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Internal Migration Slums of Dhaka

A Temporal Account at Places of Origin and Places of Destination

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MEETING BASIC NEEDS OF

Migrants in the
Slums of DhakaPlaces of Origin
and Migration

PURPOSE

This study makes a comparative assessment of access to basic services, disease issues and economic conditions of disadvantaged internal migrants related to their places of origin and places of destination.

DESIGN

This cross-sectional study compares participants' present and retrospective information (before migration) based on the same types of questions. The analysis took place in seven slums located in the Mohammadpur, Rayerbazar and Jigatola areas of Dhaka City in Bangladesh; 74 participants who had migrated from rural places of origin were interviewed.

FINDINGS

The results showed some improvements for the migrants in basic household infrastructure and hygiene practices after migrating to these slums compared to their previous status in places of origin. However, the frequency of diseases increased in the short to medium term after migration, as reported by the participants. The study argues that increased incidents of disease at places of destination can be associated with limited access to free healthcare benefits and the burden of increased living costs compared to the participants' places of origin.

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VALUE

This study considered some key issues of internal migration, with a temporal account before migration at places of origin and after migration at places of destination. The feedback from the disadvantaged migrants who compared their current living conditions with life at their place of origin has not previously been studied in low income countries.

KEYWORDS

Migration; Bangladesh; temporal account; diseases and healthcare

BIOGRAPHY

Mohammad Ehsanul Kabir completed his PhD at the School of Environment and Science, Griffith University, Australia. His PhD project compares different drivers of vulnerability that are influencing individual's decisions to migrate from their geographic origins. Ehsan earned his Master's degree in International Development and Environmental Analysis from Monash University Australia, and his Bachelor's degree in social science from Independent University Bangladesh (IUB). Ehsan also worked as a sessional teaching staff at Griffith University under the direction of his PhD supervisors. His teaching and research expertise involves global environmental challenges, human migration, and inclusion of socially disadvantaged groups within various development interventions. Previously Ehsan also worked as a Lecturer within the Centre for Sustainable Development, University of Liberal Arts, Bangladesh (ULAB) (from 2010 to 2012). Ehsan is currently working as an Assistant Professor (since February 2012) at Dhaka School of Economics, a constituent institution of the University of Dhaka.

It has been widely claimed in academia and in recent policy debates that the current flow of internal migration across the world is driven by factors such as conflict, poverty, inequality and environmental hazards (Lilleor and van den Broeck, 2011; IPCC, 2014). Various projections indicate that by the year 2080, the number of internal migrants worldwide may increase from 25 million to over 200 million (see IOM, 2009, 2018; IDMC, 2015; Biermann and Boas, 2010). Despite the many benefits of human migration, internal migrants in the context of developing countries are often regarded as exhibiting low coping capacity and a high level of socio-economic vulnerability (Khan and Kraemer, 2014). A significant portion of such migrants in developing countries originate from socio-economically disadvantaged rural backgrounds and live in squatter settlements known as slums in larger destination cities. Compared to other non-migrants' living spaces in these cities, slum households are congested and exposed to growing intra-urban inequalities (Ahmed, 2016). An unrealised health inequality exists among slum dwellers in cities, which is especially due to a lack of healthcare and access to basic services (Greiner and Sakdapolrak, 2013; IDMC, 2015; Black et al., 2011). Various disruptions and difficulties in settling into a new urban environment different from their places of origin also impact new migrants' health and welfare (Zulu et al., 2011). Health risks and mortality could be higher among migrants living in slums, as noted by some studies (including Khan and Kraemer, 2013). Hence, there is considerable concern that policies address internal migrants and their current and future healthcare and other disease issues, in order to assist equitable development for all.

Typically, policymakers have considered migration as individuals' movement from one place to another, and have often emphasised the issues that migrants encounter at their latest destination (Castles and Miller, 2003). However, contemporary understanding of human mobility is more complex, where migration often involves multiple stages of stay or travel between places of origin and possible destination(s) (Zimmerman et al., 2011; Gushulak et al., 2009; Castles, 2000).

