Changing patterns of migration in Latin America: how can research develop intelligence for public health?

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SYNOPSIS

Migration patterns in Latin America have changed significantly in recent decades, particularly since the onset of global recession in 2007. These recent economic changes have highlighted and exacerbated the weakness of evidence from Latin America regarding migration—a crucial determinant of health. Migration patterns are constantly evolving in Latin America, but research on migration has not developed at the same speed. This article focuses on the need for better understanding of the living conditions and health of migrant populations in Latin America within the context of the recent global recession. The authors explain how new data on migrant well-being could be obtained through improved evidence from censuses and ongoing research surveys to 1) better inform policy-makers about the needs of migrant populations in Latin America and 2) help determine better ways of reaching undocumented immigrants. Longitudinal studies on immigrants in Latin America are essential for generating a better representation of migrant living conditions and health needs during the initial stages of immigration and over time. To help meet this need, the authors support the promotion of sustainable sources of data and evidence on the complex relationship between migration and health.

Key words: economic recession; migration; public health; research; Latin America.

Latin America is an extremely heterogeneous region, encompassing 20 highly diverse nations ranging from countries like Brazil, which has a population of 194.9 million and a gross domestic product (GDP) of US$ 2 449.7 billion (2012), to Haiti, which has a population of 10 million and a GDP of US$ 8.3 billion (1). Socioeconomic inequalities between countries create significant differences in the distribution of health risks in the region, severely affecting the life expectancy and health of those in relative and absolute socioeconomic deprivation (2).

In recent years, there has been growing concern about the effects of the changing migration patterns resulting from the global economic recession on countries worldwide (3), including those in the Latin American region (4). This article explains the value of determining the living conditions and health status of migrant populations in Latin America within the context of global recession. The authors assert that migration is a crucial determinant of social inequality and health because it is related to structural factors such as international policies and the internationalization of labor as well as intermediate factors such as socioeconomic position. The authors recommend that new knowledge be obtained through improved research evidence to inform policy-makers about migrant populations in Latin America and their impact upon countries' economic progress and sociopolitical well-being. This position is aligned with recent recommendations from the International Organization for Migration (IOM) on how to achieve more effective communication on migration worldwide (5).

Methodological problems arising from data limitations experienced by the authors during their in-depth research on migration and health in Chile in recent years (6–13) led them to envision ways in which better data could be collected for the region as a whole. Their findings are presented below, in five sections: 1) a description of the recent global economic recession and its link to changes in migration patterns in Latin America; 2) an explanation of the importance of improving research on migration and public health in the region; 3) recommendations on key dimensions to include in the research and how to collect data on this topic; 4) suggestions on how to link research on migration to the framework of the social determinants of health; and 5) concluding remarks.

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THE RECENT GLOBAL ECONOMIC RECESSION AND ITS LINK TO CHANGES IN MIGRATION PATTERNS IN LATIN AMERICA

Since mid-2007, variations in migration patterns have been observed worldwide. The world went into global economic recession, and immediate "migration" reactions emerged. The International Monetary Fund (IMF) defines a global recession as a period of global economic slowdown in which global economic growth is 3% or less. According to this definition, the years 2008–2012 can be classified as experiencing recession (14). Economic recessions pose great challenges at the global level in terms of expected economic growth, as well as political stability, development, and population well-being, and may trigger changes in global migration patterns as people search for new job opportunities. Evidence shows that during the recent economic crisis, there were no reversals in the patterns of movement, but migratory flows to high-income countries slowed down (4), and the prevalence and characteristics of global migrants involved in these movements may have changed (4).

