

Prevalence of Elder Abuse in the United States: A Comparative Report Between the National and Wisconsin Data

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ABSTRACT

This study is designed to calculate the prevalence of elder abuse in Wisconsin and the United States and to perform a geographic comparison of elder abuse prevalence by county in Wisconsin. The national data was obtained from the National Elder Abuse Incidence Study, and the Wisconsin data from the Department of Health and Family Services. The population statistics were obtained from the United States Census Bureau. The prevalence of elder abuse based on substantiated cases was 2.7 per thousand (236,479 cases) in the United States and 1.6 per thousand (2629 cases) in Wisconsin in 1996 ($p < 0.05$). There was an increase in elder abuse prevalence in Wisconsin between 1990 and 1998. Larger metropolitan counties had the largest number of reported cases but more rural counties had the highest prevalence (14 per thousand in Vilas County) and the highest rate of increase in elder abuse prevalence (increase by 9.4 per thousand in Langlade County). This study shows that there are national and local geographic variations in the prevalence of elder abuse cases reported to Adult Protective Services. Further studies are needed to identify factors that led to these variations.

INTRODUCTION

For years elder abuse went unnoticed. With the aging of the American population, more attention is being drawn to this problem. The National Elder Abuse Incidence Study has estimated that over 500,000 elderly persons are victims of elder abuse.¹ According to a recent study, elder abuse was found to have a high mortality rate and was identified as an independent risk factor for adverse outcome.² Despite

these alarming findings, elder abuse prevalence in the United States is not well known, and the geographic variations of this prevalence has not been previously studied. The new definitions and classifications that have been developed have made comparisons of prevalence of elder abuse between different locations possible. This study is designed to calculate the prevalence of elder abuse in Wisconsin and the United States and to perform a geographic comparison of elder abuse prevalence by county in Wisconsin between 1990 and 1998.

METHODS

This is a descriptive comparison of domestic elder abuse in Wisconsin and the United States. The national data was derived from the National Elder Abuse Incidence Study (NEAIS) conducted by the National Center on Elder Abuse.¹ The sampling of NEAIS did not include any Wisconsin counties. The NEAIS used both the Adult Protective Services (APS) reports and sentinel reports of elder abuse to obtain the total count of cases. To assure standardization, the National Center on Elder Abuse has issued a set of definitions of the different elder abuse types.⁴ APS members in the counties selected to be included in the NEAIS sample were trained to better identify cases and to be more familiar with definitions of elder abuse categories.⁴ NEAIS included all cases submitted to APS for investigation in the selected counties during a 10-week period. The Wisconsin data was obtained from the Wisconsin Department of Health and Family Services between 1990 and 1998. The data included all cases of suspected elder abuse reported to APS. Reporting of elder abuse is not mandatory in Wisconsin and, therefore, reports are done on a voluntary basis. Investigations of reported cases were done by APS and substantiated cases were managed accordingly. The definitions of elder abuse in Wisconsin were similar but not identical to the NEAIS definitions (Table 1). They were also published in the state statute.⁸ The nation-

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Table 1. Definitions of Elder Abuse Types in Both the National and Wisconsin Data

Types of Abuse	NEAIS ⁵	Wisconsin ⁹
Physical	Use of physical abuse	Similar, but includes sexual abuse
Sexual	Non-consensual sexual contact	Included in physical abuse
Emotional	Infliction of anguish, pain or distress by verbal or non-verbal acts	Similar
Financial/Material	Illegal or improper use of elder's funds, property, or assets	Similar
Self-Neglect	Elder's behaviors that threaten elder's health or safety	Similar
Abandonment	Desertion of an elder individual by a person who has custody or responsibility	Not used but included in neglect
Neglect	Refusal to fulfill obligations or duties	Similar but includes abandonment

al and state population data were obtained from US census bureau publications.⁹⁻¹¹ To obtain uniform rates and prevalence estimations, an elderly individual is defined as being 60 years or older. This definition has been used in both the national and Wisconsin elder abuse data. We did not include the sentinel reports data from NEAIS in the comparative analysis since it was not available in the Wisconsin data. Also, we did not compare categories of elder abuse that were not similar in their definitions in both data sources. Prevalence was calculated by dividing the number of reports by the count of the population 60 years or older. Economical and political data of the different counties in Wisconsin was also obtained.¹² Local data on APS was obtained for selected counties by phone interviews.

