

Archives of
Disease in Childhood

Global child health

Do cash transfer programmes yield better health in the first year of life? A systematic review linking low-income/middle-income and high-income contexts **FREE**

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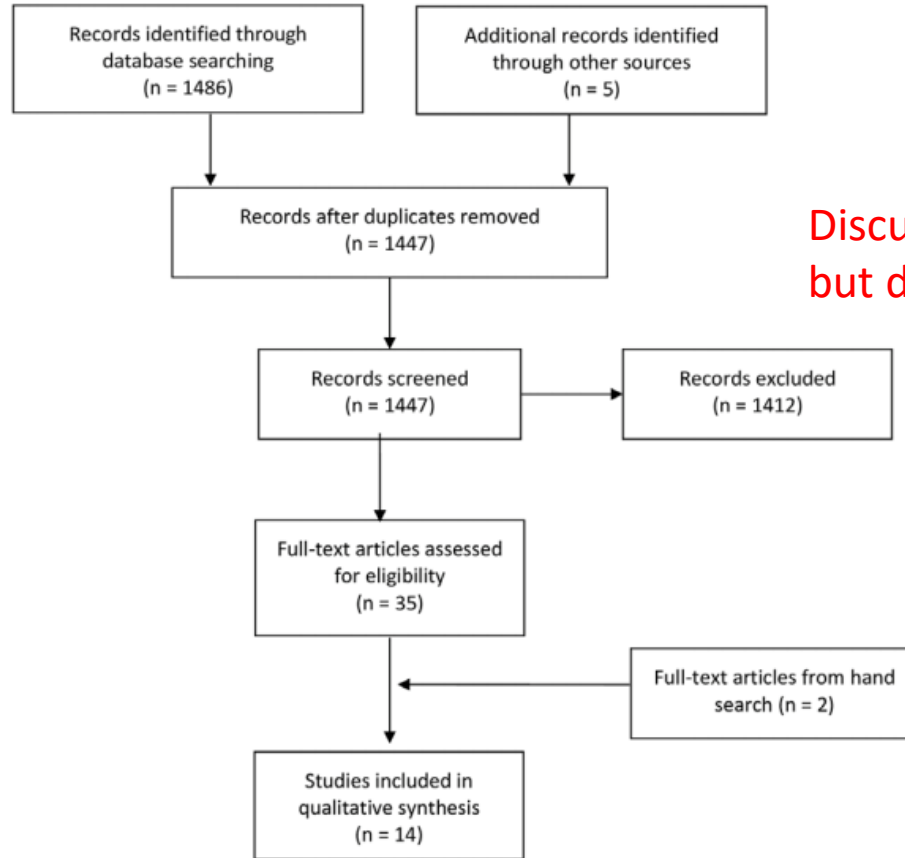
Background

- Long history of evidence on poverty and health
- Poverty is a fundamental cause of health
- Low- and Middle-income countries responding
 - Conditional (on health services or education) and unconditional
- Similar in High income countries
 - Welfare/social assistance
 - Conditional (on work) or unconditional to this evidence with cash transfer programs
- What does combining the literature tell us?

Table 1 Search terms for systematic review on the effects of cash transfer programmes on child health

Component of review topic	Search terms
Population	Child, neonatal, infant
Intervention: policy or programme	Policy, social policy, economic policy, public policy, programme, benefit*, social welfare or TANF, EITC, Aid to Families with Dependent Children, PRWA, FLMA, tax, cash transfer*, conditional cash transfer*, unconditional cash transfer*, income supplement*
Health outcome	Birth weight, mortality
Statistical methods (quasi-experimental techniques)	Difference-in-differences, propensity score, synthetic control, regression discontinuity, instrumental variable, and near-far matching, quasi experiment, natural experiment

← Any policy or program provide direct cash transfer



Discussed policies and programs, but did not empirically test them

Table 3 Overview of study characteristics

Characteristics	Number of studies	Characteristics	Number of studies
Country		Policy exposures	
USA	8	Universal unconditional programmes	3
Canada	2	Targeted unconditional programmes	3
Mexico	2	Targeted conditional programmes	8
Brazil	1	Analysis methods	
Nepal	1	Regression with instrumental variable analysis	3
Data source		Time series regression	2
Survey data	4	Difference-in-differences	5
Population-based administrative data	10	Fixed effects modelling	2
Outcomes		Propensity score matching	2
Birth weight	9		
Infant mortality	3		
Perinatal mortality	1		
Probability of survival	1		
Gestational age	2		
Apgar score	2		

