Decolonization and life expectancy in the Caribbean

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ABSTRACT

Decolonization has brought political independence to half the Caribbean states in the last half of the 20th century, while the other states remain affiliated. Previous studies suggested a beneficial impact of affiliated status on population health, which may be mediated by more favorable economic development. We assessed how disparities in life expectancy between currently sovereign and affiliated states developed over time, whether decolonization coincided with changes in life expectancy, and whether decolonization coincided with similar changes in GDP per capita.

Time-series data on life expectancy and related variables, GDP per capita and political status were collected from harmonized databases. We quantified variations in life expectancy by current political status during the 1950–2010 period. We assessed whether decolonization coincided with life expectancy trend changes by: 1. calculating the annual changes before and after independence, and 2. evaluating trend breaks in a predefined period during decolonization using joinpoint analyses. Similar analyses were undertaken for GDP per capita.

Life expectancy in currently sovereign Caribbean states was already lower than in affiliated states before political independence. Overall, decolonization coincided with reductions in life expectancy growth, but not with reductions in economic growth, and changes in life expectancy growth in the decade after independence did not correspond with changes in economic performance. The widening of the life expectancy gap between currently sovereign and affiliated states accelerated in the 1990's and continues to increase.

Despite considerable life expectancy gains in all Caribbean states, life expectancy in currently sovereign states increasingly lags behind that of states which remained affiliated. Our results indicate that changing economic conditions were not the main determinant of the unfavorable trends in life expectancy during and after decolonization. Circumstantial evidence points to the weakening of bureaucracies during decolonization underlying the uneven life expectancy developments of currently affiliated and sovereign states.

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1. Introduction

Decolonization has brought political independence to half the Caribbean states in the last half of the 20th century, while the other states remain affiliated to their former imperial countries. A recent study demonstrated that since 1965, life expectancy growth has been remarkably more uneven among Caribbean states than in the rest of the Americas (Hambleton et al., 2015).

As a consequence, the Caribbean currently has the lowest life expectancies and highest between-country disparities of the Americas.

Historical evidence reveals that a multitude of factors has contributed to the global rise in life expectancy, including medical and public health interventions, rising levels of education, economic development and income redistribution, and improving social conditions. Many of these factors are influenced by political decision-making, and empirical evidence of the impact of politics (defined as the process of making decisions applying to all members of a population) on population health is growing rapidly (Beckfield and Krieger, 2009; Mackenbach, 2013;

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Muntaner et al., 2011). Politics may directly shape the conditions for life expectancy improvement through policies related to primary and secondary prevention programs, road traffic safety, food, water and air safety, health promotion campaigns, and health care delivery, or indirectly through policies related to education, social and economic development (Navarro and Shi, 2001; Navarro et al., 2006) and policies that address income inequalities (Pickett and Wilkinson, 2015).

Decolonization - the process in which a colony becomes politically independent - is one important political event that can plausibly affect population health. Economic analyses that exploit current differences in political status have found that affiliated status is consistently associated with better economic conditions and better health outcomes (McElroy and Pearce, 2006; Mcelroy and Sanborn, 2005). These studies remain inconclusive, however, on the onset of health disparities between currently sovereign and affiliated states, and studies that directly investigate the impact of decolonization on population health remain scarce. While improved health outcomes were reported in several former colonies after political independence (Dominicus and Akamatsu, 1989; Flanagin, 1990; Iyer, 2004), population health in many former colonies remains relatively poor to the present day.

