



EFFECTS OF HEALTHCARE ACCESS ON HEALTH OUTCOMES

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RESEARCH QUESTIONS

- How unequally is access to health care distributed within countries?
- To what extent can within-country differences in health care resources explain within-country differences in health outcomes?
- To what extent could countries distribute their resources more efficiently as to achieve better aggregate health outcomes?

PRESENTATION OUTLINE

- Background
- Project Overview
- Progress and Findings
- Reflection

BACKGROUND

HEALTH CAPITAL

- Measurement of individual health
 - factors habits, genetic predispositions, and lifestyle choices
 - Common Measure: Mortality
- Affected by the environment
 - air pollution, occupation, and access to healthcare



ACCESS

- What is access?
 - Financial vs. Physical access to healthcare
 - Quality of care
- This project centers around the physical presence and distance citizens of each country must overcome to receive care



- Governments play a key role in providing healthcare to its citizens
- Access to healthcare is a huge discussion here in the US
 - Is building a new hospital or hiring another doctor the best option in every scenario?
 - Can restructuring facilities help improve the access that can be provide to include more people and better services?



SIGNIFICANCE

ENVIRONMENT

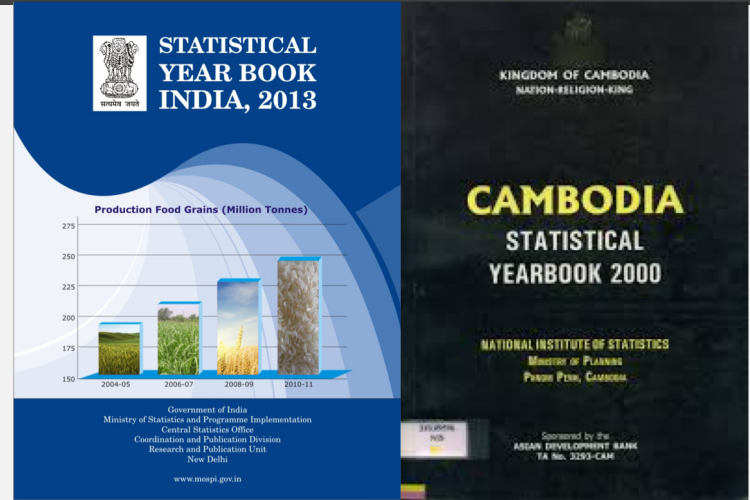
- We know this is an important topic of discussion seen here in the US
 - There are different parts of Philadelphia with vastly different populations that experience differences in access to healthcare services.
- This project will focus on characterizing the effect of access to healthcare on mortality in relation to geolocation.
 - Healthcare services will be broken down into quality of healthcare, density of facilities, and personnel available in the given region

PROJECT OVERVIEW

DATA



- Regional Infant Mortality
- Regional Demographics
- Observed Health



- Location Health Effects for many countries

EXPERIMENTAL DESIGN

- To what extent can within-country differences in health care resources explain within-country differences in health outcomes?

$$y_{ij} = X_i\phi + H_i\lambda + \tau_{o(i)}^{orig} + \tau_{j(i)}^{dest} + \tau_{j(i)}^{num} + \eta_i$$

- Infant Mortality
- Demographics
- Observed Health
- Location Health Effects

FINDING AND FORMATTING DATASETS

*Note 1: Country codes BD, LS, KH, RW, TD are all DHS-7 files without the v105a variable.

*Note 2: Hence they were removed from the dataset to allow the loop to run. Will need to return to add them in.

*Note 3: Country Codes BD and LS do not have a mens recode

*working within files containing country data

*Assumes you set path already

```
clear
set more off
capture ssc install fs, replace
```

```
cd "$root/raw/"
```

```
set maxvar 30000
```

```
*1a) Looking through the 'Standard' DHS Recoding Type and 'Continuous'
*getting the location names of these Standard type folders to use in our loop
*Caution: Country Data for several years means old data mixed with new data
*Suggestion: Delete old data or create column indicating for what year
*recode is valid
```

```
folders *_DHS *_Continuous
```

```
local all_folders = r(folders)
```

```
*iterating through each of the folders containing standard files
```

```
foreach country_f of local all_folders{
```

```
*get name of folder for creation of merge dataset (referenced in
*merge_child_parent_all_data.do)
```

```
*show which folder we're iterating on right now
di "`country_f'"
```

```
*Amongst the standard country folder files, stepping into each one at a time
```

```
qui cd "$raw/"`country_f`"
```

```
*specifying the women's recode
```

```
folders *IR*
```

```
*finding the name of the folder for the women's recode (only 1)
```

```
local mother_subf = r(folders)
```

```
*show the name of the women's recode folder we're in
```

جدول ۳-۵: تعداد مراکز صحتی جامع به تفکیک ولایات ۱۳۸۵-۸۷

Table 5-3 : Number of comprehensive Health Centers by Provinces 2006-09

Provinces	1387 2008-09	1386 2007 -08	1385 2006 -07	ولایات
Total	371	382	376	مجموع
Kabul	36	36	32	کابل
Kapisa	8	8	9	کاپیسا
Parwan	9	11	10	پروان
Wardak	9	9	9	وردک
Logar	7	7	7	لوگر
Nangarhar	19	20	21	ننگرهار
Laghman	8	8	8	لغمان