Results

- Outcomes:
 - birth weight (n=10), mortality (n=5)

Results

- Programs:
 - universal and unconditional (n=3)
 - Manitoba (1970s), Alaska (present day)
 - Positive effects

Results

- Targeted and unconditional (n=3)
 - Gary, Indiana (1970s), Manitoba (present day),
 - Positive effects

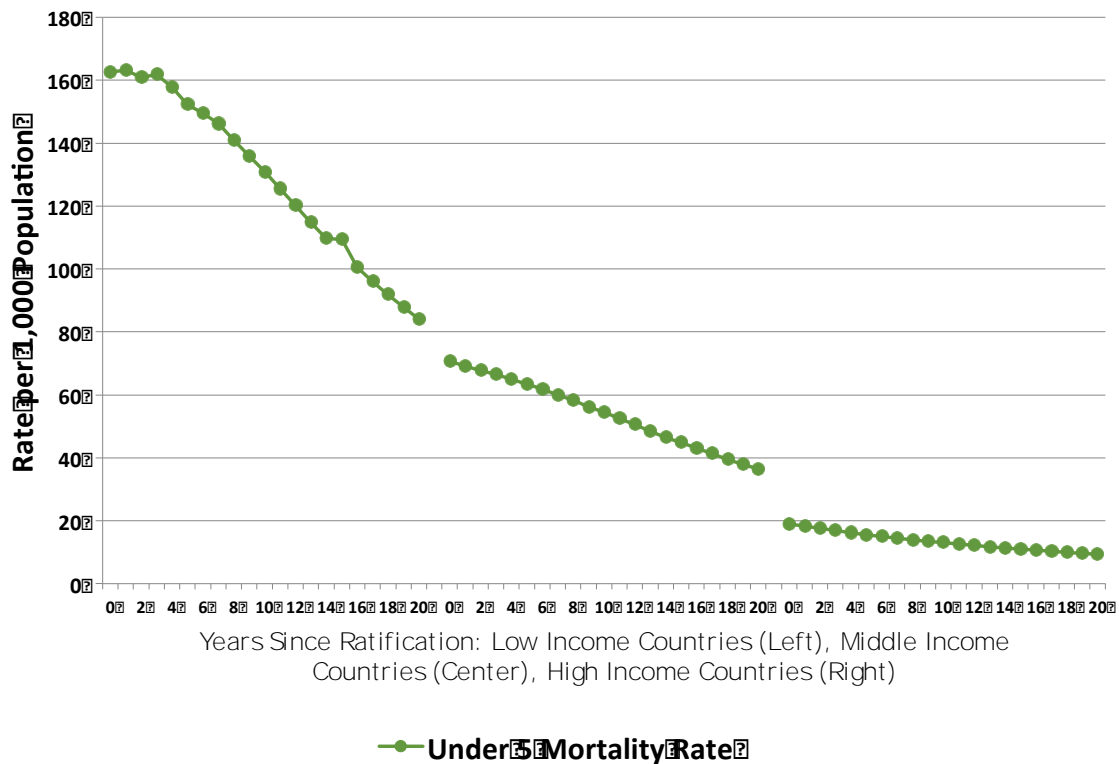
Results

- Targeted and conditional (n=8)(eliminated)
 - Oportunidades and Bolsa Familia (health care, school attendance), - positive effects of health services and education conditions
 - AFDC/EITC in the U.S. – negative/mixed effects of parental work requirements.

