

## Parental attitudes regarding interviews about injuries to their children

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### Abstract

**Background**—Questions about the circumstances of injuries, especially to infants and young children, might be perceived by parents as threatening or intrusive. Some institutional research review committees express concerns that interviews about childhood injuries may be offensive to parents. The perceived value and potential risk of questions about a young child's injury could affect the quality of responses.

**Objectives**—To assess parents' perceptions of threat and value of interviews about injury to their young children.

**Setting**—District of Columbia, 1 October 1995 to 30 September 1996.

**Methods**—Trained research assistants telephoned the parents of children seen in an emergency department or admitted to the hospital after an injury. To be eligible for inclusion the child must have been <3 years of age and a resident of the District of Columbia at the time of the event. After collection of sociodemographic information and circumstances of injury, the respondents were asked if the interview caused them to feel angry, offended or threatened, and if participation in the study was considered worthwhile.

**Results**—Seventy eight per cent of eligible families were contacted. Among those contacted, 93% completed the interview. Eighty two per cent of respondents were mothers and 11% fathers. Ninety per cent (95% confidence interval (CI) 88.4 to 91.6) of the respondents reported that the interview did not make them feel angry, offended, or threatened. Only 13 (1%; 95% CI 0.5 to 1.5) reported being very angry and 7.1% (95% CI 5.8 to 8.5) reported being a little angry. The majority of participants (61.2%, 95% CI 58.6 to 63.8) felt that participation in the study was definitely worthwhile and only 5.5% (95% CI 4.3 to 6.7) felt that it was not at all worthwhile. Parents of children with intentional injuries were more likely to report feelings of anger than parents of children with unintentional injuries (24% v 8%; p=0.02). The per cent of respondents reporting any anger was greater when the interview was conducted within 14 days of the hospital visit compared with later interviews (11% v 7%; p=0.02).

**Conclusions**—In similar populations most parents of young, injured children are neither upset nor threatened by interviews that probe for details about how their

children become injured. In general, collecting data aimed to prevent injuries is perceived as worthwhile, and parents readily cooperate with providing this information. Investigators and review committees should consider that interviews about infant and young child injuries are of no or minimal risk.

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Keywords: interviews about injuries; injury survey methods

To understand the causes of injuries and to develop effective interventions frequently requires the collection of descriptive details about how injuries occur.<sup>1</sup> Surveys and questions about the circumstances of injury events might be perceived by parents or those responsible for the care of child injury victims as threatening or intrusive. In general, people are sensitive about disclosing behavior when it diverges from social norms or when convention dictates that it is too private to be discussed publicly. Perceived sensitivity to such questions varies according to culture and social group, time, setting, and the purpose for collecting the information.<sup>2</sup> Questions about the detailed circumstances of an injury to a child could cause a parent or caregiver to feel threatened or angry for several reasons: responsibility or guilt that the injury occurred; feeling accused or blamed for the injury; fear of adverse consequences or accusation of abuse; or simply, intrusiveness and inconvenience. Additionally, revisiting the event may be a painful or otherwise unpleasant process that could lead to negative feelings towards the interview.

If discussion of events and/or behavior is perceived as threatening or causes strong negative feelings, respondents to interviews or questionnaires are more likely to under-report or mis-report information.<sup>3</sup> Efforts to minimize the threat of questions about sensitive information and to determine the extent to which questions cause a respondent to feel threatened or angry are important to minimize subsequent under-reporting bias and to determine the possible extent of such biases.

When initiating a surveillance study to determine the mechanisms and causes of injuries to infants and young children in a large metropolitan area, we were concerned that questions probing into the circumstances could lead to under-reporting and mis-reporting if the questions were either perceived as threatening or caused feelings of anger. More specifically, we were concerned about questions probing into exactly what the child was doing

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before and at the time of the injury and about who was supervising the child. These types of questions could be perceived as blaming the parents, and the parents might feel accused of neglect leading to injury and react negatively to the interview. At one participating hospital, the institutional review board granting approval for conduct of the study classified the use of questions that probe into circumstances of injury in infants and young children as constituting “more than minimal risk” because of possible perceptions of threat or anger in response to such questions. To determine the extent to which questions that probe into the circumstances of injuries in infants and children engender negative feelings or are perceived as threatening, respondents to telephone interviews in this follow up study were queried about how they felt about the interview.

