Trust Influences Response to Public Health Messages During a Bioterrorist Event

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This study builds on recent work describing African Americans’ low trust in public health regarding terrorism preparedness by identifying the specific components of trust (fiduciary responsibility, honesty, competency, consistency, faith) that may influence community response to a bioterrorist attack. We used qualitative analysis of data from 75 African American adults living in Los Angeles County who participated in focus group discussions. Groups were stratified by socioeconomic status (SES; up to vs. above 200% of federal poverty guidelines) and age (18–39 years old vs. 40–65 years old). Discussions elicited reactions to information presented in escalating stages of a bioterrorism scenario. The scenario mimicked the events and public health decisions that might occur under such a scenario. Honesty and...
consistency of information from public health officials were the components most frequently identified as determining trust or distrust. Patterns of trust varied according to the scenario stage; honesty was most important upon initially hearing of a public health crisis, whereas fiduciary responsibility and consistency were important upon confirmation of a smallpox outbreak and the ensuing public health response. Findings can help public health officials design communications that address distrust and enhance trust during a bioterrorist event.

Trust is a critical component in the health care decision-making process (Goold, 2002; Mechanic, 1996) and plays a significant role in individuals’ responses to public health crises (Gamble, 1997; Leavitt, 2003) including bioterrorism (Blanchard et al., 2005). Trust is critical to facilitating appropriate responses and insuring the safety of citizens during catastrophic public health situations (O’Toole, Mair, & Inglesby, 2002).

Trust varies across racial/ethnic groups, however and is particularly low among African Americans who easily recall the history of racial discrimination in research (Gamble, 1997). African American postal workers affected by the 2001 anthrax attacks perceived a lack of fairness in the way that public health officials responded to their needs (Blanchard et al., 2005). In Los Angeles County, African Americans were less likely than other racial/ethnic groups to report that the public health system will respond fairly to their health needs in a bioterrorist attack (Eisenman et al., 2004). The few studies that have compared trust or distrust across racial/ethnic groups have found that African Americans are less trusting than Whites (Corbie-Smith, Thomas, & St. George, 2002) and are less likely to trust physicians than Whites or Latinos (Doescher, Saver, Franks, & Fiscella 2000; Boulware, Cooper, Rather et al., 2003; Voils et al., 2004). While these studies did not examine variation across race/ethnicity for specific components of trust, item-level differences suggest that African Americans are less likely to believe their physicians would adequately inform them of their risks (honesty) or that their physicians would try to protect them from risks (fiduciary responsibility) relative to Whites. Thus, these studies have not fully addressed what specific aspects of trust are key and leave open questions of how trust varies during an evolving bioterrorist attack and how public health officials can design effective communication programs for maintaining trust in communities living with the suspicion of inequitable treatment.

In this study, we sought to characterize the components of trust in public health identified by African Americans to learn which components are most salient in determining their response to a potential bioterrorist attack and, building on the existing knowledge of risk communication (Davis, La Tourretta, Mosher, Davis, & Howell et al., 2003; Glik, Harrison, Davoudi, & Riopelle, 2004), to understand which specific components of trust need to be addressed in public health communications. We employed a staged scenario to evoke such an attack and the corresponding public health decisions that ensue during the attack. Further, we investigated the importance of different characteristics of the source or messenger (e.g., expertise, credibility), the message (e.g., the content and structure), the medium (e.g., media vs. the Internet), and the audience (e.g., whether certain age and socioeconomic subgroups are more or less trusting), all variables chosen from the communication literature from social psychology (McGuire, 1969).

Methods

Study Design and Participants

We conducted 8 focus groups with 75 African American participants (7–11 per group) in Los Angeles during June of 2004. Participants were recruited from the community and
were eligible if they were African American, age 18–65, and able to participate in a discussion group. We excluded anyone who was a Los Angeles County employee or a “first responder,” that is, anyone who, works for the fire or police department or emergency services because we thought these individuals would have special knowledge and expertise about the topic that would bias findings or overly influence the discussion.