Key studies have emphasised a need to understand health risks together with other stressors of the migrants at geographic origins before reaching a potential destination (Zimmerman et al., 2011; Zimmerman et al., 2003). Zimmerman et al. (2011) developed a migration model with five detailed phases to assist a more comprehensive health policy, namely, pre-departure, travel, destination, interception (affecting a minority of migrants) and return (to places of origin). Health risks at one stage of migration may impact the later stages of migration for the same group, family or individuals (Zimmerman et al., 2011). Indeed, factors influencing individuals' health conditions in different stages of migration may include individuals' biological characteristics, the environment (e.g. living in a hazardous environment) and geography of diseases, such as chronic disease patterns and exposure to pathogens (Zimmerman et al., 2011). Several studies have also stressed examining the risk of outbreaks of communicable diseases carried with the migrants (such as tuberculosis) from places of origin to a potential destination (Klinkenberg et al., 2009; Welshman and Bashford, 2006).

In destinations such as cities in developing countries, disadvantaged migrants are frequently exposed to a new set of difficulties, and are impacted by various socio-economic and environmental stressors (Lin et al., 2017). Therefore, it is also necessary to conduct interventions by screening for non-communicable diseases and mental health conditions, and reviewing the level of access to healthcare benefits of the disadvantaged migrants living in developing countries (Zhang and Howard, 2014). It is likely that those individuals who have already experienced trauma from a natural or man-made hazard before migration may face exacerbated mental illness due to living in social isolation after migration to an underprivileged and congested destination, such as city slums (Steel et al., 2009).

In Bangladesh, due to various factors including higher population density, rural poverty and multiple environmental hazards, the major cities are experiencing a massive internal, rural-urban migration influx (Black et al., 2011). In the capital city, Dhaka, an estimated 30% of the city's population live in slums (Ahmed, 2016). People living in slums lack access to basic services, including housing, water and sanitation, while living in poverty (Ahmed et al., 2010). Various infectious diseases are often attributed to an absence of necessary healthcare and overcrowded living conditions (Rashid, 2009; UNICEF, 2008). A recent representative household survey of slums and non-slums of urban areas in Bangladesh illustrates that intra-urban healthcare inequality is increasing, especially for migrant slum dwellers, due to their poor health conditions (NIPORT, Icdrrb and MEASURE Evaluation, 2013). However, little is known about changes in health issues, specifically frequency of disease cases and access to healthcare benefits during the shift from where the migrants lived (known as places of origin) to where they currently reside (places of destination).

Hence, the current study asks two questions involving the status of internal migrants living in slums in Dhaka:

1. What are the past and current disease issues related to places of origin and places of destination respectively?
2. What are the past and current levels of access to basic services related to places of origin and places of destination respectively?

Additionally, past and current economic conditions (in terms of occupation, household income and household expenditure) of the same internal migrants will also be compared. While interviewing migrants and gaining an understanding of their present and past experiences, this study will also analyse whether any changing patterns of disease or access to basic amenities occurred during the process of internal migration.

METHODS

This cross sectional study asked internal migrants who live in slums in Dhaka city to compare their current access to basic services, self-reported disease issues and

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BIOGRAPHY CONT.

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economic conditions with their past experience while they lived at their places of origin. Hence, the participants were asked not only about their current experience (at places of destination) but also about their retrospective knowledge of the past while living in rural places of origin. The study involved a mixed questionnaire, with both closed and open-ended questions. The questionnaire was prepared in Bengali to communicate with the participants.

Seven slums were purposefully chosen in the south-western part of Dhaka city, located in the Mohammadpur, Rayerbazar and Jigatola areas. These areas are observed as hosting many small slums that are subject to a poor physical environment and lack of waste disposal facilities (Tinni et al., 2014). *Purposive Sampling* was used for the selection of participants. Long-term migrants, including those who had migrated and had resided in the slums for at least one year during the time of data collection, were selected. Therefore, seasonal or circular migrants were not interviewed for this study. Only adult male or female household heads (who paid or shared household expenses) from each of the selected households were interviewed. In order to minimise the problems of *recall bias*, those who had migrated more than five years earlier from their rural places of origin were not included for this study. A total of 74 participants were interviewed: 29 female and 45 male internal migrants. A total of 40 participants were selected from the Rayerbazar area, 24 participants from the Mohammadpur area and 10 participants from the Jigatola area. Interviews were held and data were collected from March to October 2013.