Chi-square test was used to compare differences in proportions between the national and Wisconsin data. A two-way analysis of variance was used to compare the trends for elder abuse change over time and for the geographic analysis.

RESULTS

The NEAIS study showed that in the United States an estimated 236,479 cases of elder abuse were reported to APS in 1996. At that time, the segment of the population 60 years or older numbered 43,951,000. The prevalence of elder abuse based on reports to APS was 5.4 per thousand. Of all the cases reported to APS, 115,110 were substantiated; i.e. an abuse event was verified. The prevalence of elder abuse based on the number of substantiated cases was 2.7 per thousand. In the same year, 2629 cases were reported to APS in Wisconsin, and the elder population (60 years or older) in 1996 was 885,828. The prevalence of elder abuse based on reported cases was 3.0 per thousand. This prevalence was lower than the national estimate in the same year based on the number of cases reported to APS

	National	Wisconsin	p-value*
Based on substantiated cases by APS	2.7	1.6	<0.005
Based on reports to APS	5.4	3.0	<0.005
Based on APS and sentinel reports	12.5	8.2	<0.005

($p < 0.005$). The overall substantiation rate in Wisconsin in 1996 was 55.4%, compared to 48.7% in the national data. The prevalence of elder abuse in Wisconsin based on substantiated reports was 1.6 per thousand.

According to NEAIS data, the total number of cases of elder abuse that were identified in the United States using sentinel reports in addition to reports made to APS were 551,011 (12.5 per thousand). Of those, 236,479 (42%) cases were reported to APS and 115,110 (21%) cases were substantiated. Assuming that Wisconsin had a similar pattern, then the prevalence of elder abuse in Wisconsin would be 8.2 per thousand. (Table 2)

We identified an increase in the number of reports to APS in Wisconsin between 1989 and 1998. In 1989, 1708 cases were reported, while in 1998, 3073 cases were reported to APS (an increase of 80% from the number of reports in 1989). The average increase over this time period was 7.1 (3% per year and the rate was 114 cases per each additional year ($p < 0.005$) (Figure 1). When accounting for the increase in the elderly population over the same time period, prevalence of elder abuse based on reported cases increased 1.2 per thousand. The average increase of

Figure 1. Number of Reports and Prevalence of Elder Abuse in Wisconsin, 1989–1998

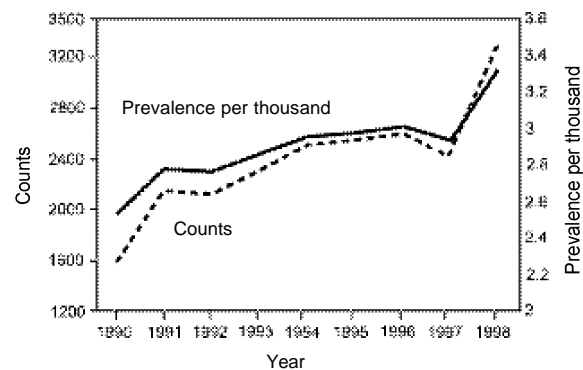


Table 3. Substantiation rates* of elder abuse reported to APS by type of abuse

Type of Abuse	National rate	Wisconsin rate		
		1996	1997	1998
Overall†	48.6%	55.4%	56.0%	51.8%
Self-Neglect	50.4%	63.0%	63.2%	60.3%
Physical Abuse	61.9%	57.9%	57.3%	54.8%
Emotional abuse	54.1%	49.7%	51.2%	49.8%
Financial abuse	44.5%	38.2%	41.2%	41.9%
Neglect by others	41.5%	44.5%	43.6%	38.6%

*Substantiation rate is the number of substantiated cases divided by the total number of cases reported to APS.
 †p-value for the difference between national rates and Wisconsin rates for 1996<0.005.

elder abuse prevalence was 0.1 cases per 1000 per year ($p < 0.005$) (Figure 1). The most common type of abuse reported in the national survey and in Wisconsin in 1996 was self-neglect (48% nationally and 53% in Wisconsin).

The overall substantiation rate in NEAIS was 48.67%, whereas in Wisconsin the rate was 55.38% in the same year ($p < 0.005$). The rate of substantiation varied by the type of elder abuse reported in NEAIS and Wisconsin. The rate also changed over time in Wisconsin (Table 3).

