Nepal Study Center

The University of New Mexico

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Waste Management and Education

ABSTRACT

Proper dumping and waste management practices are essential aspects of public health. Due to the lack of an effective waste management infrastructure, the people of Nepal utilize a variety of different waste management practices, some more effective than others. The purpose of this project is to determine which aspects related to knowledge and education contributed to the most positive dumping behavior.

LITERATURE REVIEW

Nepal has been having trouble getting the public to manage their trash due poor waste collection services, the lack of willingness to improve these services, the lack of recycling, and the lack awareness. Nepal has waste collection services, but people are disappointed by the lack of consistency and some services do not reach the residents of rural areas. The more rural areas do not always have the luxury of a public waste management system to dispose of their garbage so, they must resort to their own methods for waste disposal. Some of the methods include burning, burying, or dumping into nearby waterways. Awareness groups are trying to get communities to separate and recycle their trash and show the effects of poor waste management, but it is difficult to change the bad habits of such a large number of people. According to our secondary research, literacy and education are related to health because they affect the behaviors that affect

Research Question

Which aspects related to knowledge and education contribute to the most positive dumping behavior.

Our goal is to determine whether the general health knowledge, scientific knowledge, or education level variables have a significant effect on waste disposal practices. We can then identify specific topics that are most important for raising awareness.

Data

STATS	EducationLevel	general_health_knowledge	SciKnowledge
N	748	748	748
min	0	1	1
max	2	3	4
p50	0	2	3
mean	0.6203209	2.367647	2.737968
sd	0.7115147	0.6314992	0.6713108

EMPIRICAL RESULTS

WasteBuried

VARIABLES	(1) Model 1	(2) Model 2	(3) Model 3
general_health_knowledge	0.089***	0.084***	0.085***
	(0.028)	(0.028)	(0.028)
SciKnowledge		0.051*	0.055*
		(0.026)	(0.029)
EducationLevel			-0.008
			(0.027)
Constant	-1.428***	-1.999***	-2.026***
	(0.307)	(0.429)	(0.440)
Observations	748	748	748
Psuedo R-Squared	0.00999	0.0138	0.0139
Chi2	9.880	13.67	13.75
Log-Liklihood	-489.7	-487.8	-487.7

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

HhWasteLand

VARIABLES	(1) Model 1	(2) Model 2	(3) Model 3
general_health_knowledge	-0.099***	-0.101***	-0.094***
	(0.027)	(0.027)	(0.027)
SciKnowledge		0.026	0.029**
		(0.114)	(0.127)
EducationLevel			-0.076***
			(0.027)
Constant	0.509*	0.221	-0.028
	(0.290)	(0.410)	(0.423)
Observations	748	748	748
Psuedo R-Squared	0.0129	0.0139	0.0217
Chi2	12.84	13.84	21.58
Log-Liklihood	-489.7	-489.2	-485.3

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Models

$$HhWasteLand = \beta_0 + \beta_1 EducationLevel + u_i$$

$$HhWasteLand = \beta_0 + \beta_1 EducationLevel + \beta_2 general\_health\_knowledge + u_i$$

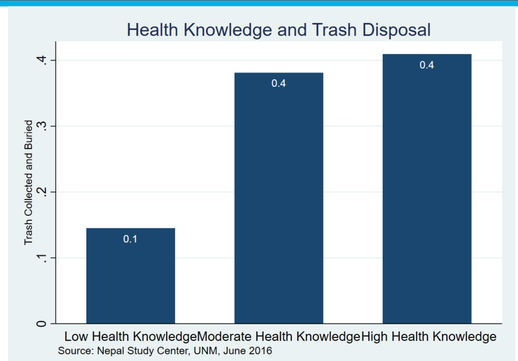
$$HhWasteLand = \beta_0 + \beta_1 EducationLevel + \beta_2 general\_health\_knowledge + \beta_3 SciKnowledge + u_i$$

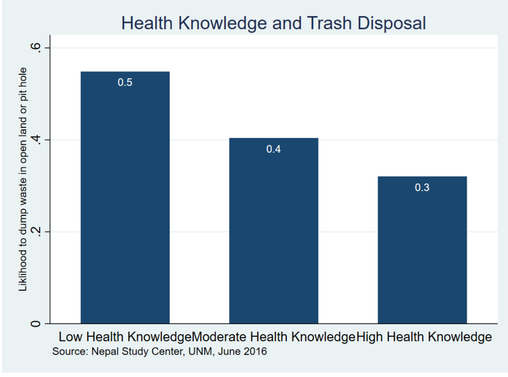
$$WasteBuried = \beta_0 + \beta_1 EducationLevel + u_i$$

$$WasteBuried = \beta_0 + \beta_1 EducationLevel + \beta_2 general\_health\_knowledge + u_i$$

$$WasteBuried = \beta_0 + \beta_1 EducationLevel + \beta_2 general\_health\_knowledge + \beta_3 SciKnowledge + u_i$$

GRAPHS





CONCLUSION/ SOLUTION

Our results show that general health knowledge has a highly significant effect on waste disposal practices in Nepal, whereas scientific knowledge and education level were only sometimes significant in our models. Our regression results indicate that increases in general health knowledge improve the chances of a household getting trash buried by as much as 17% and decrease the chances of dumping waste on land by up to 20%. These results suggest that increasing awareness about topics that were considered in the general health knowledge variable could lead to better waste disposal practices. Topics include handwashing, Ecoli, and sanitation.

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