RESULTS

Comparison of Level of Access to Basic Services

The study asked the disadvantaged internal migrants to compare their provisions for access to basic services (including access to water sanitation, healthcare, electricity and household infrastructure) at places of origin and places of destination respectively. The summary of responses is presented in TABLE 1. The majority of the participants (about 55%) reported that they were drinking supply (piped) water at places of destination without taking any water purification measures. The microbiological and chemical analysis of supply water in Dhaka shows that the overall quality of potable water is below the threshold values set by the World Health Organization guidelines for drinking-water quality (Biswas, 2012). On the other hand, at their places of origin, the majority (65%) of the same groups were drinking hand pumped tube-well water. Also at the places of origin, about 26% of people were dependent on pond water and another 9% people were dependent on river water for household consumption (TABLE 1). Once again, pond and river water in Bangladesh is found to be unsafe for drinking without adequate purification measures, due to a higher pollution load (Ali et al., 2016). A larger portion of the disadvantaged migrants were finding it difficult to access sanitary latrines at places of destination compared to those with access difficulties in the places they originally lived. At the places of origin, the majority of the respondents (74%) used non-sanitary latrines, whereas the majority (62%) of disadvantaged migrants living at places of destination reported using sanitary latrines. However, about 39% of the respondents at

TABLE 1

Comparison of Water-sanitation, Access to Healthcare and Housing Facilities

N=74	Places of Origin	Places of Destination
Source of drinkable water		
Supply water	Nil	55%
River	9%	3%
Pond	26%	0%
Tube Well	65%	42%
Provision for sanitation		
Open defecation	5%	Nil
Non-sanitary latrine	74%	39%
Sanitary latrine	15%	62%
Access to healthcare		
Free government hospital	29%	22%
Free non-government health care centre	38%	26%
Self-expenditure	33%	52%
Access to Electricity		
Houses having access to electricity	23%	99%
Houses lack access to electricity	77%	9%
Housing Condition		
Semi Pacca (a combination of tin roof and brick walls)	19%	78%
Kutchra (mud house)	81%	22%

Source: Authors' own compilation from data

places of destination were using non-sanitary latrines (TABLE 1).

Compared with places of origin, a higher percentage of the migrants were paying for their own health care expenses at places of destination. About 33% of the respondents paid for their own healthcare costs while living at places of origin, whereas at places of destination, 52% of the participants were obliged to bear their healthcare costs. Again, a lower percentage of participants had access to both free-of-cost government and non-government

hospitals at places of destination than at their places of origin (TABLE 1). Such a lower rate of access to free-of-cost healthcare also indicates an added pressure on healthcare spending at places of destination compared with places of origin.

There was a positive shift in access to electricity at places of destination compared with places of origin. At places of origin, about 23% of the participants had access to electricity in their homes, whereas almost all households (99%) had access to electricity at places of destination. A significant im