The UN Convention on Child Rights and Child Mortality Trends

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Heather Smith-Cannoy, Arjumand Siddiqi

Figure 1. Trends in Child Mortality Post-CRC Ratification



Years Since Ratification: Low Income Countries (Left), Middle Income Countries (Center), High Income Countries (Right)

—●— Under-5 Mortality Rate

Table 1. Characteristics of included countries by UN treaty

Total Countries (n)	192
Median Ratification Year (range)	1991 (1990-2015)
WHO Region (n, %)	
Africa	47 (24.5)
Americas	34 (17.7)
Eastern Mediterranean	22 (11.5)
Europe	54 (28.1)
South East Asia	11 (5.7)
Western Pacific	24 (12.5)
Country Income Level	
Low	31 (16.2)
Middle	102 (53.1)
High	59 (30.7)
GDP per Capita at Median Ratification Year (mean)	6491.73
GNI per Capita at Median Ratification Year (mean)	6236.19

Table 2. Child mortality rates pre- vs. post-CRC ratification

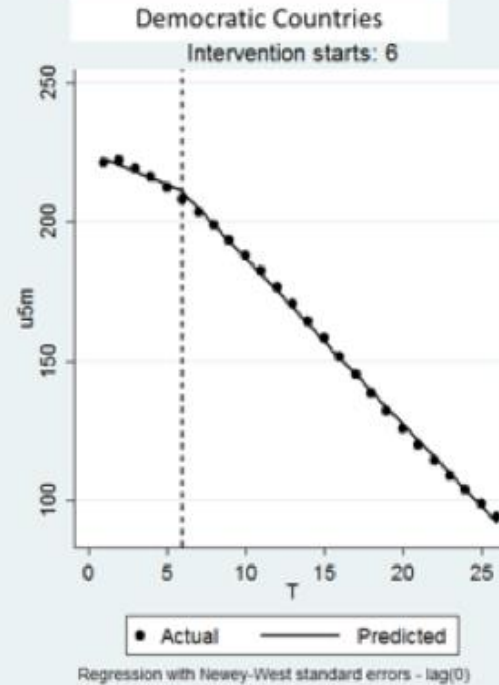
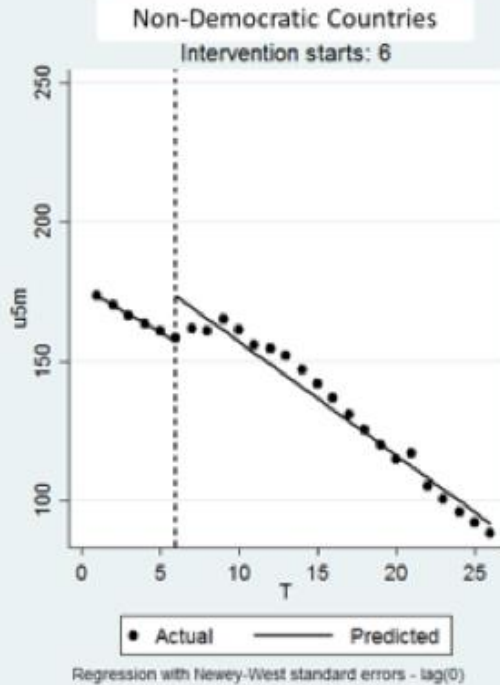
WHO Region	Child Mortality Rate					
	Pre-Ratification	5-Years Post			10-Years Post	
Africa	144.4	135.0	p=0.004	119.5	p<0.001	
Americas	48.0	39.3	p<0.001	33.2	p<0.001	
Eastern Mediterranean	63.8	52.7	p<0.001	43.6	p<0.001	
Europe	24.8	20.4	p<0.001	16.3	p<0.001	
South East Asia	108.7	88.3	p=0.010	69.3	p=0.001	
Western Pacific	51.8	44.7	p=0.001	37.3	p=0.001	
Country Income Level						
Low	168.7	152.3	p=0.001	130.8	p<0.001	
Middle	72.0	63.4	p<0.001	54.6	p<0.001	
High	19.6	15.5	p<0.001	13.0	p<0.001	

Table 3. Joinpoint regression results, child mortality post-CRC ratification

Health Indicators	Mean		Trend 1		Trend 2		Trend 3		Trend 4		AAPC (95% CI)
	Ratification Year	20-Years Post	Year	APC (95% CI)	Year	APC (95% CI)	Year	APC (95% CI)	Year	APC (95% CI)	Overall (0-20 Years)
Low Income Countries											
Under 5 Mortality Rate	162.58	83.97	0-3	-0.3 (-0.8, 0.2)	3-8	-2.6 (-2.9, -2.3)	8-15	-4.0 (-4.1, -3.8)	15-20	-4.7 (-4.9, -4.6)	-3.3 (-3.4, -3.2)
Middle Income Countries											
Under 5 Mortality Rate	70.61	36.48	0-6	-2.2 (-2.3, -2.0)	6-11	-3.2 (-3.5, -3.0)	11-20	-4.0 (-4.1, -3.9)	-	-	-3.3 (-3.3, -3.2)
High Income Countries											
Under 5 Mortality Rate	18.94	9.34	0-6	-3.9 (-3.9, -3.9)	6-9	-3.4 (-3.6, -3.2)	9-18	-3.3 (-3.3, -3.3)	18-20	-2.9 (-3.1, -2.7)	-3.5 (-3.5, -3.4)