Because we hypothesized that opinions would vary according to the age and SES of the audience, we stratified participants into four types of focus groups by crossing age (younger, 18–39 years old, vs. older, 40–65 years old) with SES (low SES, up to 200% of federal poverty level, vs. high SES, above 200% of federal poverty level): (1) younger/low SES, (2) younger/high SES, (3) older/low SES, and (4) older/high SES. The cut-off for 200% of poverty level (Federal Register, 2004) varies depending on the number of persons living in the household (e.g., $18,620 with 1 person, $50,420 with 6 persons). We conducted 2 groups of each type. Focus groups lasted 2 hours and were moderated by an African American, professional facilitator. Participants were compensated $50 for their time.

**Escalating Bioterrorism Scenario**

We developed a bioterrorism scenario that varied the communication components through its seven stages (Table 1). For example, as the scenario evolved, the source changed among the media, public health officials, and local community representatives; the message ranged from vague to more specific levels of detail; and the types of medium varied between rumor and audiovisual forms. The audience varied as a function of the focus group stratifications described above. The scenario began with the recognition of a smallpox attack and escalated through the various stages in a large-scale event that included public health recommendations and presented participants with decisions to make in response. The seven stages in the scenario also were designed to raise the issue of perceived discrimination. In Stage 1, there were reports by the media of a potential bioterrorist attack with increased hospitalization due to fever and rashes. In Stage 2, Los Angeles Public Health officials identified the illness as smallpox and introduced targeted ring vaccinations near the site of exposure and quarantines. In Stage 3, there were reports of people trying to get vaccinations and being turned away if they did not meet vaccination criteria. In Stage 4, there was a rumor that people in wealthy neighborhoods far from the site of the ring vaccinations were getting vaccinated even though they were not exposed. In Stage 5, there were two conflicting reports by the media (one recommending travel restrictions only and another recommending travel restrictions and quarantine). In Stage 6, local public health workers were assigned to communities to liaison between them and public health officials. Finally, in Stage 7, local community representatives and organizations were brought in to assist participants in their neighborhoods.

**Content of Discussion**

We investigated participants’ responses to the new information presented in each stage. We asked participants whether they trusted the information and its source and elicited their thoughts about how to provide trustworthy information at that stage.

**Data Analysis**

We used an inductive analysis strategy to assess the role that trust played in participants’ reactions to the evolving scenario. We identified a large sample of
### Table 1. Seven trigger stages in the unfolding bioterrorism scenario

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1: Initial report</td>
<td>The media reports that several people are showing up at hospitals with a fever and an unusual rash. Officials are investigating these cases as an act of terrorism, but it is too soon to know about the source of the illness.</td>
</tr>
<tr>
<td>Stage 2: Illness identification</td>
<td>The next day, Los Angeles County Public Health officials publicly announce that the illness is smallpox and that the source of the smallpox exposure appears to be at a movie theater in Sherman Oaks approximately 14 days ago. County Public Health officials are conducting vaccinations and quarantines in Sherman Oaks, because it is the area of exposure. County health officials are recommending vaccinations, to protect against getting smallpox, for those who were at that movie theater, and household contacts and other persons who had known face-to-face contact with someone currently sick with smallpox. Quarantine means you must stay at home, isolated from others, because you are someone who was exposed and could infect others.</td>
</tr>
<tr>
<td>Stage 3: No vaccination</td>
<td>You’ve heard that someone in your neighborhood went to a local hospital to get a vaccination even though she was not at the movie theater. You hear that she wasn’t vaccinated—that county public health officials told your neighbor that she was not eligible to be vaccinated.</td>
</tr>
<tr>
<td>Stage 4: Others get vaccinated</td>
<td>What if you heard a rumor that people in another neighborhood, Manhattan Beach, who do not meet criteria for getting vaccinated, were being vaccinated?</td>
</tr>
<tr>
<td>Stage 5: Conflicting reports</td>
<td>On the 5:00 news the next day, you hear two conflicting reports: Station A reports that County Public Health officials are implementing travel restrictions (meaning that you are not supposed to leave town) and are considering quarantining large parts of Los Angeles. Station B reports that County Public Health officials are implementing travel restrictions but say that County Public Health official have stated that there are no plans for quarantine at this time.</td>
</tr>
</tbody>
</table>
passages related to trust and cut and sorted them into distinct thematic categories. After identifying the categories, we reviewed the entire text and marked all examples of thematic categories (Lincoln & Guba, 1985; Ryan & Bernard, 2003). Next, the investigators (LM, DE, HR, GR) convened to read through the passages and sort them into piles by categories. After several rounds of group discussion, we identified six components of trust: (1) 

