condom prevent from STDs/HIV which might represent their view that only sex workers are the sources of HIV/AIDS. [6] Among truck drivers in Lahore Pakistan it was observed that when HIV infection spreads among sex workers in Lahore, the reported behaviour of migrant men suggests that they may act as a conduit for further transmission to the general population.

Behavioural interviews were conducted on a representative sample of 590 migrant men aged 20–49 years. Biological samples were also collected from a sub sample of 190 and tested for Chlamydia, gonorrhoea, and syphilis. Corresponding finding showed that, over half (55%) of single men were sexually experienced and 36% of married men reported premarital sex. The median ages at first intercourse and first marriage were 21 years and 28 years, respectively. In the total sample (including virgins), 13% reported any female non-marital partner in the past 12 months, 7% contact with a female sex worker, and 2% sex with a man. Only 10% reported using a condom during most recent contact with a sex worker. STI symptoms in the past 3 months were reported by 8% of men. Laboratory tests disclosed that STI (sexually transmitted infection) prevalence was 3.2%. The median length of time away from home was 3 years, though most men visited their families once in months or more frequently. In Lahore, the majority (70%) lived with friends with over three quarters sharing a bedroom.

Three quarters reported that they had never taken alcohol. 20% had no formal schooling and a similar proportion had college education: 33% were skilled or unskilled manual workers, 16% watchmen or security guards, 14% students, on the basis of the value of household possessions, 54% were classified as poor, 28% as lower middle income, and 34% as middle income. Over half (55%) of single men were sexually experienced and 36% of married men reported premarital sex. The median age at first intercourse was 21 years. Excluding wives, 16% of first partners were female sex workers, 2% male sex workers, 8% male friends or relatives, while the majority (74%) were described as female friends or relatives.

Among the 447 sexually experienced respondents, lifetime experience of specific types of sexual partner was as follows: female friend/relative 48%; female sex worker 22%; male sex worker 6%; male friend 8%; and hijray (transvestite) 3%.

In the total sample (including virgins), 13% reported any non-marital partner, 7% sexual contact with a female sex worker, and 2% sex with a man. Non-marital sex was more common among young single men rather than older married men. No significant differences were found by educational background but skilled workers, house servants/drivers, and business or salesmen were more likely to report non-marital sex than other occupational groups.

A total of 499 non-marital partners were reported in the past year; the mean number of partners among non-virgins was 1.4.

Three types of sex worker were distinguished: brothel-based street workers, and call girls. Only 10% of men used a condom at last contact. & 72% said that they never used condoms with female sex workers. Only 4% of married men used a condom at most recent marital contact. Signs and symptoms of STIs in the past 3 months were reported by 8% of men. The prevalence of STI infection was 3.2%. Among those aware of AIDS who had a non-marital partner in the past year, 80% considered that they had no risk of infection.

Over two thirds of the sample had received at least one injection in the last 12 months, nearly all in the context of medical treatment, and 3.4% had sold blood. [7] Another significant finding from two districts of India: Azamgarh in state of Uttar Pradesh & Prakasam district in Andhra Pradesh depicted large majority of surveyed men (irrespective of migration status) from Prakasam district were engaged in agricultural work. Both migrants and non-migrants in Prakasam district had initiated sex at the age of about 19 years. While fewer in Azamgarh district reported that they were engaged in agricultural work. The mean age at first migration for migrants in the study districts ranged between 18 and 20 years. In Azamgarh district, returned migrants had initiated sex about a year later than non-migrants or active migrants. In both districts, migrants had spent an average of 5–6 months at home during their last visit to their place of origin. Reasons for their last visit to the place of origin included agriculture purpose (Prakasam - 5%, Azamgarh - 22%), vacation (Prakasam - 1%, Azamgarh - 27%), to attend a marriage/function (Prakasam - 6%, Azamgarh - 15%), for rest/break in between work (Prakasam - 84%, Azamgarh - 23%), to attend a festival (Prakasam - 4%, Azamgarh - 9%). The average age at migration of this study sample was 19 years. Adjusted regression analyses revealed that active migrants were more likely to engage in sex with sex workers in the past 12 months. A surprising trend was found here that, contrary to popular belief, a high proportion of active and returned migrants (almost 75% of those who had sex) initiated sex at the place of origin before migrating. The likelihood of having sex with a casual unpaid partner is significantly higher among migrants than non-migrants in Prakasam district, but not in Azamgarh district. Consistent condom use with a casual unpaid partner was reported to be higher among active
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migrants than non-migrants in both the study districts. Among those who initiated sex with a female partner (either a sex worker or a casual unpaid partner) in the place of origin, nearly half (47% in Prakasam and 48% in Azamgarh) in both the districts reported continuing the practice at the place of destination. Among migrants, consistent condom use in sex with either a sex worker or a casual unpaid partner is lower in the place of origin than in the place of destination. [8]

