Social Inequalities in Maternal, Child and Youth Health

Belize

Country Context

Total population:318, 479
Human Development Index (HDI): 0.715
Inequality adjusted HDI: 0.553
Coefficient of human inequality: 22%
Life expectancy at birth: 70
Public health expenditure (% of GDP): 5.4
Gini index (1999) 53.3
Source: UNDP ¹ and World Bank ²

Technical Notes

What are social inequalities in health?

Social inequalities in health are measurable differences in the health of two or more social groups of a population. Such social groups could be defined by conditions or circumstances such as gender, ethnicity, socioeconomic position, access to assets and social services among others.

What is the difference between inequalities and inequities in health?

Inequities in health are those inequalities considered to be unfair and evitable. As opposed to inequalities in health—which are only measured-, health inequities imply a judgment about the justice or injustice of such difference. In other words, starting from measuring social inequalities in health, it is possible to identify and weigh up inequities in health, which in addition are target for pro-equity policies and health interventions in a population scale.

Maternal, child and youth health. (M.C.Y.H.)

- Between 2010 and 2015, there was an increase in the overall national maternal mortality rate from 69.2 to 107.4 deaths per 100,000 live births (LB).
- Neonatal mortality increased from 7.9 to 11.4 per 1,000 LB at the national level between 2010 and 2015.
- The national under-five mortality rate increased from 16.5 to 19.5 deaths per 1,000 LB between 2010 and 2015.
- The overall mortality rate of people aged 15-24 went from 15.34 per 100,000 in 2010 to 20.12 in 2015.
- The national mortality rate by homicides in ages 15-24 fell from 52.1 deaths per 100,000 population in 2010 to 36.2 per 100,000 population in 2015.

Health indicator ³	2010	2015
Maternal mortality ratio (maternal deaths per 100,000 live births (LB)	69.2	107.4
Neonatal mortality rate (under-28 days deaths per 1,000 LB)	7.9	11.4
Infant mortality rate (under-1y deaths per 1,000 LB)	13.0	16.9
Child mortality rate (under-5y deaths per 1,000 LB)	16.5	19.5
Road traffic accidents mortality rate in ages 15-24 (youth deaths per 100,000 population)	15.3	20.1
Homicide mortality rate in ages 15-24 (youth deaths per 100,000 population)	52.2	36.2

THE STATUS OF SOCIAL DETERMINANTS OF HEALTH IN BELIZE, 2015.

Table 1. Districts are listed in the lowest or highest social vulnerability according to the equity stratifier used to divide the population into terciles⁴

	% of population 15+ with no level of education completed	Wealth index (composite indicator)	% of rural population	Health care providers per 10,000 pop ⁵
Lowest vulnerabilty	Belize District	Belize District	Belize District	Belize District
	Stann Creek	Cayo	Cayo	Corozal
Highest	Toledo	Toledo	Toledo	Cayo
vulnerability	Orange Walk	Stann Creek	Stann Creek	Orange Walk

Data sources:

- Human Development Reports [UNDP]. NY: United Nations Development Program; [26 jan 2016]. http://hdr.undp.org/en/countries/profiles/BLZ
- 2. World Bank. Development Research Group. Washington D.C; [26 jan 2016]. http://data.worldbank.org/indicator/SI.POV.GINI?locations=BZ&view=chart
- 3. Ministry of Health. Compiled 2016. Mortality data. Belize.
- 4. Statistical Institute of Belize. Compiled 2016. Population estimates, wealth index, urbanization and education levels completed. Belize.
- 5. PAHO. 2009. Core data Human resources for health, stocks and flows management. Belize.

Note: All results are population-weighted.

104 more maternal deaths per 100,000 LB in the poorest districts compared to the wealthiest in 2010. In 2015 this gap had narrowed to

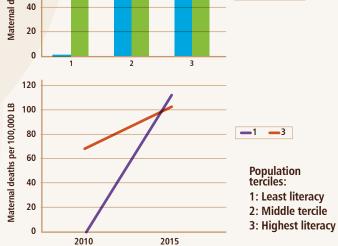
more maternal deaths per 100,000 LB in the poorest districts compared to the wealthiest.

