

## POPULATIONS AT RISK

## Physical Abuse of Urban Native Americans

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**To ascertain the extent of, and risk factors for, physical abuse among older urban American Indian/Alaska Natives (AI/ANs), we conducted a chart review of 550 urban AI/AN primary care patients  $\geq 50$  years old seen during 1 year. Mistreatment was documented in 10%. A logistic regression found younger age ( $P < .001$ ), female gender ( $P < .001$ ), current depression ( $P < .001$ ), and dependence on others for food ( $P < .05$ ) to be significant correlates of physical abuse. In only 31% of instances of definite abuse were the authorities notified. We conclude that providers should be alert to the possibility of physical mistreatment among older urban AI/ANs. Improvements in detection and management are sorely needed.**

**KEY WORDS:** victimization; elder abuse; American Indians.  
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Elder abuse is recognized as a national problem, yet little is known about victimization of American Indian or Alaska Native (AI/AN) elders. Rates of abuse reported among AI/ANs have ranged from more than 2% to 46%, with probable variation across tribes by socioeconomic factors.<sup>1-3</sup> Typically, these surveys have used convenience samples and not examined abuse in urban or health care settings. Additionally, among providers serving AI/ANs, lack of recognition may be combined with the mistaken assumption that, because of the respect Native cultures accord older adults, their mistreatment is unlikely. Thus, it is not surprising that official reports of abuse of AI/AN elders are rare.<sup>4</sup> Because our experience indicated otherwise, we reviewed the medical records of 550 older AI/ANs to examine the frequency of, and risk factors for, physical mistreatment.

## METHODS

Elders were defined as persons  $\geq 50$  years old because in AI/AN culture, "elder" status is not solely a function of chronological age and may be conferred earlier

than in the majority culture. Furthermore, impairments associated with aging in AI/ANs may occur 20 years earlier than in the general population.<sup>5</sup> Since elders constitute a much smaller percentage of the AI/AN population compared with other minorities,<sup>6</sup> lower age eligibility criteria also exist for some federally and state funded programs.

This study was conducted at the Seattle Indian Health Board, which provides health care to the King County Native population. Overall, approximately 50% of their clients are unemployed; 80% have incomes below the "poverty line"; and 58% have no health insurance. The Seattle Indian Health Board's computerized information system was used to identify all AI/ANs  $\geq 50$  years old seen between June 1994 and June 1995; this process yielded 550 names.

The charts of all 550 patients were reviewed by a professional abstractor who was trained and supervised in the chart review procedures by a general internist (DB). The steps in this training included multiple sessions in which the study forms were developed, pilot tested on actual medical records, discussed with the general internist, and then modified. Subsequently, charts were reviewed specifically for discrepancies in categorization and completeness between the general internist and the abstractor. Because the training was an iterative process, tests of interrater reliability were not applied. Information was collected on demographics, signs of physical abuse, caregiver characteristics, substance abuse, medical and psychological problems, and current medications.

Since there are no widely accepted guidelines on elder abuse, we developed criteria using information from 2 publications.<sup>7,8</sup> Physical abuse was defined as "definite" if the medical record explicitly indicated that an injury was inflicted by a family/household member, caregiver, or other person; as "probable" if the patient was the object of abuse, but no etiology was indicated; and as "suggestive" when the alleged cause did not appear to account for the location or severity of abuse. Information on patient factors associated with physical abuse included multiple injuries at a single visit, multiple visits for injuries, injuries not reported by the patient, bilateral injuries to the face, neck, torso, 3 or more visits for nonspecific complaints annually, "failure to thrive," malnutrition, dehydration, pressure sores, marital conflict/domestic violence, and dependence on others for food. Caregiver factors were alcohol/drug use, mental illness in the home/caregiver residence, marital conflict/domestic violence, financial dependence of the caregiver on the elder, multiple caregivers, and medication noncompliance.

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Patients who were definitely or probably abused were compared with those who were not with  $\chi^2$  and  $t$  tests. Univariate logistic models, controlled for age and gender, were calculated for each predictor. To minimize type 1 errors, differences of  $P \leq .01$  were considered significant. To determine correlates of physical abuse, a logistic regression based on Pearson's  $\chi^2$  was used that incorporated variables significantly related to abuse in univariate logistic analyses (age, gender, alcohol/substance use, current depression, number of health problems, dependence on others for food, history of depression/suicide attempts). The Hosmer-Lemeshow goodness of fit test was nonsignificant supporting adequate fit of the model. For the regression analysis,  $P \leq .05$  was regarded as significant.

## RESULTS

Fifty-five (10%) individuals were definitely ( $n = 42$ ) or probably ( $n = 13$ ) physically abused; 38 (7%) were classified as "suggestive." Abused persons were significantly

more often women and younger than the nonabused group. Other demographic features were similar across groups. Victimized persons had significantly more alcohol use, current depression, history of depression/suicide attempts, and health problems (Table 1).

A greater proportion of abused patients had multiple clinic visits for injuries, bilateral injuries, malnutrition, marital conflict/domestic violence, dependency for food, and fewer caregivers at home (Table 2). Since only 2 abused and 40 nonabused patients had caregivers, we could not examine caregiver-associated factors. In 36 of the 55 cases, the gender of the abuser(s) was known. In 32 (88.8%) instances, the abuser was male and the victim was female; 1 (2.8%) episode involved male-to-male abuse, 1 (2.8%) involved female-to-female abuse, 1 (2.8%) included a male and female abuser of a woman, and in 1 (2.8%) case, a male and female abused a man. A provider-initiated action was documented in 13 (31%) of the definite and 3 (23%) of the probable cases.