Another Cross-sectional survey conducted in two factories located at Ballabgarh block of Haryana in 2011 finding were reported to be Male migrant workers aged 18 years or above, who were born outside Haryana, who had moved to current location after 15 years of age, who had worked in the current factory for at least one year. About 88% of men were sexually experienced; the median age at first sexual intercourse was 18 years. Among the sexually experienced men, 47% had never used a condom. In other words, the prevalence of unprotected non-spousal sex intercourse in this study population was about 60%.

Among men who had reported non-spousal sex in the last one year, only 40% used a condom at last sexual encounter with non-spousal partner. Only 45% of married men, who had ever used condoms, did use a condom in the last sex with their spouse. Among married participants, who have ever used a condom, about 46% had used condoms consistently.

Four factors namely older age, lower education, lesser number of places migrated and having lower HIV/AIDS knowledge were independently associated with non-use of condom during non-spousal sex. Age less than 30 years, being single, having a steady partner, higher education were associated with condom use during non-spousal sex.

Men, who are relatively older, generally tend to be averse to condom use, probably due to inadequate knowledge about HIV/AIDS. Migration related factors were not found to be associated with condom use, like they were with non-spousal sex.

This study reflects that migration doesn’t play much role in condom utilization pattern.

Distribution of source states was as follows: Bihar-45.4%, Uttar Pradesh-37.2%, Rajasthan - 13.2% and others-4.1%. The mean (SD) age at migration was 21.8. The mean (SD) age of the participants was 31.4 (8.2) years. Out of them nearly 90% were literate and almost 90% were semi-skilled workers. Three-fourth of the men were married, but among them nearly half were not staying with their spouses at the current residence. Only 40% of participants had a comprehensive HIV/AIDS knowledge.

Nearly 90% of men were sexually experienced. The median age at first sexual intercourse was 18 years. Nearly half (45.5%) of the participants had experienced non-spousal sexual intercourse (ever), among whom nearly half (47%) had involved in such behaviour in the last one year i.e., recent non-spousal sex and this proportion was higher in unmarried persons as compared to married persons. 85% of men who reported non-spousal sex (ever) also reported having non-spousal sex in their hometown. Nearly one fourth of those reporting non-spousal sex (ever) also reported having paid money for sex in the last one year, which was higher among unmarried men as compared to married men.

Prevalence of condom use during last sex with non-regular partner was 58% in general population, and 56% among ‘labourer’ subgroup.

The mean time to obtain a condom was 22 minutes. 80% labourer ‘subgroup’ reported that it took less than 30 minutes to obtain a condom.

Factors independently associated with non-use of condom at the last non-spousal sex were older age, lower education, lesser number of places migrated and lower level of HIV/AIDS knowledge. Factors independently associated with experience of recent non-spousal sex were being unmarried, younger age at migration, recent migration to Haryana, greater number of places migrated and lesser total duration of migration. HIV/AIDS knowledge was not significantly associated with this outcome. [9]

Several states with high migratory rates. There were three districts each in northern Bihar (Darbhanga, Muzaffarpur, and Sitamarhi) and eastern Uttar Pradesh (UP) (Azamgarh, Allahabad, and Deoria) and one district in Odisha (Ganjam). These seven districts are characterized by high male out-migration to other states because of lack of employment opportunities and urbanization (the rate of urbanization ranges from 6% in Sitamahi district to 25% in Allahabad district).

Of a combined total population of 24.4 million in these seven districts, 5,11,286 people migrated to other states to seek employment by the year 2001. Of these, 4,83,027 were males who migrated to Delhi, Gujarat, Maharashtra, and West Bengal.

The largest proportion of out-migrants from Ganjam migrated to Gujarat (mainly to Surat district) and Maharashtra (mainly to Mumbai/Thane districts), those from northern Bihar migrated to Delhi and West Bengal, and those from eastern UP migrated to Maharashtra.