### Methods

As part of a research initiative to reduce infant mortality and morbidity in Washington DC, we conducted a surveillance study of all injuries to infants and children less than 3 years of age. Children who were residents of the District of Columbia and who were seen in an emergency room or admitted to the hospital between 1 October 1995 and 30 September 1996, were eligible for inclusion. Using emergency room and inpatient admission logs to identify children seen for an injury, we abstracted demographic information and information regarding the cause and nature of the injury from medical records. At three of the city’s 10 participating hospitals, trained research assistants contacted the parents of eligible patients by phone to invite them to complete a short interview about their child’s injury. Attempts to contact parents began as soon as one day after the event. If an interviewer reached an answering machine, a message was left informing the potential respondent about the study and offering them a small incentive (a five dollar gift certificate) to return the call.

Trained research assistants conducted the majority of the interviews after obtaining informed consent. The interviewers completed a week of training that included sessions about sensitive interviewing skills. Using a standard introductory script, participants were informed that they were being called because their child was injured and was seen in one of the participating hospitals. The interviewer explained that we were conducting a study to find out about how different types of injuries happen to children under the age of 3 years so that we can design effective injury prevention programs for parents, caretakers, and the District of Columbia communities. Parents were also advised that participation in the study was voluntary, and that they could refuse to answer any question that made them feel uncomfortable. Finally, they were told that their answers would be kept confidential except if the answers provided information that was important for the care and protection of the child, in which case the information would be given to the doctor who examined the child.

Table 1 Respondent sample

	No (%)
Total contacted for interview	1446 (100.0)
Non-respondents	
Language barrier	9 (0.6)
Refusals	42 (2.9)
Partial complete	46 (3.2)
Total respondents	1349 (93.3)

After pertinent questions for demographic information, the interviewer asked about what the child was doing before and at the time of the injury, details of how the injury occurred, what caused the injury, precautions being used to prevent injuries, and who was caring for the child and/or witnessed the injury. Before concluding the interview, respondents were asked if they felt that participating in the study was “definitely”, “somewhat” or “not at all worthwhile”, and if the interview made them “feel angry, offended, or threatened” by “a lot, a little, or not at all”. The average duration of the interview was about 10 minutes.

Associations between independent variables and outcome variables were assessed using the  $\chi^2$  test. Fisher’s exact test was used when the cell sizes were small. Children with fatal injuries were not included because the numbers were too small (four unintentional injury, four homicide, 10 sudden infant death syndrome, one undetermined) to draw meaningful conclusions.

### Results

For the year of data collection, 1868 infants and children less than 3 years of age were identified for inclusion. We were unable to contact 422 (22%) of eligible families. Based on data abstracted from medical records, children from families contacted did not differ significantly from those whose families we were unable to contact with respect to age or gender of the injured child, or cause of injury. Children of families contacted were less likely to be African American: 81.6% compared with 87.2% African American among contacts and non-contacts, respectively ( $p < 0.01$ ). Of those contacted, interviews were successfully completed for 93% (1349); 2.9% (42) refused to participate; 3.2% (46) completed only part of the interview; and 0.6% (9) could not be interviewed due to a language barrier (table 1). The 1349 respondents did not differ from the 97 contacts who didn’t complete the interview with respect to any of the above mentioned variables. The injured child’s mother was interviewed most frequently (82%), followed by the child’s father (11%), a grandparent (4%), and a friend or other relationship to the child (3%). The majority of the interviews (63%) were conducted within 60 days of the event and 31% were conducted within two weeks (table 2).