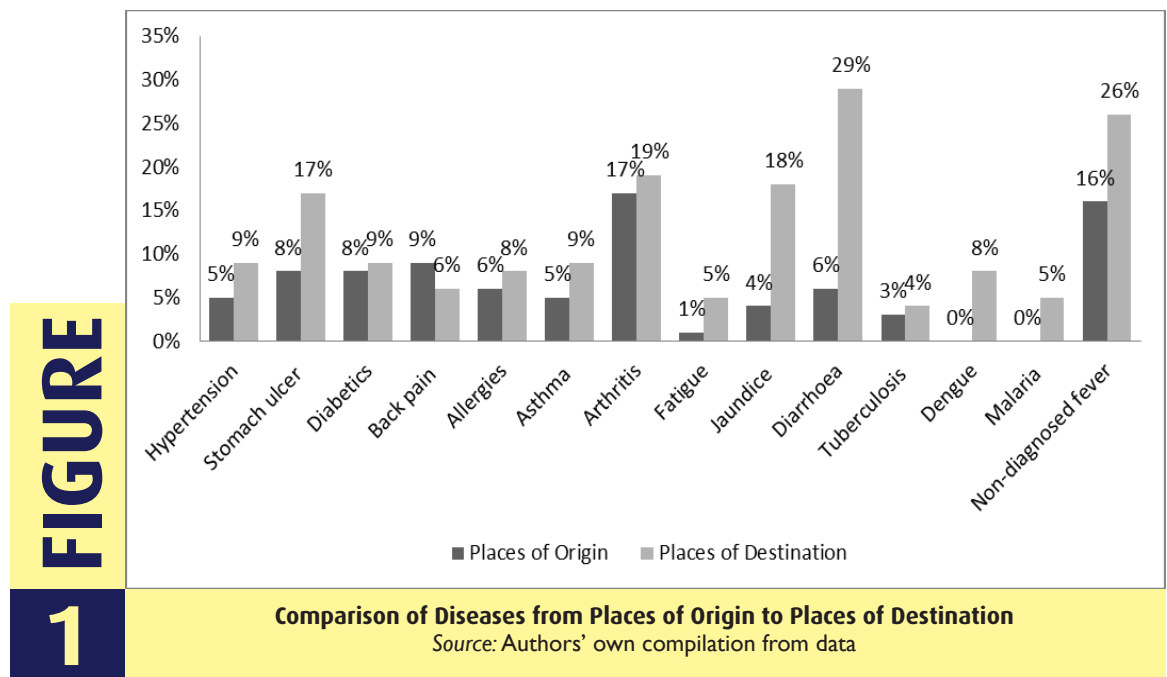
provement of household infrastructure from places of origin to places of destination was also reported. While about 81% of the participants were living in Kutcha shelters at places of origin, 78% of the respondents were living in Semi-Pacca accommodation at places of destination. Overall, upgrading of household infrastructure and improved access to municipal basic services were noted in slums compared with the participants' rural places of origin.

Comparison of Self-reported Disease Issues

FIGURE 1 presents a comparative picture of self-reported disease issues experienced by the participants between places of origin and places of destination. During the interviews, the participants reported present and past disease histories, comparing the two places. Clearly, there were increased numbers of incidents for most of the self-reported disease issues at places of destination compared with the migrants' places of origin. Stomach ulcers, jaundice and diarrhoea were reported at a significantly higher frequency of incidence at

places of destination compared with places of origin. Some other disease issues, including hypertension, diabetics, allergies and tuberculosis, were also reported in higher frequency of incidence at places of destination.

Moreover, the migrants experienced some new types of disease issues at places of destination that were not encountered at places of origin; these included mosquito-borne diseases namely, malaria and dengue. Respiratory diseases were also reported in higher frequency of incidence at places of destination compared with the places of origin. Indeed, while living in the slums (places of destination), more respondents reported that they suffered from asthma and tuberculosis, whereas for places of origin, the ratio of such disease incidence was reported with a lower frequency. Overall, waterborne diseases (diarrhoea and jaundice) involved the most frequently reported disease incidents at places of destination. Diarrhoea had the highest number of incidents (29%). The second highest frequently reported disease incidents involved non-diagnosed fever. About 16% and 26% of the respondents at places of origin and



places of destination respectively reported incidences of frequent fever that remained undiagnosed with no reasons reported. Further research is required; however, access to different drinking water and mosquito populations in the new destination can result in an increase of initial fever related diseases and diarrhoea. The high level of self-reported arthritis needs investigation and treatment.

Comparison of Economic Conditions

TABLE 2 compares participants' occupations, and their household income and household expenditure between places of origin and places of destination. At their places of origin, the majority of the participants (55%) were involved in farming. After migration, the majority of the migrants (37%) became involved in short-term activities, including