Coincidentally, HIV prevalence among female sex workers (FSWs) is high in metro cities that attract numerous rural male migrants from less developed states; HIV prevalence among female sex workers in Mumbai (Maharashtra), Surat (Gujarat), and Kolkata (West Bengal) are 37%, 8%, and 8%, respectively.
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Case subjects (men: 595, women: 609) were people who tested HIV seropositive and control subjects (men: 611, women: 600) were those tested HIV seronegative. For each gender, shows the obtained adjusted odds ratios (AORs) and population attributable risks (PARs) for migration, and behavioural factors. Corresponding finding reflected for men, the prevalence of HIV was significantly higher among those with a migration history (AOR, 4-4); & for women, the prevalence of HIV was higher among those with migrant husbands (AOR, 2-3). For both genders, the returned male migration (men: AOR, 3-7; women: AOR, 2-8) was significantly associated with higher prevalence of HIV infection. The PAR associated with male migration was higher for men (54.5%–68.6%) than for women (32.7%–56.9%) across the study areas. The obtained result were A higher proportion of HIV seropositive married men than HIV seronegative married men who had no formal education (33% vs. 24%, p<0.01). & They were unemployed or employed in unskilled occupations (87% vs. 79%, p<0.01), aged over 30 years (81% vs. 64%, p<0.01), and married for over 10 years (62% vs. 39%, p<0.01).

Similarly, a higher proportion of HIV seropositive married women than HIV seronegative married women had no formal education (56% vs. 40%, p<0.01), were aged over 30 years (88% vs. 59%, p<0.01), and married for over 10 years (58% vs. 32%, p<0.01).

The multiple logistic regression analyses adjusted for socio-demographic characteristics demonstrate a significant association between migration and men’s HIV status. The odds of HIV seropositivity were four times higher among men with a migration history than those who had never migrated (adjusted odds ratio (AOR)=4-4, 95% CI=3-3–5-9, p<0.01). The proportion of HIV-infection among married men in the study area that could be attributed to male out-migration history was estimated at 62% (95% CI=54.5–68.6), of which, active migrant men’s contribution was higher than that of returned migrant men.

Data from women survey revealed higher odds of HIV seropositivity among those whose husbands had a history of migration than those whose husbands had never migrated (82% vs. 65%, AOR=2-3, 95% CI=1-7–3-0, p<0.01). Compared to women whose husband had never migrated, the odds of HIV seropositivity were approximately three times higher for women whose husband was returned migrant (29% vs. 18%, AOR=2-8, 95% CI=1-9–4-3, p<0.01) and two times higher for females whose husband was active migrant (53% vs. 46%, AOR=2-1, 95% CI=1-5–2-9, p<0.01). Among married women, the proportion of HIV infection in the study areas that could be attributed to husband’s out-migration history was estimated at 46% (95% CI=32-7–56-9), of which, the contribution returned migrant men was similar to that of active migrant men.

Among active migrants, the multivariate models demonstrate that the odds of HIV seropositivity were higher if they reported having sex with a partner in exchange for money/gifts at least once in their lifetime (45% vs. 19%, AOR=3-6, 95% CI=2-3–5-7). Having sex in migrant destinations (40% vs. 18%, AOR=3-8, 95% CI=2-3–6-2), or inconsistent condom use in sexual encounters along migration routes (94% vs. 74%, AOR=5-4, 95% CI=2-1–13-9). Compared to their counterparts, similar results were noted among returned migrant men. Reflected outcome of returned migrant men who reported having sex with male partners (30% vs. 4%, AOR=7-8, 95% CI=1-9–33-3) or having extramarital sex in their hometown (32% vs. 4%, AOR=6-3, 95% CI=1-6–23-9) had higher odds of HIV infection than their counterparts.

The odds of HIV seropositivity among non-migrants were higher if they reported having sex with at least one casual partner in their lifetime (32% vs. 20%, AOR=2-0, 95% CI=1-2–3-3). Having sex with a partner in exchange for money/gifts at least once in their lifetime (21% vs. 11%, AOR=2-1, 95% CI=1-2–3-7), and/or having sex with a male partner (12% vs. 4%, AOR=3-6, 95% CI=1-6–8) similarly another study from India reflected significant finding based on habit of migratory truck drivers. Large number of truck drivers were found to be having sex with the prostitutes in rural areas along the highways of India. Some were having sex with men also. HIV/AIDS awareness and condom use was poor among them. Three out of 302 truck drivers were found to be infected with HIV. The truck drivers could play an important role in the spread of the infection in rural India.