country	year_dhs	year_hfd	source_file_hfd	page (as give item)	variable	facility variable (0/1)	worker variat	Types
Afghanistan	2015	2006-09	Health development full chapter.pdf	6 Table 5.3-4	Number of health facilities by type	1	0	Hospitals, comprehensive he
Afghanistan	2015	2006-09	Health development full chapter.pdf	6 Table 5.2	Number of private health facilities by type	1	0	Clinics, labs, pharmacies
Afghanistan	2015	2006-09	Health development full chapter.pdf	12 Table 5.7	Number of health workers by type	0	1	Health associate profession
Afghanistan	2015	2006-09	Health development full chapter.pdf	13 Table 5.8	Number of beds by region	1	0	Beds
Afghanistan	2015	2006-09	Health development full chapter.pdf	14 Table 5.9	Number of health workers by type	0	1	MD specialists
Afghanistan	2015	2014-16	Health Facilities.pdf	3 Table 5.3	Number of health facilities by type	1	0	Hospitals, comprehensive he
Afghanistan	2015	2014-17	Health Facilities.pdf	3 Table 5.2	Number of private health facilities by type	1	0	Clinics, labs, pharmacies
Afghanistan	2015	2014-18	Health Facilities.pdf	8 thru 9 Table 5.6-7	Number of health workers by type	0	1	Health associate profession
Afghanistan	2015	2014-17	Health Facilities.pdf	10 Table 5.8	Number of beds by region	1	0	Beds
Afghanistan	2015	2014-19	Health Facilities.pdf	11 Table 5.9	Number of health workers by type	0	1	MD specialists

PROGRESS AND FINDINGS

TEAM WORK



Out of 60 DHS datasets, we were able to clean and merge 45 datasets with 38 unique countries.

The other 15 datasets did not have region variables, which are crucial in tracking the geolocation of the household without the variable, the datasets are not useful for the project



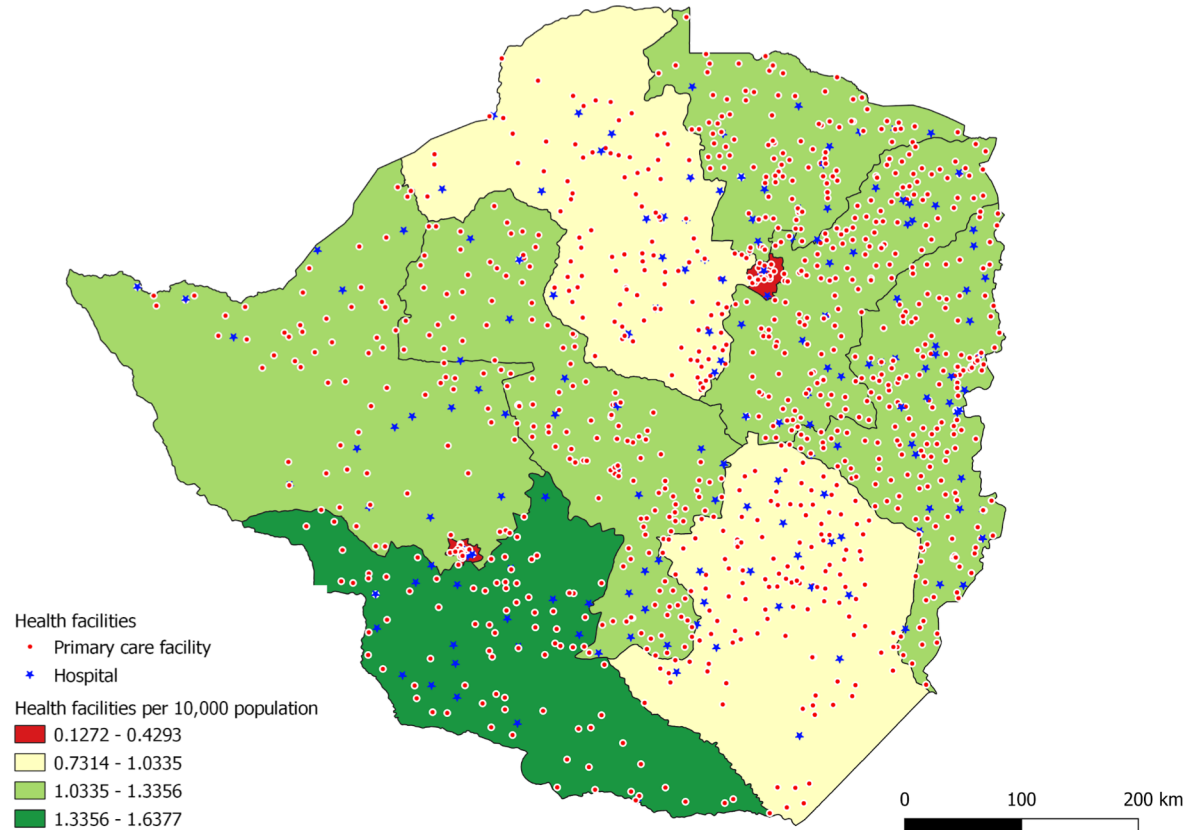
Compiled a preliminary dataset on facility types, number of beds available, and personnel types by each region for 32 unique countries.

Limitations of the datasets: Language barriers, each countries characterized variables different and at different levels of specificity.

CURRENT FINDINGS

- How unequally is **access** to health care **distributed** within countries?

Zimbabwe



FUTURE WORK TIMELINE



MAPPING FACILITY AND
PERSONNEL DENSITIES
FOR THE REST OF THE
COUNTRIES



COMPLETE CREATION OF
HEALTH FACILITY
DATASET TO FIT MODEL

REFLECTION

ACKNOWLEDGEMENTS

Juan Pablo Atal and
Torsten Figueiredo Walter

Joanne, Safa, and Ashley

SUMR Cohort '19



Q & A