**fiduciary responsibility**, defined as a relationship in which someone (the fiduciary) acts in the capacity of another’s rights, assets, or well-being; (2) **honesty**, defined as perceived truthfulness and sincerity; (3) **competency**, defined as being perceived as well-qualified to perform an act; (4) **consistency**, defined as uniformity and agreement among messages; (5) **faith**, defined as any mention of faith or similar words; and (6) **other** for trust-related passages that did not fit into the other categories. With the exception of the faith and other categories, our thematic components of trust correspond well to those mentioned in the literature (Rose, Peters, Shea, & Armstrong, 2004). Once the categories were named, team members constructed a codebook for each theme (MacQueen et al., 1998).

One team member (HR) then reviewed all transcripts and marked all incidences in which themes appeared. In addition, we marked passages that corresponded to different types of behavioral responses (vaccination, shelter-in-place, flee, watch/wait, etc.), scenarios, and sources of information (e.g., public officials, media, rumor, etc.). Analysis was performed using *Atlas.ti*.

We analyzed the salience of the six trust components by examining their frequency overall and across scenarios. We also examined the components of trust by the object of that trust, across types of participants (e.g., age, SES, etc.) and by behavioral responses.
Results

Participant Characteristics

Participants were roughly split across SES and age groups as intended by our stratified design (Table 2). About 50% of the participants were women, nearly 45% had children, about 32% had some college education, and 75% worked at least part time.

Description of Trust Themes

Below, we provide examples of the trust components. These passages are generally in response to questions about trust of information provided by the Los Angeles County Public Health Department.

Honesty. The most prevalent theme concerned the honesty of public health officials, government representatives, and media outlets, with 143 passages in total. Participants had concerns about both the completeness and accuracy of information. In general, they felt that information was held back and that it was provided on a “need-to-know” basis to prevent the spread of panic, or, in a few cases, for less altruistic reasons, such as to maintain power. Participants rarely discussed actual lying by government and public health officials, though they did talk about not receiving the truth.

This comment illustrates the point about information completeness:

The people at the top are only giving the people at the bottom maybe 30% of the truth, so you’re only working with what they’re telling you, which is probably not even half because they don’t want everybody panicking.

Another participant’s comment illustrates the information accuracy concern:

The biggest concern with the government always is to minimize public panic, so you’re not going to get the truth.

Table 2. Summary of focus group characteristics ($N = 75$)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>$N$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES group*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (up to 200% of federal poverty guidelines)</td>
<td>34</td>
<td>45.3</td>
</tr>
<tr>
<td>High (above 200% of poverty guidelines)</td>
<td>41</td>
<td>54.7</td>
</tr>
<tr>
<td>Age group*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18–39</td>
<td>37</td>
<td>49.3</td>
</tr>
<tr>
<td>40–66</td>
<td>38</td>
<td>50.7</td>
</tr>
<tr>
<td>Other demographic characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>38</td>
<td>50.7</td>
</tr>
<tr>
<td>Married</td>
<td>17</td>
<td>22.7</td>
</tr>
<tr>
<td>Children</td>
<td>34</td>
<td>45.3</td>
</tr>
<tr>
<td>Some college (vs. no college or below)</td>
<td>24</td>
<td>32.0</td>
</tr>
<tr>
<td>Currently working (full and part time)</td>
<td>56</td>
<td>74.7</td>
</tr>
</tbody>
</table>

