

Social epidemiology

Week 13

1. Think about the possible interventions that could lead to reduce prevalence of smoking in population. Discuss the ideas in different levels:
 - Policy approaches
 - Worksites interventions
 - Community-based interventions
 - Family and individual-based interventions

2. Family Rewards offered cash transfers to 2,377 families that were conditional upon their investments in education, preventive health care, and parental employment; and compared their health to a control group of 2,372 families. The program operated between 2007 and 2010 in New York City. Households earned on average \$8,674 over the three years of the program. It corresponds to a 22% increase in average monthly income. ¹
 - a) Read the table below and interpret the “preventive health care” results compared to “health outcomes”.
 - b) Why the program succeeded to improve preventive care but not health outcomes?
 - c) Compare the “preventive health care” results in 18-month and 42-month.

Exhibit 2. Effect of the program on parental outcomes at 18 months and 42 months, Opportunity NYC-Family Rewards experiment, 2007-2010

	18-month (N=3,082)			42-month (N=2,966)		
	Control	Program	Adjusted difference	Control	Program	Adjusted difference
<i>Preventive health care use and insurance coverage in the last 12 months</i>						
Medical coverage (%)	94.3	95.3	1.0**	93.9	96.1	2.2**
Children insurance coverage (%)	92.8	94.7	1.9**	93.9	95.3	1.4
Seen personal doctor (%)	80.2	84.1	3.9***	95.4	95.5	0.1
2+ dental visits (%)	57.5	69.1	11.6***	34.4	47.4	13.0**
Treated for any condition (%)	41.9	46.1	4.2***	46.8	50.3	3.5
Used emergency room as usual source of care (%)	4.9	3.2	-1.7**	3.7	3.2	-0.5
No medical care because of cost (%)	9.2	6.3	-2.9***	8.1	5.1	-3.0**
No prescription because of cost (%)	14.6	14.2	-0.4	10.9	12.4	1.5
<i>Health outcomes</i>						
Average self-rated health	3.05	3.2	0.15***	3.0	3.1	0.13
Asthma (%)	15.3	17.4	2.1	16.5	16.7	0.2
Average BMI	30.4	30.2	-0.2	30.4	30.1	-0.3
High blood pressure (%)	20.4	21.2	0.8	24.8	26.2	1.4
High cholesterol (%)	8.6	9.7	1.1	10.3	10.7	0.4
Diabetes (%)	7.2	9.1	1.9	9.7	11.9	2.2
Currently smoking (%)	23.3	20.7	-2.6	23.3	20.8	-2.5
Average score on 'State of Hope' scale	17.3	17.5	0.2	17.5	17.9	0.51***

*significant p-value

¹ Courtin, E., Muennig, P., Verma, N., Riccio, J. A., Lagarde, M., Vineis, P., Kawachi, I., & Avendano Pabon, M. (2018). Conditional Cash Transfers And Health Of Low-Income Families In The US: Evaluating The Family Rewards Experiment. Health Affairs, 37(3), 438-446. <https://doi.org/10.1377/hlthaff.2017.1271>

- d) Read the table below. What differences between LMIC and the US could explain the lack of significant results in children's health?
- e) Which parental characteristics do you think were used to adjust the results?

Exhibit 3. Impact of the program on children outcomes at 18 months and 42 months Opportunity NYC-Family Rewards experiment, 2007-2010

	18-month (N=6,559)			42-month (N=6,464)		
	Control	Program	Adjusted difference	Control	Program	Adjusted difference
<i>Preventive health care use and insurance coverage in the last 12 months</i>						
Has routine health care provider (%)	93.6	93.9	0.3	91.2	92.6	1.4
Has personal pediatrician (%)	92.3	92.5	0.2	88.3	87.7	-0.6
Had health check-up (%)	96.6	97.5	0.9	94.0	96.3	2.3
2+ dental visits (%)	60.5	72.3	11.8***	48.3	62.9	14.6***
<i>Physical health</i>						
Average children's health as rated by parents	3.82	3.8	0.05	3.8	3.9	0.1
Has any health condition (%)	28.2	27.2	-0.1	27.5	27.1	-0.4
Has an attention deficit disorder (%)	4.9	3.7	-1.2	3.6	3.1	-0.5
Has asthma (%)	10.8	10.2	-0.6	9.1	9.6	0.48
<i>For children under 6 (in the last 12 months)</i>						
Had physical examination (%)	97.1	97.6	0.6	96.2	99.0	2.8
Had a dental check-up (%)	64.2	73.5	9.3	61.3	63.7	2.4
Was screened for an early intervention program (%)	24.9	33.5	8.6	24.7	30.8	6.1