

# The Influence of Health Knowledge in Shaping Political Priorities: Examining HIV/AIDS Knowledge and Public Opinion about Global Health and Domestic Policies

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## Presenter Disclosure

**Janet Okamoto, MPH, CHES**

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

**No Relationships to Disclose**



- 1) Describe an evaluation that addresses health issues that affect political priorities.
- 2) Assess the association between HIV knowledge and ratings of global health and domestic priorities.
- 3) Identify other public health issues that may influence global and domestic political priorities.



- ▶ Americans have rated cancer, HIV/AIDS, and heart disease as top health priorities in the past five years, but recent evidence indicates these priorities appear to be shifting in part due to recent economic concerns, the changing political landscape, and questions about the role the U.S. should play in the global community.
- ▶ At present, research shows that the relationship between Americans' domestic and global priorities is mixed.
  - Even as Americans are increasingly worried about the economy, a majority report that they would be willing to pay \$1 more per week in taxes for stronger U.S. investment in global health.
  - On the other hand, others have found fewer people assigning a high priority to global policy goals, such as human rights and reducing the global spread of AIDS and other infectious diseases.
  - They have also discovered the public putting more “America centered” global priorities at the top of their agendas, such as defending the country against terrorism, protecting U.S. jobs, and finding solutions for the country’s dependence on imported energy.



- ▶ It is clear that public opinions are not black-and-white and that the relationship between people's opinions regarding global health policies and U.S. domestic priorities is complex.
  - The evidence seems to indicate that Americans, not surprisingly, value domestic issues over global ones.
  - Perhaps the question is whether Americans truly weigh domestic against global priorities.
    - ▶ It may be that domestic priorities are viewed through a global lens, where perhaps the argument that serving the global interest ultimately serves national interests is the most salient.
- ▶ Public health knowledge and the evolution of public opinion: What part does HIV/AIDS knowledge play?
  - One natural question that grows from discussion regarding public opinion is what factors go into the formation of Americans' perceptions of domestic and global health priorities?
  - It is not as clear as in the past what the American public's current priorities are, health included, and what factors contribute to their formation.
    - ▶ Public knowledge about health is critical, however, and one issue with implications for both global health and domestic policy is HIV/AIDS.



- ▶ The aim of this study was to determine the association between HIV/AIDS knowledge and domestic and global health priorities
  - Little is known about how health knowledge affects opinions of political priorities.
  - Domestic priorities are usually rated higher by Americans than global priorities, but HIV/AIDS has more recently been considered to impact health on a more global scale.
  - Therefore, in the present study, global health priorities are proposed as a potential mediator of the relationship between HIV/AIDS knowledge and domestic priorities.
  - To this end, three hypotheses were tested:
    - 1) *HIV/AIDS knowledge will be significantly associated with both domestic and global health priorities – those with higher knowledge will rate types of priorities higher.*
    - 2) *Global health priorities will be associated with domestic priorities – As rating of global health priorities increase, rating of domestic health priorities will also increase.*
    - 3) *Global health priorities will act as a mediator in the relationship between HIV/AIDS knowledge and domestic priorities.*





## ▶ Data Collection

- A private research company, Frank N. Magid Associates, was employed to recruit a sample of primetime television viewers to take an electronic survey as part of a larger study.
  - ▶ Respondents were solicited via e-mail to participate in an online survey about television content and health knowledge, attitudes, and practices.

## ▶ Measures

- Three main variables of interest were measured via self-report:
  - 1) HIV/AIDS knowledge
  - 2) Ratings of importance of domestic priorities
  - 3) Ratings of importance of global health priorities
- Demographic variables included in the analyses were: gender, age, income, ethnicity, marital status, current or previous health professional, ever had an HIV test, and hours of TV watched per week.



## ▶ Measures (cont'd)

- HIV/AIDS knowledge was measured with nine items.
  - ▶ Items covered HIV/AIDS transmission, maternal transmission, prevalence rates, effective treatment, and awareness of AIDS deniers.
  - ▶ A sum of correct answers was calculated for each respondent, with a range of 0 to 9
- Domestic & Global Health priorities were measured on a scale from 1 to 5.
  - ▶ Answer choices ranged from “not at all important” (1) to “extremely important” (5).
  - ▶ The scales was created by taking the mean of all items.

## ▶ Data Analysis

- A series of multilevel linear regression models comprised the analysis for this study to determine mediation effects.