*Focus group stratification characteristic.
The participants were equally skeptical of the rumors. Of the 15 participants who commented on the truthfulness of the rumors, 2 believed in their validity, 5 did not, and 8 considered them partially true.

Participants felt that the “honest brokers” whom they trust were their family members and friends who had some “inside” view, for example, as a nurse. Additionally, they trusted their personal doctors to provide a perspective independent of health officials. Finally, 15 of 19 participants who commented on the media’s truthfulness believed that they would not present information in an objective manner but would rather sensationalize and “hype it up.” Two honest brokers, however, were perceived in the media: Cable News Network [CNN] and news radio (e.g., National Public Radio [NPR]).

Consistency. In total, 140 passages concerned consistency. Participants were mostly concerned with how to determine such elements of trust. Participants felt that it was critical to get information from multiple sources, from local family members to international news outlets, and compare the messages. If the messages were sufficiently similar, they felt that they could trust the content and heed the health officials’ advice. As one participant commented,

I wouldn’t trust just one [website]. I think I would just [check out] different sites on the smallpox disease. Because [only] one, something might be different, just like it’s picking up different information,… so to feel comfortable, you can’t stick to just one site.

Participants provided sources that they would rely on to provide accurate information including radio talk shows, particularly NPR, websites provided by CNN, the British Broadcast Company (BBC), and MSNBC, and medical professionals who were independent of the Los Angeles public health officials, such as the Centers for Disease Control and Prevention (CDC) and local doctors. Local community leaders, including church ministers, neighborhood watch block captains, and county sheriffs, were specifically mentioned. Last, 2 participants felt that they would turn to their White friends, as these individuals would have received the “straight” story.

Participants commented on directly visible signs of reliability (17 passages) such as police or public health identifications or documentation marked with the state or county seal. The community needed to appear to be in crisis, for instance, with ambulances or the National Guard in their neighborhood. They also were watching the public health representatives’ behavior. For instance, did they make eye contact? Did they put themselves at risk to help the public?

A few participants felt that they could ascertain the consistency of the information:

You can call the city and the county, you can call and talk to one person and they’ll tell you something. Then you can call right back, get another person, and they’ll tell you something different. You just have to call the county and just keep on calling them.

Fiduciary Responsibility. Participants discussed whether public health officials would treat them as they would treat those in other communities in 115 passages.
Most participants believed that public health officials did not have their best interest at heart (33 negative vs. 13 positive statements), with some offering beliefs in government conspiracies, including “experimentation” (e.g., distribution of placebo vaccinations), racial cleansing, and governments’ desire to exert control over people’s lives. Most indicated that discrimination based on race or SES was at fault. They recounted current and historical incidents as evidence of discriminatory treatment. As one young, low SES individual said,

I don’t trust the information at all. I remember what happened in the World Health Organization with the AIDS virus. And [at] Tuskegee with syphilis and [smallpox with] the Indians. Our government has a history of using bioterrorism as a method of population control, so why would I suddenly trust them to save my life?

Several participants stated that officials would respond in ways to maximize their own advantages over the concerns of the public. Two participants argued that the officials would prioritize the county’s survival at the expense of individual needs, that is, letting people die because treatment was too expensive.

Competency. There were 58 passages involving competency, particularly of the responding public health officials. As one man (older/high SES) commented, “For me it comes down to things like competency—that I know that they know what they’re talking about.” Some participants felt that the public health liaisons were competent because they were educated and had received credentials:

If they’re going to send someone out in [to] the community, you have to hope that these people have the credentials to prevent the community from panicking.... And you can ask for the person’s credentials.

