Impact of Emigration on Health in Low Income Urban Zimbabwe

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Abstract

**Background**: Emigration is a potential determinant of health at the place of origin. This study aimed to explore the impact of emigration on health by comparing access to health and healthcare among emigration exposed and non-exposed households in urban Zimbabwe.

**Methods**: The study design was a mix of qualitative and quantitative methods. A cross sectional survey was employed to collect concurrent and retrospective data from households in Hatcliff District in Harare, Zimbabwe. An Interviewer Administered Questionnaire (IAQ) was used for data collection. Standard questionnaires used in previous studies by IOM and WHO were used as reference points in the development of the study questionnaire.

**Results**: The study respondents were de facto household heads. 268 (96%) household heads were successfully interviewed out of the computed target of 279. The study findings showed that emigration had a positive impact on household income (Pearson Chi-Square test of association $[\chi^2 (4) = 12.3 (P < 0.05)]$). Emigration was also associated with better access to health facilities ($[\chi^2 (2) = 1.751 (P<0.05)]$) and healthier nutrition. Emigration exposed household members were also more likely to maintain healthy lifestyle. Only 28% of households exposed to emigration reported a negative shift of healthy lifestyle compared to 72% of households not exposed to emigration.

**Conclusions**: The study exposed emigration to be a significant determinant of health in urban places of origin. This effect seemed to be highly positive. Contrary to commonly reported negative consequences of emigration on health at the place of origin, mostly through brain drain, we conclude that there are significant positive effects for consideration when developing and implementing migration policies and programmes.

**Introduction**

Migration has become a defining phenomenon of the twenty-first century, of global proportion. Yet, the effects of migration are increasingly becoming multifaceted, both at places of origin and at destinations. The impact of emigration (out migration) appears to be framed by two extremes. In some sending areas, migration has set in motion a development force, as remittances loosen various kinds of investment and production constraints that typically confront households. This includes direct
and indirect investment in health and health care activities, including better access to essential treatment. In some cases, emigration has however, drained local economies and societies of their human and financial capital. Very little, if any attention, has been placed on the relationship between emigration and health at the place of origin.

Zimbabwe endures a very high migrant stock. UNDP estimates the population of Zimbabweans living in the diaspora to be around 3.5 million. Ratha et. al, place the net migration for Zimbabwe at 11.1 migrants per 1000 population, translating to a migrant stock of over 4 million. This means a quarter of the Zimbabwean population is in the diaspora. The high level of emigration is associated with crippling skills losses in the health and other sectors. This notion however, overlooks the direct and indirect role of remittances in funding health and healthcare as well as other sectors. Skeldon contends that remittances have a positive impact on the place of origin. Recruitment and Returns are also key dimensions of migration with impact on health. Recruitment deals with employment status (employed, unemployed or underemployed) of migrants on departure and at destination. Returns refers to migrants who come back to their countries of origin – the commonly asked questions are; ‘do returning migrants bring back new technologies and ideas and stay, do they circulate between home and abroad, or do they return to rest and retire?’ The 3Rs (Recruitment, Remittances and Returns) of migration can therefore collectively either result in a vicious or a virtuous circle. We therefore, assume that households exposed to emigration have better health, including through improved access to healthcare.

The current economic situation in Zimbabwe is forcing people to migrate in the hope of securing employment in countries with better economies than Zimbabwe such as South Africa, Botswana, United Kingdom and Australia. Zimbabwe is faced with serious economic challenges characterised by high unemployment rates, inflation and low productivity. The assumption when migrating is that such migrants will be better off in their destination countries than they were in Zimbabwe, this includes improved access to health and health care. Those who migrate however may not get a job in their
destination countries as soon as they would have anticipated. They may also find it difficult to have their qualifications recognized in countries of destination. Sometimes they have to take up 3D (dirty, dangerous and degrading) jobs with meagre salaries. As a result, they end up in a worse economic situation than they were before they migrated. Considering that those with a high tendency to migrate tend to be bread winners in their families, the situation may be worse for those they leave behind. When this happens, the health situation of the families left behind is also affected.