- ▶ The analysis sample consisted of 995 respondents.
  - The sample was primarily:
    - Female: 71.8%
    - Young-to-middle-age adults: Mean age = 46.8 years
    - Married: 61.9%
    - Predominantly White: 86.3%
  - Most respondents had incomes between \$25,000 and \$74,999.
  - Twenty percent were or have been a health professional.
  - Forty percent had been tested for HIV.

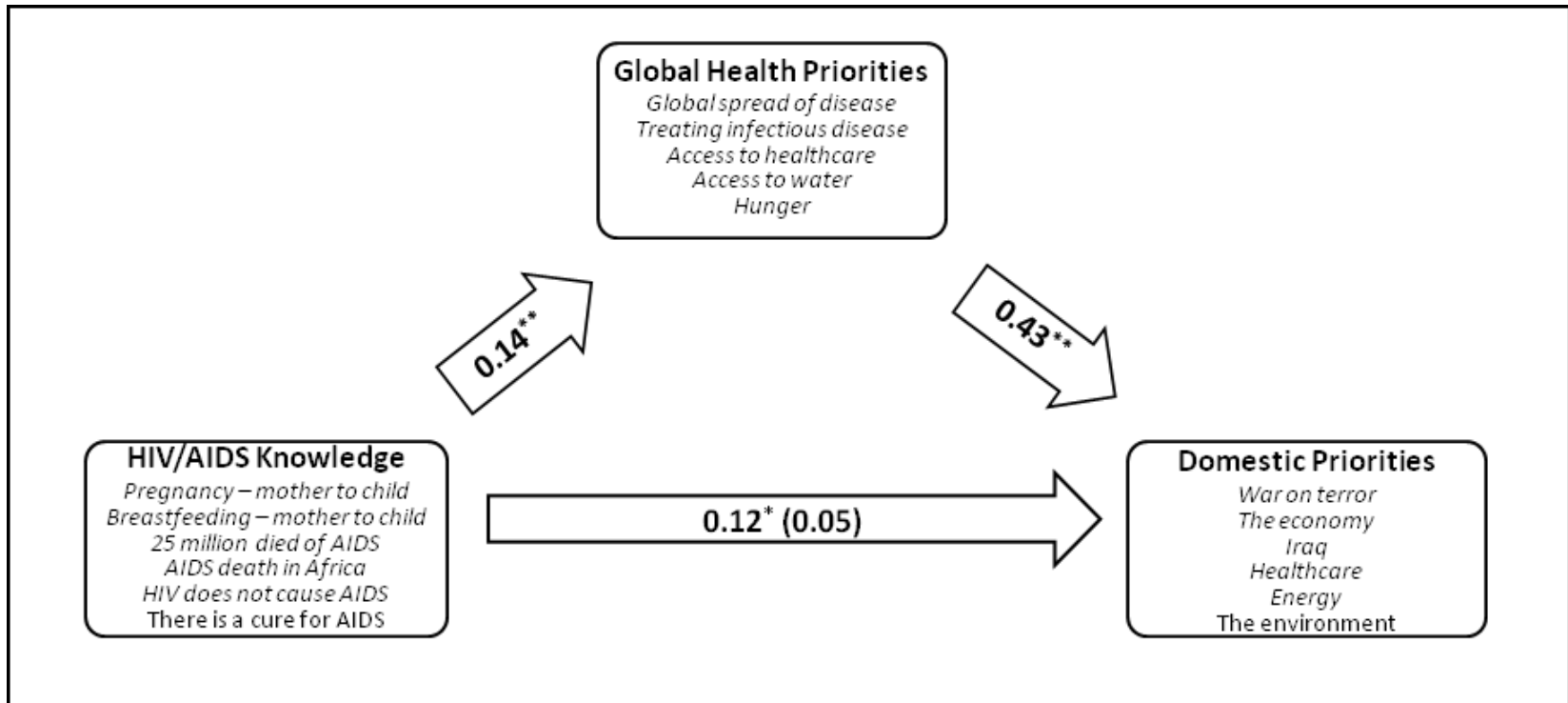
## Regression Models for Mediation Analysis