In particular, older participants were convinced simply by the fact that the liaisons were “doing their job” and were responsible for providing competent advice. Several suggested contacting the CDC, as this organization was perceived to be the official public health source. Some participants disagreed, however, citing perceptions of previous public health incompetence. As one woman stated, “I’m a skeptic because one day they tell you to drink a glass of water with your dinner and the next day it’ll cause cancer.”

One group was overwhelmingly considered competent as evidenced by their credentials and experience: personal doctors. The participants did not think that doctors were infallible, but that they were likely to provide sound counsel.

Faith. Fifty-nine passages addressed the role of faith in trust, that is, the role of inherent belief or trust in a person (or messenger) or plan (message). A large number of the participants, particularly in the older/high SES groups, stated that they would trust public health officials to act appropriately until they made an unforgivable misstep (17 passages). Many others stated that they would believe the public health official because not cooperating was potentially very consequential. As one older/high SES participant commented, “If you can’t believe them, we’re probably screwed. I mean, we’re in a world of trouble.” Furthermore, 17 passages addressed that there was little else to do in these circumstances but to trust the officials and their messages. In the words of an older/high SES male, “And the bottom line is,
we don’t have another choice but to trust them. You’ve got no choice but to trust them.” Five participants thought they would rely on their faith in God to guide them through the incident:

Five participants identified another compelling reason for placing their faith in public health officials: they were putting themselves in danger to reach out to the participants’ communities. As one participant said,

A person that would put themselves at risk would be a more trustworthy person. I’m not saying that I don’t trust the ones in the beginning, because I do. But it would impress me more to see someone from outside the state who is not in the, “quote, unquote,” quarantine area, come in and be that community liaison.

Other. There were 31 passages in the “other” category. Subject matter of these passages varied significantly. For instance, 2 participants argued that they were more apt to trust someone who came from their community. Two others thought they would be more likely to trust information that was provided to them on a one-to-one basis rather than through mass media channels. One person felt that he would be more likely to listen to a source that did not have a financial interest in the issue.

**Frequency and Types of Trust**

In all, 450 passages discussed trust. The most prevalent components of trust discussed were honesty (*N* = 125) and consistency (*N* = 121). Fiduciary responsibility and competency were discussed less often (*N* = 85 and 53, respectively), and faith was discussed the least (*N* = 38).

**Patterns of Trust by Scenario Stage**

We examined how the six trust components were distributed across the scenario stages to understand how the relative importance of these components changed with variations in source/messenger, message, and medium (Table 3). In Stage 1 (initial report), honesty was the most common concern upon initially hearing from the

<table>
<thead>
<tr>
<th>Scenario stage</th>
<th>Fiduciary</th>
<th>Honesty</th>
<th>Competency</th>
<th>Consistency</th>
<th>Faith</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Initial report</td>
<td>6</td>
<td>20</td>
<td>5</td>
<td>13</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>2. Illness identification</td>
<td>12</td>
<td>34</td>
<td>12</td>
<td>22</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3. No vaccination</td>
<td>6</td>
<td>6</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>4. Others get vaccinated</td>
<td>28</td>
<td>22</td>
<td>2</td>
<td>13</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>5. Conflicting reports</td>
<td>2</td>
<td>12</td>
<td>5</td>
<td>15</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>6. Local health workers</td>
<td>19</td>
<td>22</td>
<td>7</td>
<td>27</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>7. Local community representatives</td>
<td>12</td>
<td>9</td>
<td>7</td>
<td>27</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Total (across 7 scenarios)</td>
<td>85</td>
<td>125</td>
<td>53</td>
<td>121</td>
<td>38</td>
<td>30</td>
</tr>
</tbody>
</table>
media about possible terrorism. In Stage 2 (illness identification), honesty also was most often discussed followed by consistency. In Stage 3 (no vaccination), the most common form of trust was competency. In Stage 4 (others get vaccinated), fiduciary responsibility was the most common form of trust followed by honesty. In Stage 5 (conflicting reports), consistency and honesty were the most frequently discussed components of trust. In both Stage 6 (local health workers) and Stage 7 (local community representatives), consistency was discussed equally as often.