The drivers were aged 20–40 years. Wayside prostitutes aged 32–40 years, and part-time male prostitutes aged 16–34 years. 60% of the drivers were married with families, as were all of the wayside prostitutes, and none of the male prostitutes. 78% of drivers admitted having multiple heterosexual partners, including prostitutes and 5% admitted to regular homosexual sexual encounters.25% of this subgroup was aware that HIV may be transmitted sexually, 28% of promiscuous drivers used condoms regularly, none admitted taking IV drugs, 35% reported histories of either urethral discharge or genital ulcers, and 3 of the 302 men tested were found to be infected with HIV. None of the 21 highway prostitutes had heard about AIDS, although 21 of the 27 male prostitutes had.

All highway prostitutes admitted having at least one episode of unprotected sex with their sex partners in the previous fortnight, while all of the male sex workers would allow unprotected sex if their partners desired. Some male prostitutes were also paid blood donors.
However HIV awareness improved in these subsequent years, but the practice of safe sex did not. 42% and 56% of the drivers had heard about HIV/AIDS in 1991 and 1992, respectively, but 77% and 68% were nonetheless engaging in occasional unprotected sex. Truck drivers engaging in unprotected sexual intercourse with multiple partners in rural India could be major vectors of HIV infection. [11]

V. DISCUSSION

In this literature review, we identified 43 peer-reviewed articles in the medical literature addressing relation between migration & STD spread in Asian country. These articles described pattern of migration, age group of migrants, nature of work at migrated destination, nature of social conduit, associated factor for STD exposure, literacy level, health awareness & knowledge of health.

Further Describing the trend from various Asian country the entire article shows that pattern of migration within these countries is at similar level, & their associated causes too are almost alike. Similarly trend of Rural to urban migration pattern too is almost same level amongst these countries. Lack of employment, illiteracy, less resource availability altogether compelling both youth & adult population migrate toward urban/industrialized setup from rural destination either Internal or abroad from country of origin.

Migration leads to spousal separation, among married migrants lack to fulfil their sexual need at migratory destination favours their indulgence into extra marital relation within the migratory population or visiting commercial sex workers or doing both. Whereas those who are either young or unmarried too find it amusing visiting commercial sex workers or indulging into unprotected sex within migratory group or doing both together at migratory destination. They take it as recreational activity. These recreational activities bring them at risk of contamination from STD.

Their illiteracy status influences their utilization of protection while establishing sexual contact with commercial sex workers. Social stigma, company of similar age group migrants, and nature of carelessness, belief of unpleasurable feeling, all collectively brings them at risk of contamination from STD. These migrants while returning back to their place of origin again establishes sexual contact, either with their wife, left behind wife’s of fellow migrants or other females of their distant relation. Or simultaneously visit commercial sex workers which further spread STD among their normal sexual partner.

VI. LIMITATIONS

The literature search was limited to English language articles from the last 16 years and searched by using Pub Med. It is likely that relevant articles are missing from this review, that were published in other languages & indexed in databases besides Pub Med. Inclusion of those missing articles could have added more information on migration and STD spread in Asian countries.

In addition, this review was designed to answer a specific question about behavioural, cultural, & trend related to migration & specifically to find association with STD spread within south Asian country establishing’s partial relationship among south Asian countries, with similar socio cultural & migratory trend along with their association in STD spread.

Recommendations examined were limited to those identified in the articles retrieved for our review of barriers. The review aimed to examine migration & STD spread in general, rather than compare between entire continents. We are unable to present comparisons across globe.

Further research would be needed to answer this question.

VII. CONCLUSION

Observation of entire literature on migration & its association with STD gives conclusion that loneliness, availability of money, age, spousal separation, to & fro visiting commercial sex workers from migrant place to their place of origin & again establishment of sexual contact within normal females, exposed to these migratory population does play a key role in contaminating them with STD.

Social unmet need, stigma, nature of carelessness, & role of illiteracy further enriches its spread. However mode of sexual contact among migrant population may vary. Although its spread is significant among direct exposed sexual contacts of migrant population. But being a carrier of STD their female sex partners too are at utmost risk of STD spread.

Literacy has significance for cessation of its spread since it’s the rural population who approaches most to migration specially toward urban setup. & illiteracy is found to be most prevalent among them.

Internal & abroad migration from country is at same risk approach, reflecting equal risk factor & trend of spread from vector to receptor. Thus Population with migratory nature links themselves with risk of STD spread. Advocacy for social development, raising level of literacy, health education & awareness collectively can be suggested method to be a best contraceptive for cessation of STD & its further spread due to migration in developing world.
REFERENCES