Regarding whether the interview caused respondents to feel angry, offended, or threatened (hereafter referred to only as “angry”), only 13 (1.0%; 95% confidence interval (CI) 0.5 to 1.5) replied that the interview caused them to feel “a lot” angry; 96 (7.1%, 95% CI

Table 2 Characteristics of respondents

Characteristic	No (%)
<b>Relationship</b>	
Mother	1105 (81.9)
Father	145 (10.8)
Missing/other	99 (7.3)
<b>Age (years)</b>	
<20	119 (8.8)
20-29	635 (47.1)
30-59	506 (37.5)
60+	11 (0.8)
Missing	78 (5.8)
<b>Household income (\$)</b>	
<10 000	400 (29.7)
10 000-24 999	309 (22.9)
25 000-49 999	182 (13.5)
>50 000	191 (14.2)
Unknown	192 (14.2)
Refused	70 (5.2)
Missing	5 (0.4)
<b>Days to interview</b>	
0-14	420 (31.1)
15-30	224 (16.6)
31-60	200 (14.8)
61-90	115 (8.5)
91-120	104 (7.7)
121-270	219 (16.2)
271+	62 (4.6)
Missing	5 (0.4)
<b>Cause of injury</b>	
Cut/pierce	82 (6.1)
Falls	588 (43.6)
Motor vehicle/traffic	77 (5.7)
Struck by object	138 (10.2)
Fire/flames/scalds	83 (6.2)
Poisoning	84 (6.2)
Other	297 (22.0)
<b>Severity</b>	
Emergency room only	1273 (94.4)
Hospitalized	76 (5.6)

5.8 to 8.5) reported feeling “a little” angry; and 26 (1.9%, 95% CI 1.2 to 2.6) gave indeterminate responses (fig 1). The remaining 1214 (90.0%, 95% CI 88.4 to 91.6) were “not at all” upset by the interview. Regarding the perceived value of the study, 825 (61.2%, 95% CI 58.6 to 63.7) felt it to be “definitely worthwhile”, 386 (28.6 %, 95% CI 26.2 to 31.0) “somewhat worthwhile”, while only 74 (5.5 %, 95% CI 4.3 to 6.7) thought it “not at all worthwhile” (fig 2).

To identify factors that may have contributed to feelings of anger or the perception of value, we examined possible associations to the sensitivity questions (table 3). The parents of children with intentional injuries, though relatively few, were more likely to report feelings of anger than those of children with unintentional injuries (23.8% v 8.0 %, p=0.02). With respect to the length of time from injury to the

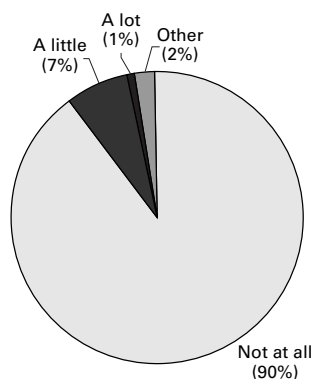


Figure 1 Did this survey make you feel angry, offended, or threatened? (n=1349).

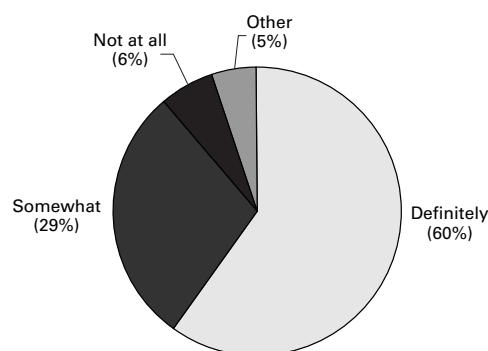


Figure 2 Did you feel that participating in this study was a worthwhile experience? (n=1349).

interview, the portion of respondents reporting any anger was greatest within 14 days compared with interviews conducted more than two weeks from the injury (10.8% v 7.0 %, p=0.02). Not unexpectedly, anger about the interview was related to feeling that participation was not worthwhile. The frequency of reported anger about the interview was not different for any of the other variables: where the injury occurred, the cause or type of injury, age of respondent, respondent’s relationship to the child, household income, whether the respondent witnessed the injury, and who was caretaker at the time of the injury.