**Patterns of Trust by Stratification Groups**

Participants in the younger/high SES group discussed honesty nearly twice as often as did the other groups (60 vs. 21–37 passages in other groups; See Table 4). For most components of trust, frequency was greater among younger participants, suggesting that trust was a more important factor for them. Frequency of faith-related trust, however, was roughly equivalent for both age groups.

**Frequency and Patterns of Behavioral Response**

We identified 300 passages discussing a behavioral response or decision about what participants would do in each hypothetical situation (data not shown in table). The most frequently observed response was to watch and wait for more information \(N = 186\), and this response was highest across all scenarios except for those involving community workers or representatives. Decisions to get vaccinated were most common during the smallpox identification and local health worker scenarios. Shelter-in-place and flee decisions were most common in the scenario conveying conflicting reports.

**Influence of Trust on Behavioral Response**

With regard to behavioral response, trust was more often mentioned by participants in their discussion about decisions to watch and wait \(N = 95\) or to get vaccinated \(N = 32\) than it was in their discussions about decisions to shelter-in-place \(N = 13\) or flee \(N = 6\) (See Table 5). Across behavioral responses, honesty \(N = 52\) and consistency \(N = 41\) were the most common types of trust mentioned. In discussions

**Table 4. Frequency of trust components across groups defined by age and SES**

<table>
<thead>
<tr>
<th>Component of trust</th>
<th>Younger (18–39)</th>
<th>Older (40–65)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fiduciary</td>
<td>Honesty</td>
</tr>
<tr>
<td>Low SES</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>High SES</td>
<td>38</td>
<td>60</td>
</tr>
<tr>
<td>Total (across all groups)</td>
<td>115</td>
<td>143</td>
</tr>
</tbody>
</table>
about vaccinations, fiduciary (31%) and honesty (28%) were the two most frequent kinds of trust mentioned, while in discussions about watch-and-wait decisions, honesty (35%) and consistency (34%) were most frequently mentioned.

**Discussion**

In this qualitative study of African Americans living in Los Angeles County, we sought to understand how specific components of trust influence response to public health messages during a bioterrorist attack. We observed a wide range of concerns around trust of public health officials for directing community response to a bioterrorist event. This is consistent with the literature that has characterized trust as a complex and multidimensional concept (Bianco, 1998; Hardin, 2001; Rose et al., 2004).

Honesty and consistency of information were the most common specific trust concerns in this African American sample. Participants had more concerns about the completeness of information, or errors of omission, though a few questioned the accuracy of information. Participant concerns about consistency centered on the need for obtaining information from multiple sources and on comparing different messages to see if they are similar. Thus, to address perceptions in the African American community that health officials might lie or provide incomplete information during a bioterrorist event, then validation of both the accuracy and completeness of public health messages will be essential. African Americans in this study reported that during a bioterrorist event, they would seek information not solely from the media and health officials (field workers as well as call centers) but also from the Internet. This suggests that a multipronged approach to communication involving a variety of means for dissemination (print, electronic, broadcast, personal interaction) will be needed to insure that the information is consistent across sources during a bioterrorist attack.