	<i>b</i>	SEB	$\beta$
<b>Model 1: Independent variable to outcome (domestic priorities)</b>			
HIV/AIDS Knowledge	0.29	0.11	0.12*
Age	0.01	0.002	0.09**
Health Professional	0.04	0.05	0.02
Female	0.17	0.05	0.19**
White	0.03	0.06	0.01
Income	0.03	0.02	0.05
Married	0.03	0.05	0.03
HIV test	-0.02	0.04	-0.01
Hours of TV/week	0.004	0.001	0.09**
<b>Model 2: Independent variable to mediator (global health priorities)</b>			
HIV/AIDS Knowledge	0.46	0.17	0.14**
Age	0.01	0.003	0.07*
Health Professional	0.08	0.08	0.03
Female	0.25	0.07	0.11**
White	-0.34	0.10	-0.12*
Income	0.03	0.03	0.04
Married	-0.05	0.07	-0.03
HIV test	0.12	0.07	0.06
Hours of TV/week	0.00	0.002	-0.003
<b>Model 3: Independent variable and mediator to outcome (domestic priorities)</b>			
HIV/AIDS Knowledge	0.16	0.10	0.05
Global priorities	0.27	0.02	0.43**
Age	0.01	0.002	0.15**
Health Professional	0.02	0.05	0.01
Female	0.11	0.04	0.08*
White	0.12	0.05	0.07*
Income	0.02	0.02	0.03
Married	0.05	0.04	0.04
HIV test	-0.05	0.04	-0.04
Hours of TV/week	0.004	0.001	0.09**

\* p<0.05; \*\* p<0.01



# HIV/AIDS knowledge, global health priorities, & domestic priorities: A mediation model (N=995)



All equations controlled for age, health profession, gender, ethnicity (White/Non-White), income, marital status (married/not-married), hours of TV watched per week, and prior HIV test; Values displayed are standardized betas

\*  $p < 0.05$ ; \*\*  $p < 0.01$



- ▶ Given that the associations of HIV/AIDS knowledge with both the proposed mediating variable (global health priorities) and the outcome variable (domestic priorities) were concurrent, it was important to explore other plausible models.
  - All other possible mediation models were examined.
  - Only one of these alternative models showed any trend towards significance, lending support to the credibility of the tested model.
    - ▶ There was a trend towards global health priorities to partially mediate the relationship between domestic priorities and HIV/AIDS knowledge



- ▶ Previous research findings show that the American public has a set of priorities for the country, which have changed over time in response to specific events
  - There is a strong indication that the American public's values function in a decidedly global framework and areas of interest to them extend beyond just their own national boundaries.
- ▶ Study findings suggest that those with greater HIV/AIDS knowledge place greater importance on global health priorities, which in turn affects ratings of more domestic concerns.
  - Viewing the health of the global community as important does not preclude placing a high value on priorities closer to home.
  - Based on the results of this study, being more knowledgeable about HIV/AIDS leads to placing a greater importance on domestic issues such as the economy, energy, and healthcare, but this value is filtered through the priority placed on global health issues.
- ▶ Findings need to be further verified in a longitudinal design – therefore, any causal inferences remain exploratory and the relationships investigated in the mediation analysis could, to some extent, be bi-directional.



- ▶ Several cautions should be noted with the interpretation of these results:
  - The present study was part of a larger study examining entertainment media exposure, and like most mass media evaluations, could not be randomly sampled.
  - Generalizability is also limited, particularly due to the oversampling of heavy television viewers.
  - Another limitation is that the measurements were self-reported and therefore suffer the methodological issues that typically accompany this type of measurement.
  - Finally, the cross-sectional nature of the study limits the causal inferences that can be made and true mediation cannot be determined.





- ▶ This research has implications for ways to gain support for implementation of public health policy through increasing health knowledge.
- ▶ It remains to be seen whether these findings would translate to other types of health information – as more of a global emphasis is often placed on HIV/AIDS than other health concerns.
- ▶ There is a cautious optimism among political scientists that public opinion plays a role in government decision-making in certain circumstances and on certain issues.
  - What research has shown is that if an issue is salient to the public, decision makers are more likely to pay attention to public opinion than they are for issues that are not very salient to the public.
  - This study examined the relationship between health knowledge and its potential to affect the American public's opinions about political priorities.
  - This is not something that has been given much consideration in past research and has implications for public health policy, particularly in the current economic and political atmosphere.
  - This could suggest, based on these findings, that by increasing health knowledge, HIV/AIDS knowledge in the case of the present study, one has the potential to influence public opinion about both domestic and global health priorities.