This study explores the impact of emigration on health by comparing access to health and healthcare among emigration exposed and non-exposed households in urban Zimbabwe. It also explores the impact of emigration on other key determinants of health.

Methods

The study design was a mix of qualitative and quantitative methods. A cross sectional survey was employed to collect concurrent and retrospective data. The quantitative method was employed to measure the impact of emigration on household livelihood through capturing of numerical data. It answered the questions: how much? how many? how often? to what extent? Both households exposed and not-exposed to emigration were included to allow for comparison between the households. Households exposed to emigration were defined as those from which one or more permanent member(s) had relocated to another country permanently for a period over six months preceding the study. This study extensively drew on Frankenberger’s ‘Household Livelihood Security Concept and Lee’s General Theory of Migration’. The ‘Migration and Household Livelihood Security Framework,’ as adapted from Frankenberger and McCaston identifies economic security, educational security, community participation, habitat security, food security and health security as the intermediate determinants of the household livelihood security (dependent variable). Access to health and health care was evaluated by asking interviewees to rate their households’ “access to health facilities” on a Likert scale (poor - very good).

Multistage random sampling was employed in the study. Hatcliffe district was randomly selected from a list of all high-density suburbs in Harare. Nine (9) enumeration area (EA) maps showing location of
households and major population points in Hatcliffe were then obtained from ZIMSTAT. The sampling frame used for the 2002 Population Census, the 2002 Zimbabwe Master Sample (ZMS02) developed by ZIMSTAT (formerly known as CSO) after the 2002 Population Census was used. The EAs were selected using probability proportionate to size (PPS) sampling (using a computer-based system). This approach ensured that households in larger EAs had the same probability of getting into the sample as those in smaller EAs, and vice versa. A total of 31 households were selected from each EA. A sampling frame (list of the houses in the EAs) was then obtained from the selected EA maps and simple random sampling was employed to select the study units within the selected EAs. The study units were households and interviewees were the de facto heads of all the selected households in Hatcliffe districts on the date of interview.

An Interviewer Administered Questionnaire (IAQ) was used for data collection. The questionnaire was targeted at the household heads and largely collected quantitative data. Standard questionnaires used in previous studies by IOM were used as reference points in the development of the study questionnaire. The questionnaire included pre-coded and open-ended questions on the impact of emigration on household livelihood. Statistical Package for Social Sciences (SPSS 17) was then used to analyse the data. The process of data analysis involved definition of variables, data entry and running of summary measures or descriptive statistics as well as inferential statistics. The outputs were then presented in graphs, charts and cross-tabulations.

Results
The study respondents were de facto household heads in Hatcliff District of Harare, Zimbabwe. A total of 268 out of the computed target of 279 de facto household heads were successfully interviewed (See Table 1). This yielded a response rate of 96%. The majority of the respondents were females (52%). Reported emigration levels were quite high, with 110 (41%) out of the 268 interviewed households having been exposed to emigration within the 5 years preceding the survey. Less than 60% (158) of the households had not been exposed to emigration. Overall, a total of 151 persons had migrated from the surveyed households. This yields an average of 108 emigrants per 1000 population (10.8% of the study population). Those who migrated were likely to be heads of household that is
fathers (46%) and mothers (44%).

Data from the study tend to suggest that emigration has a positive impact on household income (Pearson Chi-Square test of association \( \chi^2 (4) = 12.3 \) \((P < 0.05)\)). For instance, 30% and 38% of the households exposed to emigration had incomes in the ranges $150-$300 and $301-$600 compared to 21% and 33% of the households not-exposed, respectively. About 21% of the households not-exposed to emigration had incomes less than $150 in the 6 months preceding the study compared to only 6% of the households exposed to emigration. The gap seems to narrow down as household incomes approach $1,200. About 19% of the households not-exposed to emigration had incomes in the range $601-$1,200, compared to 18% of households exposed to emigration who had incomes in the same range. Households not exposed to emigration were more likely to be in the high income bracket.

