

LINGUISTIC BACKGROUND, ETHNICITY AND HEALTH INEQUALITIES IN PERU

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Race/ethnicity as a key social determinant of health

- Reducing health inequalities requires a framework that goes beyond the formal health system to understand the roots for the exclusion of particular social groups (CSDH)
 - Identify ways to break these patterns understanding that policy making is in itself affected by the same forces that sustain the exclusion of particular groups
- Racial/ethnic based exclusion is one of the most powerful elements affecting the rights of population
 - CSDH, Final Report Social Exclusion KN, 2008
- Rural-urban migration, globalization trends set special challenges to understand ethnic-based exclusion

Linguistic background and ethnicity

- Definition of ethnicity
 - groups of individuals that share some social and cultural characteristics (no genetic ones) such as geographical origin, history, *language*, religion, values and traditions
- Each one of these dimensions contribute to the definition, but they are also correlated
- Linguistic background can contribute to the understanding of ethnic identity, not only because it is part of the definition, but also because it correlates with the other dimensions

Objectives of the study

- Deepen our understanding of ethnicity as a determinant of MCH inequalities in Peru
 - 2005 round of the DHS includes a question about the mother tongue of parents and grandparents of women surveyed
 - Intermediate group: speaks Spanish at home, but the mother tongue of her ancestors is quechua/aymara
 - At what level do linguistic background, as proxy of ethnicity, affect health status as well as the use of health services by women and children from the survey?

Main hypothesis: Migration, cultural assimilation and linguistic background

- Ethnographic studies describe a gradual inter-generational change in beliefs, practices and traditions when indigenous population migrate to the cities (Altamirano, 1997; Oliart, 1984)
- Linguistic background can help to quantify these processes in surveys such as DHS
 - At what level does the adoption of the Spanish language happen while maintaining other practices and beliefs?
 - Specially those that determine health status of individuals and their use of health services (Torres, 2003)
 - Socio-economic factors
 - Geographic and cultural barriers (connected to migration)

Cultural barriers in health

- Social gap between health system and women with indigenous background (Yon, 2000)
 - Modern methods of family planning (FP) and reproductive health are perceived as necessary
 - Although, perception of unknown risk and loss of control separate these women from the health system
 - Also, the perception that providers do not consider their necessities or requirements (Anderson, 2001)

Mother tongue and number of households with indigenous background, alternative definitions

	Total	Urban	Rural	Rural Highlands	Southern Rural Area
Ethnicity Rate					
Language of the householder and spouse	17.0	9.6	31.1	40.1	63.9
Language of the householder or spouse	32.4	23.4	49.5	62.9	95.2
Language of the householder, spouse or ancestors	47.8	42.1	58.6	69.5	97.7
Distribution of Ethnicity					
Language of the householder and spouse		37.0	63.0	53.9	30.7
Language of the householder or spouse		46.9	53.1	44.9	24.1
Language of the householder, spouse or ancestors		57.3	42.7	33.7	16.8

Fuente: ENAHO, 2001

- Adding intergenerational linguistic background increases the % of households that can be considered as of quechua/aymara background
- At the same time, reduces the concentration in rural areas of the population of indigenous background

Linguistic antecedents and ethnic attribution of the householder

	(1)	(2)	(3)	Total	(1)	(2)	(3)
<i>Total</i>	56.4	29.2	14.4				
Indigenous from the amazon	58.9	27.8	13.3	3	3.1	2.8	2.7
Quechua	6.0	56.3	37.7	30.1	3.2	57.9	79.0
Aymara	4.4	47.7	47.9	4.0	0.3	6.5	13.2
Black/mulatto/Zambo	92.1	6.1	1.9	1.1	1.7	0.2	0.1
Mestizo (mixed race)	83.0	15.9	1.1	58.1	85.5	31.6	4.5
Caucasian or white	92.0	7.4	0.6	2.9	4.8	0.7	0.1
Other	86.2	9.4	4.5	0.9	1.4	0.3	0.3

(1) old spanish; (2) recent spanish; (3) quechua/aymara

Fuente: ENAHO, 2001

- Population with quechua/aymara mother tongue self-identify themselves as part of this group
- The mestizo (mixed race) category increases for the ones with recent Spanish language
- Note: That category is still important for the ones with old Spanish language

Basic Characteristics of ENDES women by linguistic background (%)

Characteristics	Spanish		Quechua/ Aymara	Total Women
	Old	Recent		
<i>N° observations</i>	7,255	3,107	1,051	11,413
	63.6%	27.2%	9.2%	
Area of residence				
Urban	74.6	75.9	10.0	69.0
Rural	25.4	24.1	90.0	31.0
Natural region				
Metropolitan Lima	31.4	30.9	0.5	28.4
Rest of the Coast	33.5	14.4	1.6	25.4
Highlands	21.0	45.5	94.1	34.4
Selva	14.1	9.2	3.7	11.8

(continues ...)

