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Short communication

Democracy and health: Evidence from within-country heterogeneity in the Congo

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ABSTRACT

The literature documents a positive association between democracy and health, and studies supporting this claim have largely relied on cross-country panel analyses. In many developing countries, however, local traditional leaders at the micro-level play a key role in individuals' daily lives while the influence of the national government is largely negligible. In response, this study revisits the relationship between democracy and health using micro-level household data from 816 randomly selected villages in Eastern Congo. We find little or no evidence that health outcomes are better in villages that are governed by elected leaders compared to villages where leaders are not elected. Our data suggest that efforts to improve health outcomes in this setting may need to focus on issues such as gender discrimination and education.

1. Introduction

Whether democracy affects health outcomes has received a lot of attention. Scholars argue that democracy is related to many positive outcomes from peace (Ray, 1998) to happiness (Inglehart et al., 2008). To date, however, most research exploring the relationship between democracy and health builds on country-level analyses. In this study, we examine this relationship using data that we collected in the Democratic Republic of the Congo, where national politics are largely irrelevant to individuals' daily (health) behaviours, and there is considerable variation in the level of democracy at the micro-level.

Empirically, there is considerable evidence that health outcomes are better under democracy. Besley and Kudamatsu (2006) show that there is better performance in terms of life expectancy at birth and infant mortality in countries that score better on the Polity2 democracy index from the Polity IV database. They also find a positive effect on sanitation, access to clean water, immunisation and health spending. Franco et al. (2004) suggest that more freedom is associated with lower infant and maternal mortality and higher life expectancy. Klomp and De Haan (2009) find a positive relationship between the type of a country's regime and two health measures constructed by the authors (individual health and healthcare sector quality). Ghobarah et al. (2004a) argue that democracies make more funds available for healthcare, while Wigley and Akkoyunlu-Wigley (2011) suggest that there is a positive impact of greater electoral proportionality on life expectancy and infant mortality outcomes. Welander et al. (2015) provide empirical evidence that countries with a higher Polity2 democracy score have lower child and infant mortality rates. Presenting case studies on famine and the SARS outbreak, Ruger (2005) argues that the absence of democratic institutions can worsen epidemics. Other studies emphasize the duration of exposure to democracy as a determinant of health or related outcomes (see Pieters et al., 2016 on child mortality; Costa-Font and Kossarova, 2014 on the effect of the transition of Czechoslovakia to liberal democracy on height; and Besley and Kudamatsu, 2006 on life expectancy and infant mortality). However, in a study that focuses on poverty, Ross (2006) suggests that when certain methodological flaws are addressed (country effects, global health trends and sample bias), there is no evidence that democracy benefits poor people. For a table summarising information on health indicators and political dimensions from previous studies, see Klomp and De Haan (2009).

Theoretically, a number of channels have been put forward via which democracy may promote better population health. Democracy may result in more accountability, and capable individuals might be selected to rule, which can affect health outcomes, for example through willingness to focus on health (e.g. Besley and Kudamatsu, 2006).

The existing literature has examined heterogeneity in health outcomes within countries, which can be attributed to various factors (Subramanian et al., 2001; Sun et al., 2011; White et al., 2011). However, there is a gap in considering heterogeneity in governance within a country as a determinant of health.

The empirical studies mentioned above rely largely on cross-country panels and differences in regimes across countries, or changes over time

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to examine transitions between regimes. This paper advances the literature by studying the link between democracy and health taking advantage of within-country heterogeneity, using micro-level household data that we collected in villages in the Congo. There are three main reasons why we believe this shift in focus is important.

The first reason is substantial. In many developing countries, what happens at the national level has little impact on individuals' daily lives because the reach of the government is low. In contrast, institutions at the micro-level – such as traditional chiefs – govern daily behaviour (Logan, 2013; Acemoglu et al., 2014a; Baldwin, 2013, 2016).

Second, exploring the role of democracy at the micro-level is important for policy reasons. International aid organizations seem to have taken a cue from the findings that 1) leaders at the micro-level are key, and 2) democracy is beneficial. In recent years, programs that introduce local institutional innovations have become a favoured model for development, hoping that these will lead to greater accountability of traditional leaders. These programs are undertaken across the world: e.g. Liberia (Fearon et al., 2009), Afghanistan (Beath et al., 2013), Sierra Leone (Casey et al., 2012), and Sudan (Avdeenko and Gilligan, 2015). Mansuri and Rao (2013) quote a figure of $85bn in World Bank spending in the last decade alone on these types of interventions. A large body of research suggests that institutions are a key driver of economic development (Sokoloff and Engerman, 2000; Acemoglu et al., 2001; La Porta, Lopez-de Silanes and Shleifer, 2008). There are a number of arguments that support the model of introducing local institutional innovations (i.e. democracy at the local level). There is a conviction that participatory approaches to development will yield better results than traditional top-down approaches (e.g. Scott, 1998). Including the voices of local beneficiaries increases their sense of ownership, and is also likely to produce choices that better reflect their needs (Mansuri and Rao, 2013), as well as increase the quality of services provided (Lieberman, 2015). The core idea is that the distance between principal and agent is reduced. There are also intrinsic arguments for participatory approaches that emphasize the value of autonomy in determining one's material situation (e.g. Sen, 2001), while local decision-making processes can be inclusive and more democratic. To date, however, we know little about the relationship between democracy and health at this micro-level.