Emigration was associated with better access to health and healthcare facilities. Households exposed to emigration were more likely to report better access to health services when compared to households not exposed to emigration. At least 61% of the households exposed to emigration rated their access to health facilities to be at least good, compared to 54% of households not-exposed to emigration (See Figure 1). At least 30% of the households also reported that their access to health facilities would be significantly affected should the household member(s) who emigrated is to permanently return home. In addition, households exposed to emigration were likely to report that they had sought treatment the last time a member of the household fell ill (Pearson Chi-Square test of association \( \chi^2 (2) = 1.751 \) \((P<0.05)\)) (See Table 2).

Follow up questions revealed that households exposed to emigration maintained healthier diets compared to households not-exposed to emigration. About 68% of households exposed to emigration reported having at least three (3) meals per day compared to only 42% of the households not-exposed to emigration. Households exposed to emigration were also more likely to maintain healthy lifestyle. Only 28% of households exposed to emigration reported a negative shift in health lifestyle over the five years preceding the study, compared to 72% of the households not-exposed who reported the same.
The relative importance of remittances as a source of household income had not changed over the years. For instance, in both 2010 and 2011 remittances was the third most significant source of household income, contributing 12% and 16% respectively (See Table 3). Labour and self-employment were the first and second sources of income in 2010 and 2011, contributing 34% and 31%, and 22% and 23%, respectively. Self-employment also remained a major source of household income contributing 22% in 2010 and 21% in 2011 respectively.

Discussion
The study confirmed the generally large migrant stock for Zimbabwe, but maintaining a median locus. The estimated migrant stock of 108 emigrants per 1000 population (11%) is comfortably between internationally and nationally reported estimates both of which are potentially motivated by political ambitions. The reported migrant stock is lower than the reported international average of 27% or 270 emigrants per 1000 population but higher than the conservative average national stock reported by the Government of Zimbabwe of (361,743 emigrants) 2.9% or 29 emigrants per 1000 population. However, it is agreeable that the migrant stock for the country is high, making this a good setting for studies to assess the impact of emigration on health at the place of origin.

It is arguable that the reported positive impact of emigration on the study households’ income (Pearson Chi-Square test of association \( \chi^2 (4) = 12.3 \ (P<0.05) \)), conversely impacts on their access to health and healthcare in a positive direction. This is because higher income is generally associated with better health, as households and individuals are better able to purchase healthcare and access other positive determinants of health such as good nutrition and better living conditions. To confirm this notion, the survey findings shows that households exposed to emigration were more likely to seek treatment the last time a member of the household fell ill (Pearson Chi-Square test of association \( \chi^2 (2) = 1.751 \ (P<0.05) \)). Households exposed to emigration also enjoyed healthier nutrition and were more likely to engage in healthy lifestyles. About 68% of households exposed to emigration, for instance, reported having at least three (3) meals per day compared to only 42% of
the households not-exposed to emigration. This finding is consistent with studies conducted elsewhere\textsuperscript{16,17}. The fact that 61% of households exposed to emigration rated their access to health facilities to be at least good, compared to only 54% of households not-exposed to emigration further validate the notion that emigration is associated with better health. Chakraborty has reported similar findings\textsuperscript{18}.

In addition, the study shows remittances to be a resilient contributor to household income. Finding from the study indicate that, the relative importance of remittances as a source of household income had not changed over the years, with remittances remaining the third significant source of household income in 2010 (12%) and 2011 (16%) respectively. Pant and Solimano have in separate studies, similarly reported remittances to be a stable source of income for households\textsuperscript{19,20}. We infer that the impact of emigration on health in similar settings is sustainable.