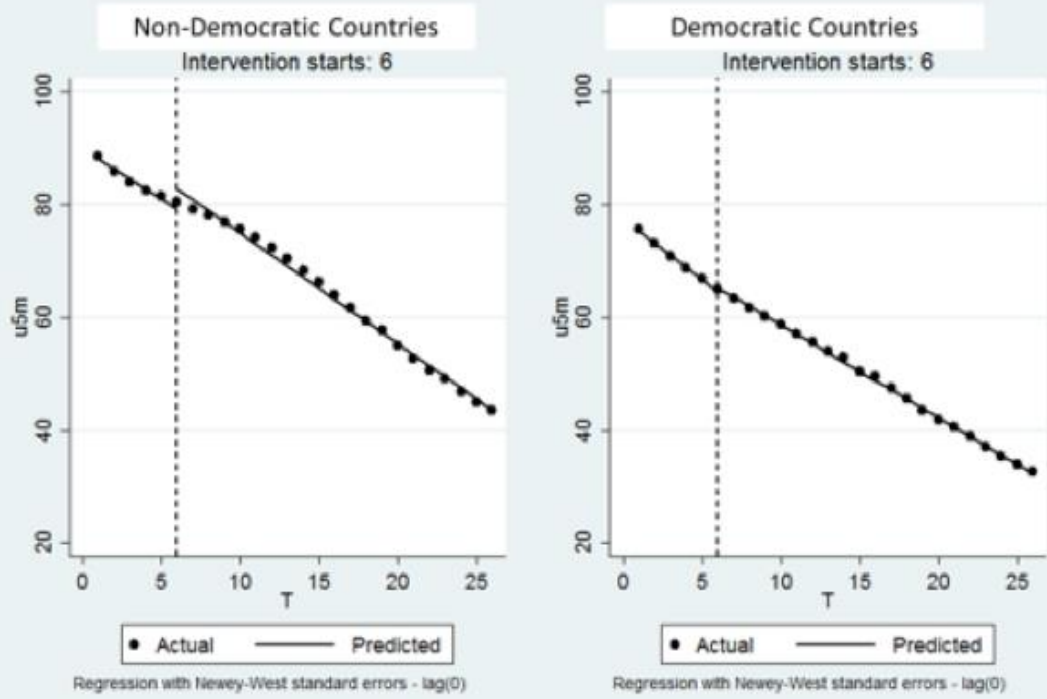
APC = Annual % Change, AAPC = Average Annual % Change

Under 5 Mortality Pre / Post CRC Ratification



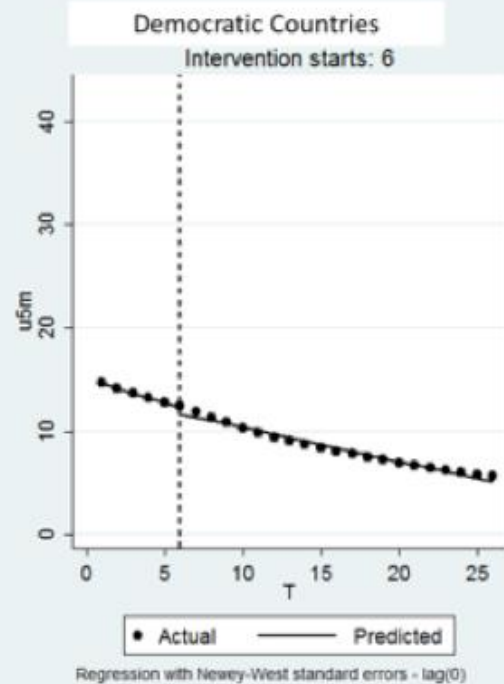
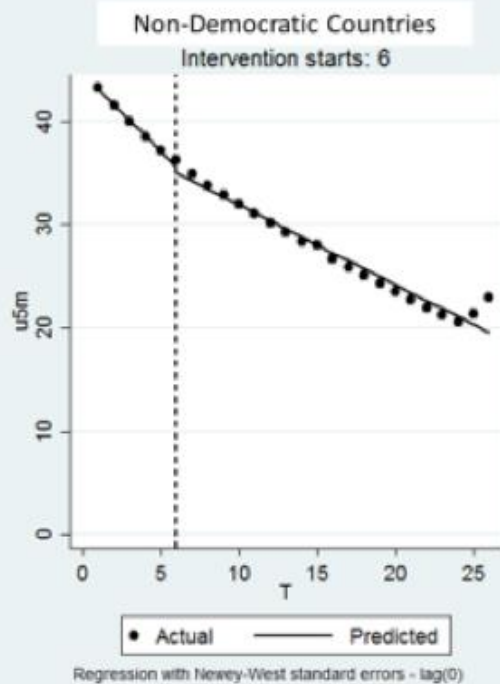
Low Income Countries