Throughout history, three major migration patterns in Latin America have been identified: 1) immigration from overseas (particularly during the mid-19th and mid-20th centuries, when immigration to Latin America had a strong European component); 2) intra-regional migration (particularly between 1970 and 1990, when immigration across the region was driven by socioeconomic developments); and 3) South–North migration (particularly during the last few decades), resulting in the loss of qualified workers from Latin America, increasing economic value associated with remittances to the region, and the emergence of Latin American immigrant communities in the United States and Canada (15). More recently, a growing South–South migration pattern has emerged in the region, resulting from the movement of people living in relatively less developed countries (e.g., Bolivia, Ecuador, and Peru) to neighboring, more developed ones (e.g., Argentina, Brazil, and Chile). Due to a lack of work opportunities for women in many countries in the region, a feminization of migration has also been observed. A growing proportion of women from low-income countries are migrating to neighboring ones to work in manual, semi-manual, and domestic services. In many cases these women leave their partners and children behind and remit a large proportion of their income to their families in their countries of origin (7). Immigrant women in this situation tend to 1) have low income, 2) be stigmatized, and 3) have poor working conditions (7).

Due to the global economic crisis, further growth in the inflow of immigrants to Latin America has taken place in recent years. Latin American countries have been less vulnerable to the crisis than some countries, such as Spain and Portugal, which were severely harmed by the recession, and thus may have become more appealing destinations for migrant populations (16). Specific international agreements between European and some Latin American countries will inevitably shape variations in migration patterns in coming years. These patterns could include European immigrants leaving their countries to search for job opportunities in Latin America after losing positions in their country of origin due to recession, or emigrants returning to their countries of origin (or their parents' countries of origin). A recent report from the Organization of American States (OAS) (17) described new migratory patterns in Latin America as follows: "In absolute terms, in 2009, the United States and Canada together had an entry flow of approximately 3 184 600 immigrants. . . . For the same year, an entry flow of 460 290 immigrants in total was registered in the following seven countries covered in this first report: Argentina, Chile, Colombia, Ecuador, El Salvador, Mexico and Uruguay. Argentina and Chile are the two principal destination countries for regional migrants. Immigration, in general terms, decreased in Canada and the United States by almost 6% from 2008 to 2009" (p. viii).

Patterns of migration also vary depending on legal status. Changes in unauthorized (undocumented) migration are difficult to identify, however, as few data regarding this group are routinely collected, and existing information on the living conditions and health of immigrants in Latin America is scarce. In addition, existing data are often dated and/or inaccurate, as migration is a dynamic, iterative process, closely related to employment and legal status, which in turn determines the income, educational opportunities, health, and well-being of migrant families, all of which may not be fully captured in current evidence. Even though migration patterns constantly evolve, and their multidimensional causes may vary, research on migration remains relatively limited in Latin America. Migration-related questions in surveys conducted in the region remain poor and the conventional questions asked do not generate enough information to support adequate understanding of how immigrant communities live and how their health is affected over time.

THE IMPORTANCE OF IMPROVING RESEARCH ON MIGRATION AND PUBLIC HEALTH IN LATIN AMERICA

The mechanisms underlying the complex relationship between socioeconomic inequalities and the distribution of health have been identified as material, psychosocial, behavioral, cultural, political, and eco-social, among others. To various extents, these mechanisms have been synthesized in the most recent model of the Social Determinants of Health (SDH) (18). Despite its significance, this model has some limitations as it is mostly based on evidence produced in high-income countries, and does not include migration as a key SDH, or consider dynamic migration processes and related factors over time. Despite its limitations, the SDH does include migration as one of the determinants of health (19), and research on migration as an SDH has been developed in recent years.

Current knowledge about the relationship between migration status and health in Latin America is also limited. There is a body of knowledge on immigrant health in the region, but much of it is outdated. In a November 2012 scoping search of PubMed/MEDLINE, ISI Web of Knowledge, and EMBASE using the key words "Latin America" and "migration," the authors of this article found 67 reports (with 48 published between 1958 and 1990, and a total of 54 published up to the year 2000). The 13 most recent studies (published from the year 2000 onward) support the regional migration trends described above, and focus on the emigration of Latinos to the United States (20, 21), internal migration (22), and the feminization of immigration in the region (23, 24). Evidence from Latin America and other regions on the health effects of migration is heterogeneous. Some research suggests that immigrants may have relatively good health despite poor living conditions upon their arrival in the target country (i.e., a "healthy migrant" effect), while other evidence indicates a rapid deterioration of immigrants' health once they are living abroad, due to factors such as higher socioeconomic deprivation, social isolation (25, 26), and underuse of health care services (27). In what Rumbaut (28) called the "paradox of assimilation," the length of time that an immigrant spends in a foreign country has been correlated with an increased risk of a wide range of health problems. In some cases, immigrants' rates of poor health may overtake local rates and they may become a severely sick population (29).