Table 3 Factors related to respondents feeling “a lot” or “a little” angry about being interviewed

Characteristic*	No†	“A lot” or “a little” angry (%)	p Value
<b>Injury intentionality</b>			
Intentional	21	23.8	0.02
Unintentional	1302	8.0	
<b>Interval to interview (days)</b>			
0-14	415	10.8	0.02
≥15	903	7.0	
<b>Felt participation was worthwhile</b>			
“Definitely”	817	4.8	<0.01
“Somewhat” or “Not at all”	452	14.2	

\*Factors not related to outcome: age of respondent, witness to injury, caretaker of victim at time of event, relationship of respondent to victim, injury severity (hospitalized v emergency department), location of injury, income, external cause of injury. †Includes data for the 1349 respondents with a coded response to the question about whether the interview made them feel angry, offended, or threatened. Totals for each characteristic do not add up to 1349 due to missing data.

Table 4 Factors related to respondents feeling that participation was “definitely worthwhile”

Characteristic*	No†	Definitely worthwhile (%)	p Value
<b>Location of injury</b>			
Public non-commercial	100	53.0	0.01
Residential and other	1166	65.3	
<b>External cause of injury</b>			
Poisoning	82	78.1	0.01
All other causes	1203	63.3	
<b>Response of anger to interview</b>			
“A lot” or “A little”	103	37.9	<0.01
“Not at all”	1166	66.7	

\*Factors not related to outcome: age of respondent, witness to injury, caretaker of victim at time of event, relationship of respondent to victim, interval between hospital visit and interview, income, injury severity (hospitalized v emergency department), intentionality of injury. †Includes data for the 1349 respondents with a coded response to the question about whether the interview was worthwhile; totals for each characteristic do not add up to 1349 due to missing data.

More parents of poisoning victims thought participation to be definitely worthwhile than those of children injured from all of the other causes combined (78.1% *v* 63.3 %,  $p=0.01$ ) (table 4). Fewer parents whose child was injured in a public place felt the participation was worthwhile than those injured in residential or transportation settings (53.0% *v* 65.3%,  $p=0.01$ ). For the remaining variables examined there was no association with the value of participating in the study.

### Discussion

This study demonstrates that, in an urban setting, parents are generally not threatened or offended by research questions that probe into the circumstances of injuries to their children. This conclusion is supported by an extremely low rate of refusal to participate in the interview (2.9%) compared with other phone interview studies<sup>1</sup> and by the findings that only 1% of participants were “a lot” angry while only 7% of participants were “a little” angry. It is gratifying that a majority of parents felt that participation in a study that addresses childhood injuries was very worthwhile, with only 6% feeling that it was “not at all worthwhile”. Such responses suggest that requests for needed information regarding the causes of injuries will be met with cooperation by affected parents and families.

These findings apply primarily to similar populations with similar experiences to this study population, namely urban parents and guardians of children 0 to 3 years of age with mostly minor injuries experienced typically by this age group. However, in this study population, attitudes about the interviews did not vary significantly by family income, suggesting that all income groups are receptive to interviews about child injury, including those with income over \$50 000. None the less, when undertaking studies of different populations that probe about details of child injury, this conclusion may need to be confirmed.

That even a small number of parents were offended or angry with a probing interview might be viewed by some as counter productive and a negative effect of the study. However, a small portion of subjects may react negatively to any interview regardless of the topic, and a universally positive reaction is not realistic. Comparisons with responses in other studies on different topics would be needed to conclude that it was the content of the interview and not the method itself that led some respondents to judge the interview negatively.