Decolonization may affect life expectancy development in several ways. First, decolonization can lead to lower economic growth relative to other independent countries (Sylwester, 2005), for example through discouraging private investments (Rodrik, 1991). Given the strong dependency of life expectancy growth on economic conditions (Preston, 1975), even in the modern age (Mackenbach and Looman, 2013), this may affect life expectancy developments during decolonization. If this were the case, we expect that life expectancy growth during decolonization mirrors a state's economic growth. Second, decolonization can be accompanied by civil unrest and violent eruptions. Short-term effects on life expectancy growth include an increase in the number of violent deaths, the displacement of civilians, the disruption of health services and economic activities, and the reallocation of government resources from public services to military expenditures (P. Collier et al., 2003). The effects of civil unrest on population health persist long-term and result in additional health challenges, for example through increases in infectious and other preventable diseases (Ghobarah et al., 2004) and mental health problems (P. Collier et al., 2003). Third, political decisions during decolonization can lead to the weakening of (colonial) bureaucracies and, consequently, a state's administrative capacity (Kenny, 2015). In the absence of strong bureaucracies, the government's capacity to solve problems, to provide necessary resources and to implement effective policy initiatives is challenged in areas that contribute to population health, such as health care, education and social welfare. Political decisions during decolonization were also found to influence the termination of beneficial medical reforms (Warren, 2010) and to incite health professional migration to Western countries (Arnold, 2011).

The purpose of this paper is to explore the development of population health -indicated by life expectancy at birth- and the potential role of changing economic conditions -indicated by GDP per capita- during decolonization in the Caribbean region in the last half of the 20st century. Specifically, we aim to 1) quantify variations in life expectancy development by political status during the 1950–2010 period, 2) assess whether decolonization coincided with changes in life expectancy growth, and 3) assess whether decolonization coincided with similar changes in GDP per capita.

2. Methods

2.1. Data

We selected datasets that were most comprehensive in terms of study period and number of included Caribbean states based on searches in harmonized databases. The source of life expectancy at birth data is the World Population Prospects 2012 dataset of the United Nations (UN), which included states with 90,000 inhabitants or more. We collected life expectancy data in single calendar years (interpolated from 5-year estimates), by gender, from 1950 to 2009 (United Nations: Department of Social and Economic Affairs, 2013). In order to provide explanatory clues and to confirm our findings, we selected three variables from the same dataset that are related to life expectancy: crude death rate (per 1000 population, by gender), under-5 mortality and infant mortality (both per 1000 live births). The source of GDP per capita data is the Bulmer-Thomas dataset (in US$, 2000 prices), which includes annual time series on 28 Caribbean states, from 1960 to 2008 (Bulmer-Thomas, 2014).

2.2. Definition and selection of Caribbean states and their political status

The Pan American Health Organization's (PAHO) definition of the Caribbean includes 30 states: 27 island states and 3 continental states in South America: French Guiana, Suriname and Guyana. Continental Belize in Central America was added to this selection because of its strong historical and economic ties to the Caribbean and its membership to the Caribbean Community and Common Market (CARICOM). Life expectancy data of 21 states were available in the UN dataset.

Information on political status, including the year of independence where relevant, was collected from the United Nations (http://www.un.org/en/decolonization/nonselfgov.shtml#s) and verified with other sources, such as national websites. We included sovereign states -loosely defined as populations in defined territories that are represented by one government and have full control of their (inter)national affairs by international law- that gained political independence during the period for which life expectancy data were available. This excludes Haiti, the Dominican Republic and Cuba. Table 1 presents a factual overview of the political status of the 18 states included in this analysis during the 1950–2010 period.

The number of independent Caribbean states grew from three in 1960 to sixteen in 1983 during three consecutive waves of decolonization. The majority of these states were former British colonies and all are currently member of the Commonwealth of Nations, an a-political intergovernmental organization with the purpose of collaborating on shared objectives. Surinam is the only former Dutch colony that gained political independence. All currently sovereign states are sovereign under international law and UN member states.

Within the same time period other imperial countries with presence in the Caribbean, the Netherlands, France and the United States (U.S.), established new political entities for their colonies. The U.S. Virgin Islands is an unincorporated territory with limited political power and citizenship rights. Aruba, Curaçao and Puerto Rico, have gained more autonomy and are self-governing with respect to internal affairs. The three French colonies, French Guiana, Guadeloupe and Martinique, became French departments in 1947. Its citizens have full citizenship rights and the states are considered an integral part of the French Republic. All currently affiliated states have strong political, legal and (socio)-economic ties to their former imperial power.