The Politics of Water Fluoridation from a Problem Definition Perspective

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Background

- Water fluoridation has been a solution offered for the prevention of tooth decay for more than 60 years
- It has always created significant controversy
- Proponents claim that it is a safe and effective public health measure
- Opponents claim that it is hazardous to health and question whether it is a legitimate function of government
- The debate is often played out in the form of public referenda at the local level

Goals of Study

- To examine why a health profession's effort to address what they perceived to be a major public health problem generated such controversy
- To examine the explanations offered for why a particular community may decide to fluoridate its water supply
- To determine the extent to which the problem definition literature may contribute to these explanations

Explanations for Decisions

- Demographic determinants i.e. wealthier and more educated communities are more likely to fluoridate
- Structure of the city government i.e. mayor council or councilor manager versus board of selectman
- Alienation of voters i.e. voters feel alienated from their government and vote down proposed measures
- Campaign skills i.e. dentists are not particularly good at campaigning

Problem Definition Literature

- Decisions are whittled down to simplified choices amenable to public discussion. This is called issue definition. Baumgartner and Jones (2005)
- Issues are redefined and shaped and classified as one type or another depending on ones worldview. Most political conflicts hinge on the problem of classification. Stone(1997)
- Technical issues also involve intense political debate with "experts" using technical arguments which likely do little to change minds. Nelkin(1992)

Problem Definition(continued)

- Some issues may be "intractable" because they are both technologically complex and involve morals/values. Bosso(1997)
- The nature of the conflict determines the nature of public involvement. The way a problem is framed in public debate may influence participation/expansion. Schattsneider(1960)
- Successful campaigns involve not only monetary resources but the strategic use of words and images that summarize a point of view. Cobb and Ross(1997)

Problem Definition(continued)

- Public opinion is susceptible to framing because attitudes are composed of a diverse set of considerations. Frames that embrace political/cultural values can draw support from opposition. Koch(1998)
- Media is important in the publics understanding of issues and often reflects the current perceptions and frames around an issue. The media may be used to change the publics perception or opinion.

Cobb and Ross(1997), Nelkin(1987), Frameworks(2003)

Current Framing and Perception Around Oral Health

- Children's oral health has not emerged in public discourse.
  - Current cognitive model around oral health has the following elements: 1. Cavities are the primary effect 2. Primary responsibility lies with the parents 3. Expectation that schools will be involved 4. Oral health is part of a larger health picture. Frameworks/Morgan(2000)
  - Support for oral health issues may be shallow
- 90% of scientists and 70% of public are supportive of fluoridation. Newbrun and Horowitz (1999)
- Arguments currently used on either side do little to change minds of those with an established opinion. Grossman-Dental Health Foundation CA(2006)

Methods

- Comparative Case Studies
- Worcester in 2001 and New Bedford in 2006
- Examined:
  - Demographics
  - Political Structure
  - History of Fluoridation
  - Initiation- Who, When
  - Referendum Campaign- Who Involved, Timeline, Resources
  - Public Opinion
  - Turnout

Methods (continued)

- Media Analysis
  - Identification of the Problem
  - Frames
  - Categories of Problem Definition Frames and Language
    - Causality, Severity, Incidence, Novelty, Proximity, Special Populations
  - Context
  - Messengers
  - Symbols and Visuals
  - Tone
  - Instrumental vs. Expressive Orientations

Worcester, MA

- Urban community, more diverse, less affluent and educated than state as a whole
- Council- Manager
- Long history of fluoridation referenda most recent 1996
- Initiated by Central MA Health Foundation more than one year prior to vote
- More than $400,000 spent by proponents

New Bedford, MA

- More diverse, less affluent and educated than state as a whole
- Mayor- Council
- History with fluoridation- last referendum more than 15 years prior to current
- Initiated by PACE
- Campaign two weeks prior with less than $20,000 spent

Comparison of Media Coverage

- More media coverage in Worcester
- Majority of news articles in both cities provided arguments for both sides
- Several editorial and opinion columns in both cities. Editorial boards were supportive of fluoridation in both cities as were most columnists.
- There were multiple letters to the editor in both cities with proponents having slightly more letters in both cases
- Framing of issue was different between proponent and opponent groups but similar within the groups across the cases
- Tone of debate was more negative in Worcester

Comparison of Problem Definition and Framing: Proponents

- Most often provided facts and figures about safety and effectiveness
- Problem most often was identified as cavities with no indication of the impact on overall health, psychological health or other
- Often identified as a "crisis"
- Often identified as a problem of the "poor"
- Framing often supported current frame of individual responsibility
- Often identified as a solution to the lack of access to Medicaid dentists
- Opponents were identified as not credible
- Dentists were the most common spokespersons

Comparison of Problem Definition: Opponents

- Very often claimed fluoride is not safe, is a poison, and caused cancer and other serious ailments
- Matter of individual choice and that fluoridation is not a legitimate function of government
- Should educate public/ parents on brushing and flossing and nutrition and that this would go further to alleviate the problem
- Claimed that if dentists were not so greedy they would accept Medicaid reimbursement and that this would solve the problem

Conflict Expansion

- Public opinion polls show that the public is generally supportive of fluoridation
- In Worcester, polling was done throughout the campaign with fluoridation losing support
- No polling was done in New Bedford
- Opponents in Worcester were able to "steal" support by raising questions about safety but also by creating and reinforcing a perception of the CMHF as " big business" trying to buy an election
- In New Bedford, this did not happen. May have been due to the controversy surrounding the firing of the director of the BOH. Also, it may have been due to short campaign and voter turnout.

Conclusions

- The concepts and categories of problem definition helped explain the political discourse and the controversial nature of this issue
- The way that problems come to be defined in the debate likely has an effect on how the public understands the issue and prioritizes it
- However; because the public has already established frames regarding oral health and fluoridation redefining the debate is not always easy or predictable
- Arguments on either side may reinforce current frames and values.
- To change the nature of the debate proponents will need to redefine and reframe the issue

Future Research and Thoughts

- More review of public opinion surrounding oral health and fluoridation
- Development and testing of messages that include values
- Exploration of this solution as it relates to resources and outlook for future success