In 2010 maternal mortality was 5 times higher in the most rural districts than in the least rural ones. Five years later, maternal mortality was times higher in the most rural districts than in the least rural ones.

The inequality gap went from 69 excess maternal deaths per 100,000 LB in the most literate tercile in 2010, compared to the least literate tercile, to excess deaths per 100,000 LB in the least literate tercile in 2015 compared to the most literate tercile, thus changing the direction of the inequality gap.



Figure 2. Inequality gaps in maternal mortality stratified by education (percentage of population aged 15+ with no level of education completed). 120 Maternal deaths per 100,000 LB 100 80 60 2010 2015



Source: Statistical Institute of Belize; Belize Ministry of Health

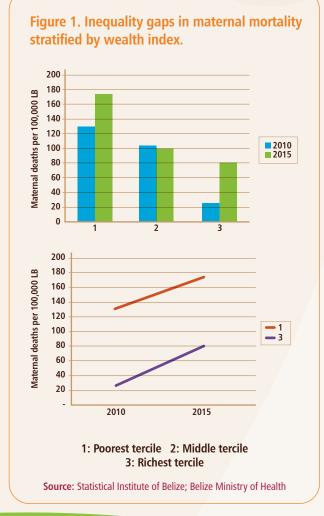
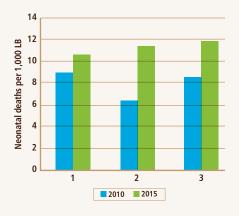


Figure 3. The poorest districts also had the highest maternal Corozal mortality ratios in Belize, 2015. Walk Belize District Cayo Tercile with the highest maternal mortality ratio Toledo Poorest tercile

Inequalities in Neonatal Health in Belize 2010-2015

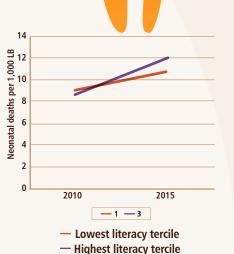
The inequality gap of neonatal mortality between the most rural and least rural districts was virtually null in both years assessed. (-0.3 in 2010 and 0.9 in 2015)

Figure 4. Inequality gaps in neonatal mortality stratified by % of population aged 15 or higher who have not completed basic education.



1: Lowest literacy tercile 2: Middle tercile 3: Highest literacy tercile

Source: Statistical Institute of Belize; Belize Ministry of Health



There were neonatal deaths more per 1,000 LB in the districts with higher concentration of health care providers, compared to the ones with the lowest concentration.

Neonatal mortality was 3% higher in the poorest tercile compared to the wealthiest tercile in 2010, and

thiest tercile in

higher in the wealthiest tercile in 2015, compared to the poorest tercile. Similarly, when stratified by education, inequality gaps were close to null.

Inequalities in Child Health in Belize 2010-2015

Under-five mortality showed an excess of 3.3 deaths per 1,000 LB in the poorest districts, compared to the richest in 2010.

In 2015, the poorest districts showed an excess of

4.3

under-five deaths per 1,000 LB compared to the richest districts.

Mortality of children under-five was

1.2

times higher in the most rural districts compared to the least rural in 2015. 2.5 more under-five deaths per 1,000 LB in the least literate districts compared to the most literate ones in 2010, and

2.4

more under-five deaths per 1,000 LB in the least literate districts

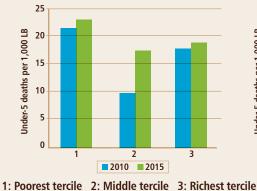
compared to the most

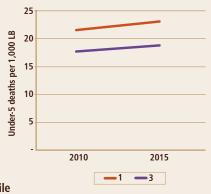
literate ones in 2015.