Under 5 Mortality Pre / Post CRC Ratification



Middle Income Countries

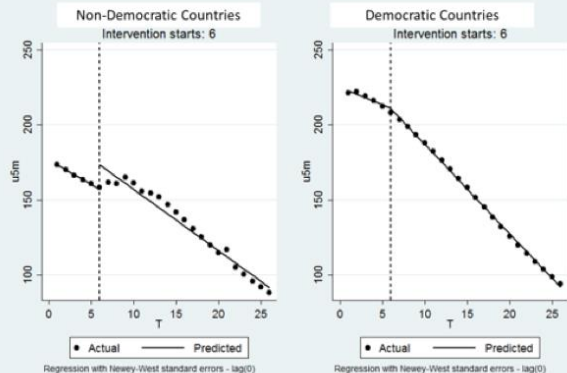
Under 5 Mortality Pre / Post CRC Ratification



High Income Countries

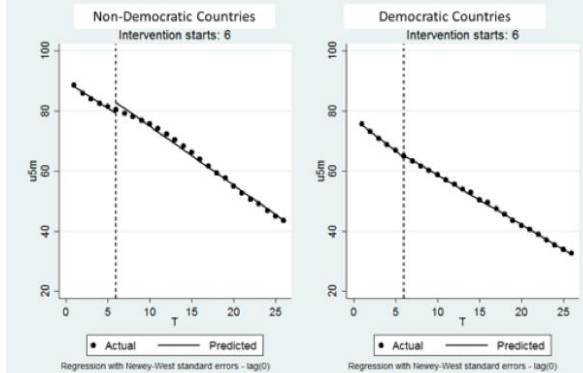
Low Income Countries

Under 5 Mortality Pre / Post CRC Ratification



Middle Income Countries

Under 5 Mortality Pre / Post CRC Ratification



High Income Countries

Under 5 Mortality Pre / Post CRC Ratification

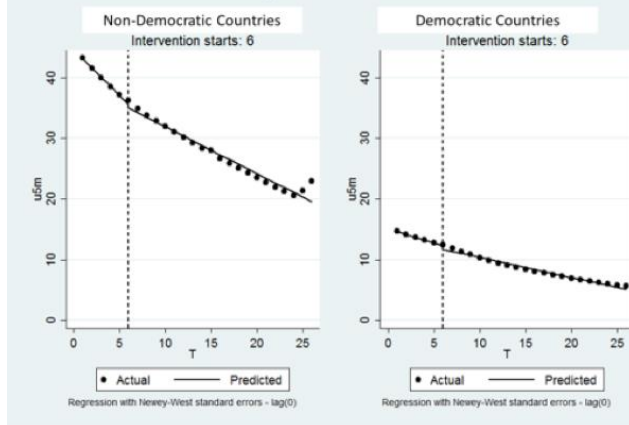


Table 4. Summary of interrupted time series analysis

	Low Income Countries		Middle Income Countries		High Income Countries	
	Non-Democratic	Democratic	Non-Democratic	Democratic	Non-Democratic	Democratic
Under 5 Mortality						
Significant ratification effect	YES	No	YES	YES	No	YES
Significant ratification effect over time	YES	No	No	YES	No	YES