Focus group participants reported trusting particular types of messengers more than others. Government and public health officials were viewed as withholding information, making them less trustworthy compared with personal health clinicians (nurses, doctors). Public credibility theories suggest people are more likely to believe messengers if they are seen as being genuinely concerned about the welfare of others beyond their own self-interest (Covello, 1992). Messengers also must be perceived as

<table>
<thead>
<tr>
<th>Component of trust</th>
<th>Vaccination</th>
<th>Shelter-in-place</th>
<th>Flee</th>
<th>Watch/wait</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiduciary</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Honesty</td>
<td>9</td>
<td>3</td>
<td>4</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>Competency</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Consistency</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>Faith</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>10</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Total (across all groups)</td>
<td>32</td>
<td>13</td>
<td>6</td>
<td>95</td>
<td>10</td>
</tr>
</tbody>
</table>
honest, generous, and fair. Lessons from Vanderford and Smith’s 1996 study of the credibility of surgeons involved in the silicone breast implant controversy of the 1990s can be applied to our study (Vanderford & Smith, 1996). We found that African Americans’ perceptions of public health officials were similar to the public mistrust of surgeons, who withheld side-effect information from patients undergoing silicone breast implantation. Vanderford and Smith explained that surgeons did not discuss unlikely side effects to avoid unnecessarily frightening patients but that patients wanted to know even remote possibilities as it increased their sense of control. Similarly, in a bioterrorist event, errors of omission, such as when messengers fail to provide the whole truth, can create an atmosphere of mistrust and can damage credibility of officials, even when officials have the best of intentions. Public health messages that err toward more information combined with community interaction will build more successful partnerships, minimize blame, and strengthen trust (Tennen & Affleck, 1990).

Also, contrary to the common public health perceptions about audience demographics that low SES citizens do not listen to NPR (but instead listen to local radio or television), focus group participants felt that NPR would be a credible source of information during a bioterrorism emergency. While we cannot address the question of whether this suggests that low SES individuals would actually listen to NPR during a disaster, this finding suggests that appealing to low SES individuals with public health messengers may be a promising area to explore.

Trust components varied according to the stage of the scenario. Honesty was the most important aspect upon initially hearing of a smallpox outbreak. This may be due to the uncertainty of the situation initially and a greater reliance on the source and spokesperson delivering the information. Upon confirmation of the outbreak, fiduciary responsibility and consistency became more important. One social psychological explanation for this pattern is that knowing of a bioterrorist attack reduces the community’s perceived control over the situation and imparts an expectation to “be taken care of.” Fiduciary concerns were paramount in Stage 4, in which inequitable vaccination distribution was rumored. Given such fiduciary concerns, our data suggest that establishing trust in advance of an attack and heading off such concerns with honesty and consistency could serve as important communication tools for preventing or minimizing these concerns in the face of rumors. Accordingly, public health messengers are likely to be seen as more credible sources of information than the rumor(s) (Bantz, 1981).

Despite growing concern about public distrust of the health system among African Americans during a bioterrorist event (Eisenman et al., 2004; Lasker, 2004), we still know little about how trust shapes individuals’ decisions about bioterrorism. Our findings contribute to this gap by focusing explicitly on trust and how the specific components of trust influence decision making. We found the most common behavioral response to be to watch and wait. Most participants opted to watch and wait for more information in order to trust it. Honesty was important in all behavioral responses. Each type of response was associated with different components of trust. For vaccination decisions, fiduciary responsibility was also a concern; for decisions to flee, consistency also was mentioned; and for watch-and-wait decisions, consistency was very important, though all components of trust were mentioned. Implications of knowing the fiduciary and honesty concerns are paramount in vaccination decisions suggests that messages and messengers specifically address these issues, for instance, by saying that this is advice “they are giving their family
too” (fiduciary) and acknowledging and addressing issues of limited knowledge of efficacy or other unknowns (honesty). These conclusions are supported by a study of Toronto health care workers conducted during the 2003 SARS outbreak. This study found that the credibility of monitoring quarantine was more important in influencing health care workers’ compliance with quarantine than the threat of enforcement (DiGiovanni, Conley, Chiu, & Zaborski, 2004). Similarly, we found that honesty, a related component of trust that also addresses credibility of the messenger, may be critical to community compliance.