Figure 6. The most rural provinces also had the highest under-five mortality rates in Belize, 2015.









Source: Statistical Institute of Belize; Belize Ministry of Health

Road traffic accidents mortality (RTA)

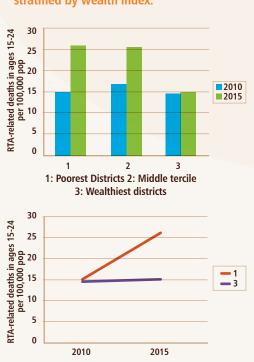
RTA mortality rate in the most rural districts was 3% higher than in the most urban in 2010. This gap increased up to

higher mortality rate in the most rural districts compared to the least rural in 2015.

In 2015 there was an excess of

deaths per 100,000 population in the poorest districts compared to the wealthiest.

Figure 7. Inequality gaps in road traffic accidents mortality in youth (ages 15-24) stratified by wealth index.



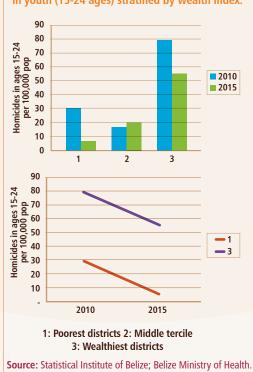
Source: Statistical Institute of Belize; Belize Ministry of Health.

Homicide mortality

Homicide mortalities in the population aged 15-24 showed a gap of

more deaths per 100,000 population in the wealthiest districts than the poorest in 2015.

Figure 8. Inequality gaps in homicide mortality in youth (15-24 ages) stratified by wealth index.

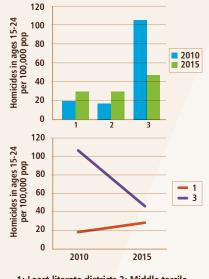


Homicide mortality rate among those districts with higher levels of education showed 86.7 more homicides per 100,000 population compared to the least -literate districts in 2010. This gap reduced to

deaths per 100,000 population more in the higher-literacy districts compared to the least-literate

districts in 2015. Education- based inequality in homicide mortality was reduced 80% from 2010 to 2015.

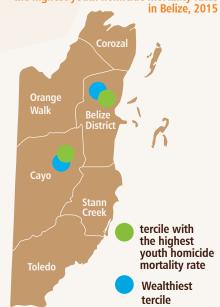
Figure 9. Inequality gaps in homicide mortality in youth (15-24 ages) stratified by pop aged 15+ who have not completed basic education.



1: Least-literate districts 2: Middle tercile 3: Most-literate districts

Source: Statistical Institute of Belize; Belize Ministry of Health

Figure 10. The wealthiest provinces also had the highest youth homicide mortality rates



Recommendations

- Given that national maternal, neonatal and child mortality indicators increased between 2010 and 2015 in Belize, efforts need to be accelerated to identify and respond to the direct causes of these deaths and their social determinants.
- Maternal mortality prevention efforts should be focused in the districts with the poorest and most rural populations (Toledo and Stann Creek).
- Wealth and education are two social factors that significantly impact maternal, child and youth health inequalities in Belize, and should be taken into consideration when planning for, designing and implementing future inter-sectoral
- Efforts to prevent road traffic accident-related mortality amongst youth, such as the Road Safety Project, should be prioritized in the poorest provinces and most rural

- populations (Toledo and Stann Creek).
- Given that the wealthiest districts in Belize account for the highest number of youth mortality due to homicides, it is advisable for violence prevention programs to target these specific districts (Belize and Cayo).

References:

- 1. Human Development Reports [UNDP]. NY: United Nations Development Program; [26 jan 2016]. http://hdr.undp.org/en/countries/profiles/BLZ
- 2. World Bank. Development Research Group. Washington D.C; [26 jan 2016]. http://data.worldbank.org/indicator/SI.POV.GINI?locations=BZ&view=chart
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