TABLE 2	Economic Conditions: Comparison of Occupation, Income and Expenditure		
	N=74	Places of Origin	Places of Destination
	Occupation		
	Farmer/Sharecropper	55%	0%
	Day labourer	5%	33%
	Short-term employment	0%	37%
	Small business	5%	8%
	Housewife	24%	3%
	Household services	2%	19%
	Unemployed	8%	0%
	Household Income		
	< 5,000 tk	73%	10%
	5,001 tk–10,000 tk	18%	54%
	10,001 tk–15,000 tk	5%	23%
	15,001 tk–20,000 tk	3%	7%
	20,001 tk–25,000 tk	0%	3%
	25,001 tk–30,000 tk	1%	3%
	Household Expenditure		
	< 5,000 tk	50%	0%
	5,001 tk–10,000 tk	38%	53%
	10,001 tk–15,000 tk	12%	28%
	15,001 tk–20,000 tk	0%	16%
	20,001 tk–25,000 tk	0%	3%
	25,001 tk–30,000 tk	0%	0%

Source: Authors' own compilation from data

pulling rickshaws (tricycle cart) and street begging. At places of destination, about 33% of the participants became involved in waged labouring. Again, for places of origin, 24% of female participants reported their occupation as housewife, whereas at places of destination, only 3% of female respondents reported their occupation as housewife. Instead, 19% of the same group became involved in household services, such as paid domestic assistance in others' houses.

Participants experienced a significant increase in both household income and household expenditure after migrating to city slums. For places of origin, about 73% of the participants reported their household income as less than 5,000 taka (1 Bangladeshi taka is equivalent to approximately US\$0.012) per month, whereas for places of destination, only 10% of the participants reported their household income as less than 5,000 taka per month. Instead, for the majority (54%) of the participants, their household income was upgraded to the next higher income category at places of destination, which is between 5,001–10,000 taka (TABLE 2). Likewise, there was an increase of household expenditure after migration to Dhaka. For places of origin, the majority (50%) of the participants' reported their household expenditure as less than 5,000 taka per month, the lowest category in TABLE 2. After migration and while living in the slums, the majority of the migrants reported their household (53%) expenditure as between 5,001 and 10,000 taka, the next higher income category. Household expenditure is often regarded as a better indicator than income to establish the living standards of a disadvantaged social group (Kamakura and Du, 2012). Interestingly, none of the households' expenditure was in the lowest category (i.e. less than 5,000 taka) at places of destination, whereas about 50% of the respondents reported their household expenditure as within this lowest category at places of origin. Nonetheless, only 3% of the total migrants reported that their household income increased up to the highest range (in TABLE 2) at places of destination, which is between 25,001 and 30,000 taka per month.

DISCUSSION

The objective of this study is to compare access to basic services, self-reported disease issues and economic conditions of disadvantaged internal migrants related to their places of origin and places of destination. While comparing such factors, this study identified two distinctions based on the results: the first is the overall increase of household income, expenditure and healthcare costs after migration at places of destination; the second is the increased frequency of disease issues that the participants faced while living in slums in Dhaka compared with their rural places of origin. Based on these two different outcomes, the paper suggests that migrants' healthcare is negatively impacted after migrating to slums in Dhaka, despite having access to increased income after migration to the city.

First, the results showed that almost the same percentage of the respondents experienced an increase of household income and an increase of household expenditure (54% and 53% respectively) from the lowest to the next higher category (as shown in TABLE 2) after migrating from places of origin to places of destination. Seemingly, increased income was accompanied by increased household expenditure after migration. The results also showed that, at places of destination, a higher percentage of the participants lacked access to free government and non-government healthcare benefits compared with their past situation at places of origin (as shown in TABLE 1). In an open-ended question during the interviews, participants were encouraged to explain their personal obstacles to accessing basic healthcare benefits at places of destination compared with places of origin. Many of the participants reported higher fees for doctor's prescriptions and medication as the major constraint to accessing healthcare in places of destination. Such an added burden of prescription fees and costs of medicine can negatively impact healthcare and potentially increase disease issues among slum dwellers in a city. Indeed, it is also shown in FIGURE 1 that the participants experienced an increased frequency of disease issues at places of destination.

Additionally, while analysing answers to the same open-ended question, the study also revealed that many of the disadvantaged migrants were obliged to send a significant portion of their earnings to their family members, who were financially struggling at their places of origin. Due to the higher cost of living in the city, some of the participants also reported that they had left their children in rural places of origin, to be raised by other family members. Ajaero and Onokala (2013) also noticed that the migrants living in slums suffered from lower real income due to the pressure of sending remittances home. Such a double financial burden can further narrow their ability to pay for increased healthcare costs at their places of destination.