There are many reasons to maintain and improve research on migrant populations worldwide, particularly in Latin America. First, immigrants are a highly heterogeneous group (7, 9). Their health needs could be tackled through tailored interventions (30), but the specific approach must be determined on the basis of sound and current evidence describing their complex characteristics. Second, migration affects not only economic growth and development but also international labor structures and international collaboration (17), shaping policies and, to various degrees, affecting national and regional demographic and epidemiological patterns (31). Third, migration is strongly related to human rights (32), and affects different groups simultaneously (8). For example, emigration of highly educated people to high-income countries has severely affected some poor countries via the loss of a proportion of the countries' productivity and related economic growth (33). At the same time, a large proportion of low-income women are migrating from countries such as Bolivia and Peru, and leaving their children behind, to work in domestic services in bordering countries (6, 7). Income remittances may improve the living conditions of the families "left behind," and support the local economy, but do not necessarily move these countries toward socioeconomic or political stability (34). Fourth, exploitation of women for sexual commerce remains a public health challenge, especially in border areas (35, 36). Fifth, undocumented immigrants tend to experience great socioeconomic deprivation and health-related vulnerability, and remain hidden from most governmental figures and research evidence (6, 27, 37). For example, although some research indicates that the total number of unauthorized migrants entering the United States annually has plummeted from an average of 850 000 between 2000 and 2005 to approximately 300 000 per year between 2007 and 2009 (38), and the number of unauthorized migrants from Mexico has dropped from 500 000 to 150 000 per year over the same period (17), this evidence is not included in most government data. However, some countries in the region have begun to address the status of undocumented workers. For example, Argentina has carried out a significant regularization program since 2007 (the "Patria Grande" program), resulting in about 216 000 persons or about 10%–15% of the country's total immigrant population becoming regularized over the 2007–2009 period. In Chile, the national 2007–2008 regularization program received 49 000 applications, representing about 15% of the foreign-born population (17).

Overall, these factors suggest the importance of focusing attention on the close relationship between migration and social inequalities, the effect of these inequities on the distribution of health, and the urgent need for more research evidence in Latin America. This has become more evident since the recent global economic recession.

RECOMMENDATIONS ON KEY DIMENSIONS TO INCLUDE IN RESEARCH AND DATA COLLECTION

Opportunities to gather new evidence from censuses and surveys

Information on the living conditions and health of the Latin American population is collected by national censuses every 10 years and more regularly by ongoing surveys (e.g., the Demographic Health Surveys). Censuses are a good source of evidence, but their infrequency prevents the identification of short-term changes in migration in Latin America. For this reason, nationally representative surveys, conducted every two or three years, have a key role to play. However, many of the ongoing surveys do not include questions on migration status. At the time this article was written, to the best of the authors' knowledge, no migrant-specific survey was under development in the region.

The case of Chile can be used to illustrate the type of data that should be collected about migrant populations in the Latin American region. In Chile, other than the national census, the largest survey for data on migrants in Chile is the CASEN (*Caracterización Socioeconómica Nacional*) survey. This survey collects data on socioeconomic status, material living conditions, demographic characteristics, use of the health care system, and self-reported health. Applied only since 2006, this survey includes three questions about migration status: 1) "Where were you born?" (e.g., in Chile or abroad); 2) "If not born in Chile, in which country were you born?"; and 3) "If born in a different country from Chile, how long have you lived in Chile?" While these questions allow researchers to categorize the population as Chilean-born or international immigrants, they are too general to provide a full picture of migrants' situations in the country and their fluctuations over time. These data could be expanded with more detailed questions on migration status, identified based on their significance to public health policies and international evidence. A list of suggested questions appears in Table 1. To adequately represent this population at different time points, there is also an urgent need for longitudinal data on migration in the region. As shown in the effects of the recent global recession, the relationship between the international labor structure and migration is complex. More detailed evidence could help policy-makers better anticipate these outcomes and design interventions to help avoid unintended consequences for the living conditions, health, and well-being of migrant populations and their receiving societies.