The third reason relates to the mechanism of the impact of democracy on health. Previous studies have shown that democracies make governments more willing to invest in healthcare, which, in turn, can help improve health outcomes (Besley and Kudamatsu, 2006; Safaei, 2006). However, these villages in the Congo lack resources and infrastructure, meaning that regardless of the willingness to invest in health, this might not be practically possible. Therefore, although we might find a link between democracy and health outcomes in the Congo, as in developed democracies, this relationship might be weaker or non-existent in this setting, due to the absence of resources and infrastructure.

2. Context, data collection and empirical strategy

2.1. Research context

Our data (discussed in detail below), show that individuals in Eastern Congo are poor subsistence farmers, and the typical household has to walk 45 min to reach drinking water. Furthermore, (health) infrastructure is largely absent – either due to destruction or lack of investment. Our area of study figured centrally in the violence which has engulfed the country over the last two decades. Eastern Congo was home to the start of the Congolese Wars (1996–1997 and 1998–2003). The latter, with the direct involvement of eight African nations and 25 armed groups, has been the deadliest war in modern African history. It is thus not surprising that health outcomes in Eastern Congo are very poor (World Health Organisation, 2015). Among our respondents, 18.1% have been seriously ill (defined as not being able to go to work or school) in the two weeks preceding the survey. Among children under the age of seven, we find that 31.4% had fever, 26.9% had a cough and 9.7% had diarrhoea during the preceding two weeks. These numbers are close to the figures provided by the nationally-representative DHS (Demographic and Health Survey), according to which 30% of children under five had fever the preceding two weeks (DHS, 2014). The corresponding rate for diarrhoea was 17%.

Our data confirm that the central government has little influence on Congolese daily lives. Only 17% of our respondents know the name of the prime minister, and only 26% that of the ruling party (compared to, for example, 71% of Americans that can name the *Vice* President (Newsweek, 2011)). As in many other developing countries, it is not national politics, but local traditional leaders that play a central role in community life (e.g. Logan, 2013). In the Congo, the village chief plays this role. The chief is responsible for community governance, which includes land allocation, mitigating disputes, organising public goods provision, and other issues related to the community. For example, we gave each respondent a hypothetical scenario in which the village received funds and asked who has the most influence on beneficiary selection. A majority of respondents stated that this is the village chief, with only 2% mentioning the government. Similarly, of all public goods projects undertaken in the village the preceding six months, 33% were initiated by the village chief, while less than 2% were initiated by the government. Therefore, individuals' perception on chief influence and the limited role of the central government also reflect reality in Eastern Congo. Given this setting, an investigation into the role of democracy on health outcomes would have to focus on the variation in how traditional leaders gained power, rather than the national government.

Importantly, our data document considerable variation in how village chiefs gained power. The most common form of assuming power is through inheritance (41%). Some are chosen by the king (19%) or by political or traditional leadership (5%). Others are selected by village elections (20%), by village elders (11%), or through village referendum (4%). In this study, a leader is considered elected if they gained power via village elections or referendum. As an informative exercise, 20 villages in the South Kivu province that had reported that the village chief was elected were re-visited in 2017 for an additional short survey. This survey is not representative of our complete sample, nor can it be used to conduct statistical analyses. However, it serves as an informative exercise to provide more information about these elections. The responses show that election rules are not the same in all villages. The reported eligible age to vote was 18 in most villages, but some reported 15, 35 or even 40 years of age. Women were reportedly not allowed to vote in 8 out of 20 villages. There were also different responses to the question on the frequency of elections, as in some villages these were repeated every 5, 10, 25 or 30 years, or ‘very rarely’, while in others the chief was elected for life.

2.2. Data collection

Data were collected in the Congolese provinces of South Kivu, Maniema, Haut Katanga and Tanganyika. Eighty enumerators collected data in two waves: Initially a wave in 2007, followed by a larger wave in 2012. A total of 942 households (6,056 individuals), in 286 villages, were visited in 2007 that we aimed to visit again in 2012. In 2012, we collected data from 6,015 households (35,164 individuals) in 816 villages, and 733 village chiefs. Of these, 219 villages (627 households), were also visited in 2007. The same type of information was collected in 2007 and 2012, with the exception of information on the presence of a health committee and conflict exposure, which were included in the 2012 survey only. In each household, we interviewed one randomly selected adult, who provided information on all other people in the household. Fig. 1 shows the location of the 219 panel villages.

The 2012 wave included a much higher number of households, so this (second) wave was the main focus of our analysis and was the subject of our baseline empirical model. However, as an additional check, we also used a panel including the households that were visited