These conclusions assume that the responses by participants were accurate and relatively unbiased. In one respect the risk of inaccuracy is avoided by this interview because the questions refer to how the respondent feels about the current interview.<sup>5</sup> Thus, the respondent was the best and only source of information about his or her feelings and attitudes. Because the sensitivity questions were asked about the current interview, there was no possible recall bias from time lapse between the event and interview. Furthermore,

the participants were informed by a carefully worded and read verbatim consent request that participation was confidential, that they could withdraw from participating at any time, and that not participating would in no way affect the provision of care for their child. Such reassurances apply to the reporting of reactions to the interview as well as to the circumstances of injuries. Thus, social or institutional sanctions were not possible, though concerns of possible sanctions could have been present and caused reluctance to report negative feelings.

On the other hand, because of natural avoidance of negative statements or fear of possible offense by the interviewer to negative responses, interview respondents may have been more likely to give a favorable response than a negative one.<sup>6-7</sup> To minimize this potential bias, closed end choices were used, and the negative choices (“a lot angry”, “not at all worthwhile”) were presented as options equal in value to positive response choices. Since these two questions addressed how the experience of participation caused parents to feel, the only source was to ask parents to report this information. Unlike asking for factual data about the frequency of behavior considered sensitive, the variable of interest here is the presence of certain feelings or attitudes. The reliability of self reports might have been increased by having a second research assistant contact the participant to confirm the reliability of the first report. Unfortunately, this was beyond the scope or resources of the project. Furthermore, a second interview might have changed the response.

The factors associated with negative attitudes reported by the participants demonstrate an expected relationship between the responses to the two sensitivity questions. The respondents who expressed even a little anger with the interview were less likely to consider participation worthwhile compared with those who were not at all angry (38% *v* 67%). That parents interviewed close in time to the injury of their child (within two weeks) have a 50% greater rate of reporting angry feelings about the interview as those interviewed beyond 14 days, suggests an inverse relationship between proximity to the event and responses to inquiries about it. This suggests that with some separation in time from an injury event it is less disturbing for parents to talk about it. The need to minimize the recall bias by conducting the interview as close as possible to the event must be balanced with the need to respect the sensitivities of respondents. Two weeks may be an optimal time interval to conduct probing interviews.

In conclusion, most parents or guardians in similar urban settings are neither upset nor threatened by interviews that probe for details about injury of their children when conducted for the purpose of preventing injuries in children. In general the parents perceive the collection of data for this purpose as worthwhile and readily cooperate with providing this information. Investigators and review committees should consider interviews for information about childhood injury to be of no or only minimal risk.

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### Seventh World Conference on Injury Prevention and Control, 2004

Bids are invited for hosting the seventh World Conference on Injury Prevention and Control in the year 2004.

Injury prevention and control is a maturing area of concern and action. It involves many disciplines and interest groups that are active in various settings such as the work place, in transportation, in sports, and in the domestic environment. Recognising the potential value of intersectoral liaison and collaboration, the World Health Organization and its group of WHO Collaborating Centers for Injury and Violence Prevention has established the series of conferences on injury prevention and control. These conferences aim at facilitating the exchange of information and experiences in research throughout the world and in developing the professional level of injury prevention practices.

The first conference in the series was held in Stockholm in 1989, followed by other successful conferences in Atlanta (1993), Melbourne (1996), Amsterdam (1998), and New Delhi this year. The Sixth World Conference will be held in Montreal in 2002. The average number of participants at these conferences is one thousand, representing injury prevention practitioners and researchers from a wide variety of countries around the world. Most participants are working in research, in particular in injury epidemiology, in programming, and policy development at national or state level and in prevention projects at local and national level. The diversity in backgrounds of the participants offers great added value to these conferences, bridging the gaps between sectors, disciplines, and safety domains.

The International Organising Committee is starting preparations for future conferences and therefore seeking proposals for hosting the Seventh World Conference in 2004. Such proposals should be sent in before 1 June 2000. The IOC and the WHO Collaborating Centers will make a final decision in autumn this year jointly.

More information on the series of conferences, including guidelines for preparing your bid, can be obtained at the coordinating secretariat of the IOC at:

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