- Population that reports mother tongue as quechua/aymara concentrates almost exclusively in rural areas
- Population with recent spanish are as urban as the ones with old spanish
- But it still concentrates more in the highlands

Basic characteristics of DHS women by linguistic background (%) II

(... Continues)

Characteristics	Spanish		Quechua/ Aymara	Total Women
	Old	Recent		
Level of education				
No education	1.9	2.2	16.8	3.4
Primary	20.8	26	58.8	25.7
High School	44	46.1	23	42.6
Superior	33.3	25.7	1.4	28.3
Quintiles of wealth				
Inferior quintile	10.1	7	38	11.8
Second quintile	14.8	17.9	51.4	19
Intermediate quintile	19.2	27.9	8.5	20.6
Fourth quintile	25	26.9	1.5	23.4
Superior quintile	30.9	20.3	0.6	25.2

Fuente: DHS 2005-2006

- Education: women with quechua/aymara language are less educated, while the ones with recent spanish are similar to the ones with old spanish
- Regarding asset tenancy:
 - Quechua/aymara women are located almost exclusively in the two lower quintiles
 - Women with recent spanish are less poor, but are in intermediate level compared to women with old spanish

MCH indicators

- For the mother:
 - Antenatal controls
 - Appropriate care during labor
 - Financing of health care (affiliation to SIS – mothers and children)
 - Fertility and use of modern contraceptives methods
 - Teen pregnancy
 - Overweight/obesity of women, exposure to obstetric risk (height of mother)

- For the children:
 - Chronic malnutrition
 - Diarrhea and access to the corresponding treatments
 - Access to growth and development controls

Linguistic backgrounds and SMI

	Global	Spanish		Quechua/ aymara
		Old	Recent	
<i>Assistance during labor</i>				
Institutional labor	72.4	76.8	77.4	42.3
Assistance by health professional	72.7	76.6	78.9	46.6
<i>Pre-natal controls</i>				
At least one control	95	94.7	95.4	95.3
At least four controls	87.8	88.3	87.6	85.7
<i>Afiliation to SIS</i>				
Affiliated mother	61.1	55.7	61.4	85.1
Affiliated child	50.5	44.9	48.1	81.0
<i>Fertility and family planning</i>				
N° of children	2.0	1.7	2.0	3.5
Teenage pregnancy	28.0	25.1	30.4	41.0
Modern methods, current use	32.7	34.7	31.7	21.9
Traditional methods, current use	18.6	16.2	20.8	29.0

(continues ...)

Linguistic background and SMI (continue)

	Global	Spanish		Quechua/ aymara
		Old	Recent	
<i>Antropometry of the mother</i>				
Overweight or obesity (IMC \geq 25)	44.4	45.0	47.2	32.8
Obesity (IMC \geq 30)	12.5	13.0	14.0	4.7
Exposition of mother height (<147 cm.)	20.4	17.6	24.2	30.8
<i>Diarrhea and treatment</i>				
Child with diarrhea	14.7	14.0	17.6	12.5
Received rehydration therapy	71.5	73.2	73.3	59.4
<i>Growth and development control</i>				
Children < 2 años	79.5	79.3	79.0	81.4
Children \geq 2 años	44.3	41.1	47.0	51.7
<i>Antropometry children</i>				
Z-score height for age	-1.2	-9.9	-1.1	-2.0
Child with chronic malnutrition (%)	23.9	18.4	20.0	51.3

Fuente: DHS 2005-2006

Discussion

- Ethno-linguistic gaps
 - Without differences: antenatal controls
 - Pro quechua/aymara population: Affiliation to SIS
 - Anti quechua/aymara gap: most indicators (assistance during labor, malnutrition, etc)
- Women of *recent spanish* behave similarly to those of *old spanish* with respect to use of health services
 - Assimilation at work for most indicators of health status and use of health services
- With an important exception related to family planning: use of UMAM, teen pregnancy
 - Differences are not only between women of *old spanish* and those that speak quechua/aymara
 - There are also differences between women of *old and recent spanish*

Discussion II

- Result is robust to the inclusion of controls associated with social determinants of health within a multivariate model
 - In particular, differences between the three ethno-linguistic groups are kept with the inclusion of these controls for the UMAM although not for teenage pregnancy
 - Hence, these differences go beyond the inequalities in social determinants of health
- Ethno-linguistic gaps in FP variables are consistent with ethnographic studies which emphasize social distance between these populations and health professionals (Yon, 2000; Anderson, 2001)
 - Differences related to vision of sexuality, maternity and gender relations
 - Gaps between groups of *recent and old spanish* suggest that these differences are not easily overcome with the reduction of geographical associated to migration to the cities, even after a few generations

Discussion III: Policy implications

- Teen pregnancy have permanent negative consequences for girls (lower schooling, performance in labor market)
 - Policy options in some countries may include age of consent laws (Field and Ambrus; JPE, 2008)
- Efforts to promote health equity when using modern methods of FP require an integral approach that includes work about cultural patterns
 - But not only in rural spaces, but also in urban spaces, as it detaches of the difference between women of old and recent Spanish

Discussion IV: Research agenda

- Importance of keeping and using questions at the DHS that go more in depth about ethnic background (ethnicity module in DHS 2007-08)
- Estimate culture effects by using heterogeneity in sexual behavior patterns in regions of origin for migrants (Fernandez & Figlio, 2009)