Increased attention to hard-to-reach (including undocumented) immigrants

Expanding the number of survey questions about migration status may not be sufficient to fully represent different types of migrants. Authorized (documented) migrants are the easiest to include in these surveys, but there are recognized difficulties in

TABLE 1. Relevant new data to gather among migrant populations in Latin America, 2012[a]

Research from national censuses and surveys in the region	Suggested migration questions (general)
	1. "If born in this country: have you ever lived for over a year in any other country?" "Where?" "When?" "Why?" "When did you return and why?"
	2. Reasons for migrating to Chile (work, study, refugee, family member abroad, other)
	3. [Second- and third-generation immigrants:] "Where was your mother born?" "Your father?" "Your maternal grandparents?" "Your paternal grandparents?"
	4. Features of immigration (e.g., alone or accompanied; with or without a job contract, and if with a job, its characteristics; documented or undocumented; first versus multiple migrations, etc.)
	5. Family relationships (e.g., did the migration occur with or without family; hometown associations and remittances, etc.)
	6. History of immigration since arrival in Chile (e.g., "left Chile and then came back," etc.)
	Legal status, socioeconomic status, and migration history
	7. Current legal status and changes in legal status since arrival
	8. Income and occupation before migration and since arrival, including type of occupation, occupational hazards, and psychosocial dimensions of work
	9. Objective and subjective measures of socioeconomic position and social class, before migration and since arrival, including at least income, education, type of occupation (see no. 8), household assets, and subjective socioeconomic status
	Health-related dimensions
	10. Health behaviors before migration and since arrival (smoking, alcohol, physical activity, diet, etc.)
	11. Current self-perceived health status (based on European Quality of Life-5 Dimensions [EQ-5D] or other measures) and self-perceived stress during migration, at arrival, and over time
	12. Health status before migrating, including acute health problems and the chronic conditions
	13. Health status upon arrival in Chile and onward and any medical follow-up (including acute and chronic health conditions)
	14. Measures of health status biomarkers: body mass index (BMI), blood pressure, blood sugar, blood lipids, sexually transmitted diseases
	15. Perceptions of discrimination and stigma by immigrants in their neighborhood, work, and health system, including the identification of those perceived to create the hostile environment
	16. Measures of social capital and social cohesion with other immigrants and local communities in the country of origin and the host country (binding, bonding, bridging, linking, and other dimensions)
	17. Measures of social integration, acculturation, and enculturation processes in the host country
Increased attention to hard-to-reach (including undocumented) immigrants	1. Defining hard-to-survey populations (e.g., whether they are hard to find, hard to reach, hard to persuade, etc., and metrics for quantifying the level of difficulty)
	2. Measuring undercounts (e.g., demographic methods, dual-system estimates, oversampling methods, network sampling, capture–recapture techniques, and other techniques used to sample rare populations)
	3. Tailored interviewing methods (e.g., the use of community-based interviewers, language and cultural translation, etc.)
	4. Defining the type of non-response bias: non-contact (no contact was made with the randomly selected household) versus rejection of participation (contact was made but the household refused an interview)
	5. Identifying key factors influencing non-response, such as individual and household characteristics, the social environment, and survey design features
	6. Improving interviewer abilities to reduce response bias and assess it over time

[a] Author recommendations.

capturing unauthorized (undocumented) immigrants (39). Undocumented immigrants are particularly important to include given their vulnerability to poor health and living conditions. Undocumented immigrants tend to have lower self-reported health; more accidents, injuries, and psychosocial distress resulting from poor working conditions; and marginal living conditions, all of which are in turn associated with poverty and social exclusion (40). Interviewing strategies aimed at minimizing the missing data on migration status should be established by surveys before data collection.