The relative importance of the trust components varied as audience characteristics differed across the age and SES stratified focus groups. Younger/high SES groups discussed honesty more frequently than did the other groups. It is possible that this group is more skeptical of authority figures, which may drive honesty as being a critical feature of trust. We found that age and SES did not influence the frequency of other types of trust components. This absence of differences between groups was inconsistent with the prior literature (Davis et al., 2003). This lack of difference for fiduciary responsibility, competency, consistency, and faith for this group of African Americans suggests that race/ethnicity is the dominant characteristic that health communication ought to address. Additionally, within this racial/ethnic group uniform policies that are sensitive to African American concerns can be used to address groups varying in age and SES.

Our findings are consistent with the literature on source credibility in communication in general as well as in health communication. The literature on trust and credibility suggests that effective communication depends on whether the message recipient perceives the message source as trustworthy and believable (Covello, 1992). We have identified the types of trust that are particularly important for African Americans, allowing for more targeted strategies for addressing distrust among African Americans. Our findings also show that public assessment of how much they trust a message is based on the extent to which it conveys empathy and caring, competency and expertise, honesty and openness, and dedication and commitment on the part of public health authorities.

Limitations. Our study contains several limitations. First, the small sample size did not provide sufficient power to use formal quantitative methods to analyze the data. Even with the lack of statistical tests to solidify group differences, however, we can examine patterns across groups and have the advantage of in-depth understanding. Another strength of our small qualitative analysis is that we stratified by age and SES to consider hypothesized differences in opinions about trust and response to bioterrorism. Second, we cannot be certain that the scenarios would withstand the validity of real-world testing. Nevertheless, the staged scenario we developed for this study incorporated lessons from prior work that employed scenarios in focus groups (Davis et al., 2003), input from collaborating Los Angeles County Public Health officials, and principles of the risk communication process (e.g., from initially hearing information through stages of understanding, believing, personalization, and response; Sorensen & Mileti, 1991). All of these facets increase the face validity of this work. Third, our staged scenario concentrated on the period of time during which the event had occurred and its immediate aftermath and, therefore, we cannot comment on the extent to which trust influences responses pre- and postevent. Focus group participants did note the importance of establishing trust in the community prior to an event, however, to insure that public health concerns are
genuine. Future work should address how trust components might vary in pre- and postevent situations. For example, in the recovery phase, fiduciary responsibility and competency may prove to be more important than honesty and consistency if individuals engage in a blaming behavior. Last, counts of trust passages represent only a crude indicator of salience because we “discovered” the trust components in a post-hoc manner, unlike for other elements where we asked participants to answer specific questions.

Conclusion

Our qualitative study examined the specific aspects of trust that may influence community response to public health messages during a bioterrorist event. Since information needs tend to differ across age, ethnic, and cultural groups (Kasperson, 1986, 1992; Kasperson, Golding, & Tuler, 1992), how African Americans, known to have lower trust in the public health system and its officials compared with Whites and Latinos, react in these unfolding situations has implications for risk communication. Social marketing approaches such as audience segmentation may be useful in tailoring information to specific populations such as African Americans (Andreasen, 1995) to promote community health and safety. Our findings are consistent with the risk communication literature (Sorensen, 2004) that suggests that honesty and consistency of information across multiple sources are essential to delivering information and recommending response procedures that guarantee community compliance. Based on our findings, specific recommendations for building trust in risk communications are to (1) use “credible” sources in written materials and oral communications, e.g., trusted sources were independent medical professionals (personal doctors, CDC officials) and national media outlets (CNN, NPR, talk shows), and citizens from that community; (2) provide full and accurate information in those materials; (3) have local officials demonstrate sincerity either through eye contact, providing evidence that they may be putting themselves at risk to help the public, and fully disclosing all information that would enable the public to make informed decisions; and (4) consistent with the findings of Covello and Allen (1988), it is important to involve the public early on in the communication process as a legitimate partner using active forms of communication.

References


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