It is necessary to note that there is a dearth of literature describing and explaining the emigration and health nexus. There is therefore need to replicate the study with larger populations and wider geographic coverage in order to allow for comparison of communities with different socio-economic classes, and to allow for broader generalisations.

Limitations

Resources and time could not permit for undertaking an in-depth study. This study was as a result, limited to one purposively selected district and a limited number of respondents from randomly selected households. Hence, the study did not allow for comparison between communities with different socio-economic classes nor broader generalisations of the findings. Secondly, the emigrants could not be interviewed, therefore, interpretation of study findings relied on extrapolation based on secondary information and existing literature on the 3Rs (Recruitment, Remittances and Returns) of migration. In addition, the tools employed did not measure the actual saving and spending propensities of migrants and their families.

Declarations

\textbf{Ethics approval and consent to participate:} Ethics approval not required. Respondents were requested to complete consent to participate forms.
Consent for publication: Not applicable

Availability of data and materials: The datasets generated and/or analysed during the current study are not publicly available because individual privacy could be compromised, but are available from the corresponding author on reasonable request.

Competing interests: None declared

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Authors' contributions: TC: Conceived and designed the work; analysed and interpreted the data; drafted the work; edited and finalised the Manuscript.

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Tables

**Table 1** – Percentage Distribution of Demographic Characteristics of Respondents (n=268).

| AGE GROUP OF RESPONDENT | Percent (%) |
|-------------------------|-------------|
| 16-19                   | 7.8         |
| 20-29                   | 32.8        |
| 30-39                   | 25.7        |
| 40-49                   | 14.6        |
| 50-59                   | 5.6         |
| 60+                     | 13.4        |
| Total                   | 100         |

| SEX OF RESPONDENT | Percent (%) |
|-------------------|-------------|
| Male              | 47.8        |
| Female            | 52.2        |
| Total             | 100         |

| POSITION IN HOUSEHOLD | Percent (%) |
|-----------------------|-------------|
| Father                | 45.9        |
| Mother                | 44.0        |
| Child                 | 4.5         |
| Grandmother / Other Relative | 5.6 |
| Total                 | 100         |

**Table 2** – Cross tabulation of Household Emigration status and Treatment Seeking (n=268).

| HH exposure to migration | Was treatment sought | No | Not Applicable | Total |
|--------------------------|----------------------|----|----------------|-------|
| Exposed                  | Count                | 82 | 19 | 8 | 109 |
| % within HH exposure to migration | 75.2% | 17.4% | 7.3% | 100.0% |
| Not exposed              | Count                | 117 | 23 | 19 | 159 |
| % within HH exposure to migration | 73.6% | 14.5% | 11.9% | 100.0% |
| Total                    | Count                | 199 | 42 | 27 | 268 |
| % within HH exposure to migration | 74.3% | 15.7% | 10.1% | 100.0% |

Each subscript letter denotes a subset of Was treatment sought categories whose column proportions do not differ significantly from each other at the .05 level.

**Table 3** – Percentage Distribution of Sources of Household Incomes Over Years (n=268).

| Reference Period | 2010 (%) | 2011 (%) | Change (%) |
|------------------|----------|----------|------------|
| Gifts            | 6.7      | 6.7      | 0          |
| Cash transfers   | 0.9      | 0.9      | 0          |
| Remittances      | 12.4     | 16.5     | 4.1        |
| Petty trade      | 11.9     | 11.8     | -0.1       |
| Self-employment  | 21.9     | 21.7     | -0.2       |
| Livestock sales  | 0.7      | 1.5      | 0.8        |
| Crop sales       | 6.7      | 4.1      | -2.6       |
| Labour           | 34.3     | 31.3     | -3         |
| Other            | 4.6      | 5.6      | 1.0        |
| Total            | 100      | 100      | 3.6        |

Figures
Figure 1

Percentage Distribution of Ratings of Household Access to Health Facilities for Households Exposed & Not-Exposed to Emigration (n=268).