Specific sampling and recruiting techniques that have been proposed but not adopted in Latin America need urgent consideration. Examples include methods for adequately defining hard-to-survey populations (e.g., determining whether they are hard to find, hard to reach, hard to persuade, etc., and quantifying the level of difficulty in defining them), and measuring undercounts (e.g., demographic methods, dual-system estimates, oversampling methods, network sampling, capture–recapture methods, etc.). Other methodological approaches include those related to advertising; special interviewing methods (e.g., community-based peer interviewing); language considerations; and cultural translation (41, 42).

LINKING RESEARCH ON MIGRATION WITH RESEARCH ON SOCIAL AND HEALTH INEQUALITIES

The authors suggest five areas for future research on migration and health inequalities in Latin America: 1) knowledge gaps about socioeconomic inequalities between immigrant groups, and how such inequalities relate to stigma and labor market discrimination processes, as well as local and international policies; 2) acculturation (43) and enculturation (44) between immigrants and the receiving society, and their relation to social exclusion or social integration processes over time; 3) under-researched areas such as health behaviors, social capital, the relationship between genetic predisposition and environmental factors, and the effects of recent health care reforms and other structural components; 4) life-course effects on social and health inequities within immigrant populations (little research has been conducted with this perspective internationally, and none in this region; mixed methods and advocacy for long-term longitudinal monitoring of immigrants in the region could provide valuable data); and 5) the study of migration as a dynamic and complex process inextricably connected with broader economic, social, and international factors. Strong theoretical understanding of this process is urgently required to create better research questions and study designs. Better research provides better data, which provide better support for policy involvement. Robust evidence is by far the best support for policy-makers on this topic both within and outside of Latin America.

CONCLUSION

There is an urgent need for better understanding of the living conditions and health of migrant populations in Latin America. The recent global recession emphasizes the mismatch between changing migration patterns and "static" research approaches. Migration is a crucial determinant of social equality and health, and concrete, new knowledge could be obtained through research to better inform policymakers about the needs of the migrant populations in Latin America. To meet these needs, the authors advocate the promotion of sustainable sources of data and evidence (ideally longitudinal) on the complex relationship between migration and health, and use of the SDH model as an initial framework from which new theories, relevant to migration, can emerge.

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SINOPSIS

Cambios en los modelos de migración en América Latina: ¿cómo puede la investigación obtener información útil para la salud pública?

En los últimos decenios, los modelos de migración en América Latina han cambiado significativamente, en particular desde el inicio de la recesión mundial en el 2007. Estos recientes cambios económicos han acentuado y exacerbado la insuficiencia de datos probatorios existentes en América Latina con respecto a la migración, un determinante crucial de la salud. Los modelos de migración están evolucionando constantemente en América Latina, pero la investigación en materia de migración no ha evolucionado a la misma velocidad. Este artículo se centra en la necesidad de un mayor conocimiento de las condiciones de vida y salud de las poblaciones migrantes en América Latina en el contexto de la reciente recesión mundial. Los autores explican cómo se podrían obtener nuevos datos sobre el bienestar de los inmigrantes mediante un mayor aporte de datos probatorios de los censos y las encuestas de investigación en curso para 1) informar mejor a las instancias normativas acerca de las necesidades de las poblaciones migrantes en América Latina; y 2) ayudar a determinar las mejores estrategias para llegar a los inmigrantes indocumentados. Es esencial llevar a cabo estudios longitudinales sobre los inmigrantes en América Latina con objeto de formular una mejor descripción de sus condiciones de vida y sus necesidades de salud durante las etapas iniciales de la inmigración y con el transcurso del tiempo. Para satisfacer esta necesidad, los autores alientan la promoción de fuentes sostenibles de información y datos probatorios sobre la compleja relación entre migración y salud.

Plabras clave: recesión económica; migración; salud pública; investigación; América Latina.

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