Second, the results also illustrated a changing pattern (mostly in increased frequency) of self-reported disease issues as experienced by the participants after migrating to the city and living in urban slums, compared with their places of origin. Water-borne diseases, especially diarrhoea, had the highest reported number of incidents. Interestingly, at the places of destination, a higher percentage of the participants experienced improved access to a sanitary latrine compared with their situation in the rural places of origin, a condition that initially seems more hygienic. However, slum households in Dhaka are congested and do not have the necessary distance between pit latrines and water sources. The closer proximity between toilets, slum households, supply water pipeline and sewerage lines are general healthcare concerns for the slums in Dhaka (Buttenheim, 2009); even the drinking water sources are highly vulnerable to contamination by faecal contents (Azharul Haq, 2006). Therefore, the participants' reported that higher dependency on supply water for drinking purposes at places of destination was a potential health threat, compared with places of origin where the majority of the respondents were dependent on safer tube wells for drinking water. This is also a possible reason why reported incidents of waterborne diseases were significantly higher at the studied destinations compared with places of origin. It is also understood that some of the new

disease issues, including mosquito-borne diseases or an increased frequency of respiratory illness, can be linked with urban pollution and unhealthy living in slums.

Overall, this study provided evidence to argue that lack of free healthcare benefits can be linked with the increased frequency of various disease issues at places of destination. Increased health spending should be considered as a financial burden for migrants living in these slums. Although additional research is required to address the burdens of healthcare of the disadvantaged migrants, the evidence is clear that the incidents of reported disease issues increased at places of destinations due to various social welfare deficiencies.

CONCLUSIONS AND RECOMMENDATIONS

This research examined the survey responses of disadvantaged internal migrants, comparing their previous life with their current situation; this has not been studied in the context of a low income country. The study argued that at places of destination, compared with places of origin, less access to free healthcare combined with higher household expenditure can restrain disadvantaged internal migrants from accessing adequate medical treatment when ill. The study also demonstrated that there can be an increased occurrence of disease issues once the internal migrants reach their places of destination. Pre-existing health conditions and disease issues can become worse with new, risky exposure to the city; these include the impact on health from unhealthy living conditions and lack of safe drinking water. Due to a double financial burden, or increased household expenditure, the disadvantaged migrants in slums may become unable to access and pay for basic healthcare and medicines.

Therefore, screening for different types of diseases is necessary for internal migrants at urban places of destination. In a resource-poor setting such as Bangladesh, vaccinations for infectious communicable diseases at places of destination are also necessary.

Intervention programmes should include initiatives to help these migrants cope with post-migration issues, such as lack of family support and social ties. It is also important to ensure their easier access to regular communication with their families, and affordable ways of sending remittance monies back to family members living at their places of origin. Finally, a sponsored health insurance policy for these migrants would ensure more access to healthcare benefits, including serious interventions such as medical surgeries if needed. Frequent visits by healthcare professionals in slums are required. It is also crucial to offer free medication and medical services to infants and, particularly, mothers in city slums.

LIMITATIONS OF THE STUDY

The present paper is based on a preliminary study conducted in the north-western part of Dhaka city. While the sample size is small, the *purposive sampling* technique may not reflect the health and well-being of the total migrant population living in urban slums. Further studies with similar design but more representative sampling will show more diversity of the health and wellbeing of disadvantaged migrants living in slums. Moreover, it is necessary to realise that internal migration involves multi-stages, including monitoring multiple transit points before reaching a relatively stable destination. Future studies and policy interventions should also consider such multi-stage health risks and be given more attention when considering risks to health and wellbeing.

DEFINITIONS

Purposive sampling: In sociology and statistics research, purposive sampling is a non-probability sampling where the participants are selected based on some specific characteristics and the objective of a study (Given, 2008).

Recall bias: This may involve incomplete memory recall by study participants regarding events or experiences from the past (Grimes and Schulz, 2002).

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