A logistic regression model demonstrated that, compared to nonabused individuals, those with definite or probable physical abuse were 1.1 times more likely to be younger ( $P < .001$ ), 9.4 times more likely to be female ( $P < .001$ ), 4.4 times more likely to be currently depressed ( $P < .001$ ), and 2.7 times more likely to depend on others for food ( $P < .05$ ).

**Table 1. Demographic and Clinical Characteristics of Native Elders**

	Abused* <i>n</i> = 55 (10%)	Not Abused <i>n</i> = 495 (90%)
Mean age, y ( $\pm$ SD)	56 (6.1)	62 (8.7) <sup>†</sup>
Female, %	91	57 <sup>†</sup>
Education, %		
Grade school	24	18
Some high school	43	36
High school graduate	22	34
College	11	12
Employed, %	52	42
Marital status, %		
Single	16	22
Married	20	28
Divorced	40	29
Other	24	21
Number in household, mean ( $\pm$ SD)	2.2 (1.2)	2.0 (1.2)
Insurance type, %		
Medicare	31	33
Medicaid/GAU/DSHS	20	15
Private	14	20
Self-pay	31	31
Other	4	1
Current alcohol use, %	31	26 <sup>‡</sup>
Current substance use, %	7	3
Current depression, %	56	22 <sup>†</sup>
History of depression or suicide attempts, %	31	12 <sup>†</sup>
Feelings of guilt/ worthlessness, %	4	1
Number of health problems, mean ( $\pm$ SD)	4.4 (2.3)	3.6 (2.5) <sup>§</sup>
Number of medications, mean ( $\pm$ SD)	3.3 (2.3)	2.7 (2.3)

\*Defined as definite or probable as described in text. <sup>†</sup> $P \leq .001$ ; <sup>‡</sup> $P \leq .01$ ; <sup>§</sup> $P \leq .05$ .

## DISCUSSION

Our finding that 10% of Native elders suffered definite or probable physical mistreatment is similar to rates reported in previous studies of older adults and the limited

**Table 2. Patient Factors Associated with Physical Abuse of Native Elders**

	Abused* <i>n</i> (%)	Not Abused <i>n</i> (%)
<i>N</i>	55 (10)	495 (90)
Multiple injuries at a single visit	0	0
Multiple visits for injuries	3 (6)	4 (0.8) <sup>†</sup>
Documented injuries not reported by patient	0	0
Bilateral injuries to face, neck, torso	9 (16)	1 (0.2) <sup>‡</sup>
$\geq 3$ visits for nonspecific complaints per year	0	0
"Failure to thrive"	0	0
Malnutrition	2 (4)	1 (0.2) <sup>‡</sup>
Documented dehydration/ volume depletion	0	3 (0.6)
Pressure sores	0	0
Elder marital conflict/ domestic violence	39 (71)	28 (6) <sup>‡</sup>
Dependent on others for food	10 (18)	50 (10) <sup>†</sup>
Caregiver present at home	2 (4)	40 (8) <sup>†</sup>

\*Defined as definite or probable as described in text; <sup>†</sup> $P \leq .01$ ; <sup>‡</sup> $P \leq .001$ .

data available on Native populations. In this regard, 11% of older Eskimos reported having been victimized and consequently feeling sad.<sup>2</sup> Similarly, in 2 small studies, 19% and 16% of Northern Cheyenne<sup>9</sup> and Navajo elders,<sup>1</sup> respectively, reported physical mistreatment. Although denial of food, lack of medicine, and being hit were each reported by more than 2% of a large random sample of Navajos, 40% overall acknowledged suffering some form of abuse or neglect.<sup>3</sup>

Consistent with the literature, we found that females more commonly suffered abuse than males.<sup>10</sup> In studies specific to Native people, abuse among AI women has been previously associated with younger age, not being married, low socioeconomic status, and substance abuse.<sup>11,12</sup> More relevant to our sample, factors that appear to increase the risk of Native elder mistreatment include sudden care needs, mental problems, and lack of income.<sup>1</sup> In the current study, some known risks such as younger age, current depression, and dependence on others for food were correlated significantly with physical mistreatment, while others such as alcohol/substance abuse and caregiver factors were either not correlated with abuse or could not be assessed.<sup>10-13</sup>

All states have laws that require providers to report suspected abuse to an official agency.<sup>11</sup> Yet, only 18% of cases are reported, although nearly half are substantiated.<sup>10</sup> In this regard, of particular concern was the apparent inadequacy of provider reporting: we found documentation in the medical records that authorities were notified in only 31% of the definite cases. Although providers might have complied with abuse reporting requirements but not noted this in writing, this finding underscores the need for providing clinicians with the skills to screen for, and respond to, mistreatment.<sup>14</sup>

Our study was limited by the absence of a well-accepted case definition and recommendations on intervention, an issue complicating all studies of elder abuse.<sup>15</sup> This is compounded by variability in different ethnic groups' perceptions of abuse.<sup>16-18</sup> Chart review studies also are subject to biases of incomplete information and retrospective case ascertainment. Finally, since these data were collected in an urban practice, our results may not generalize to individual tribes or reservation-based communities.

In conclusion, our results are congruent with previous studies of older adults seen in health and human service settings. Ten percent of patients were documented to have suffered some form of definite or probable physical mistreatment and an additional 7% had evidence suggestive of such abuse. Yet, only a minority of cases were known to be reported to authorities. Factors previously reported to be associated with physical abuse such as female gender were correlated with mistreatment. Given the retrospective nature of this study, we believe that these figures likely represent underestimates of the actual prevalence of abuse. Our findings argue for educational efforts targeting providers to improve the detection and management of

suspected abuse, and suggest the need for prospective studies in AI/AN populations.

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