The very old (80 or older) accounted for the largest proportion of the reported cases in Wisconsin and NEAIS. In 1996, between 41.3% and 51.8% of all reported cases were 80 years or older (rate varied depending on the type of abuse). In the same year, 44.4% of all reported cases in Wisconsin were 80 years or older (45.6% in 1997 and 46.7% in 1998). Reported cases of elder abuse in the national and the Wisconsin data were more likely to be women (60%-

76% of reported cases in NEAIS and 65% of reported cases in Wisconsin were women). Other characteristics were difficult to compare between the national and Wisconsin data due to the differences in reporting.

The perpetrator was a close relative in the majority of the reported cases in NEAIS and Wisconsin. In 89.7% of all cases where a perpetrator was identified, the abuser was a family member in NEAIS. Of those, 47.3% were adult children and 19.3% were spouses. In the same year, 80% of the perpetrators identified in Wisconsin were family members. Of those, 38% were adult children and 22% were spouses.

We identified geographic differences in the increase in the number of cases reported to APS, elder abuse prevalence, and the rate of change in the number of cases reported and elder abuse prevalence between 1990 and 1998 (p -value for time effect < 0.005 , p -value for geographic effect < 0.005). Milwaukee County accounted for the largest number of cases reported to APS from 1989 to 1998. In 1998, 23.3% (717) of all reported cases were from Milwaukee County. This was followed by Dane (237), Kenosha (180), and Brown (170) Counties (Table 4). However, when calculating the prevalence of elder abuse by dividing by the number of the individuals 60 years or older for each county, Milwaukee ranked 22 (3.1 per thousand). Vilas County had the highest prevalence based on the number of reported cases to APS (14 per thousand) and the highest average prevalence over the last 10 years (14.1 per thousand). When comparing the number of total cases reported in 1990 and 1998, Milwaukee County had the highest absolute increase (199 cases) but Langlade County had the highest increase in prevalence (prevalence increased by 9.4 per thousand between 1990 and 1998). When comparing the rate of change per year of the different counties, Langlade County also had the highest rate, followed by Vilas County (Table 4).

Some counties in Wisconsin experienced a decline in the number of reported cases to APS between 1990 and 1998. Dane County experienced the highest decrease in the absolute number of cases reported between 1990 and 1998 (decrease of 42 cases), followed by Burnett County (a decrease of 16 cases), and Barron County (a decrease of 14 cases). Florence County experienced the highest decrease in elder abuse prevalence between 1990 and 1998 based on cases reported to APS (a drop of 9 per thousand).

DISCUSSION

This is the first report of the prevalence of elder abuse in the United States based on a national proba-

Table 4. Various measures of elder abuse in Wisconsin by county

Number of cases 1998		Prevalence* 1998		Increase in total cases [□] (90 to 98)		Increase in prevalence [□] (90 to 98)	
County	Cases	County	per 1000	County	△ [□]	County	△
Milwaukee	717	Vilas	14.0	Milwaukee	199	Langlade	9.4
Dane	237	Langlade	10.0	Kenosha	73	Vilas	7.3
Kenosha	180	Vernon	9.4	Outagamie	69	Vernon	6.1
Brown	170	Kenosha	8.1	Fond du Lac	65	Oneida	5.1
Outagamie	108	Washburn	7.0	Racine	60	Sheboygan	4.2
Racine	89	Menomine	6.8	Vilas	49	Green	3.7
Fond du Lac	88	Green Lake	5.8	Langlade	45	Bayfield	3.6
Waukesha	88	Brown	5.5	Oneida	43	Fond du Lac	3.6
Vilas	85	Oneida	5.5	Vernon	37	Lincoln	3.5
Marathon	66	Price	5.3	Sheboygan	35	Trempleau	3.2

p-values for the difference across counties and trend from 1990 to 1998 are all <0.005.
**Prevalence is calculated based on the US Census Bureau population estimate for 1998.¹⁴*
[□] Increase in total cases is calculated by subtracting the number of reports in 1990 from the total number of cases for 1998 in each country.
[□] Increase in prevalence is calculated by the difference in prevalence between 1990 and 1998.
[△] Difference between 1990 and 1998

bility sample. This report shows that elder abuse prevalence is underestimated when using only cases reported to APS. The NEAIS data showed that 57% of elder abuse cases are not being reported to APS. If this is also true in Wisconsin, the local prevalence based only on reported cases underestimates the actual prevalence of elder abuse. This suggests to clinicians and health care workers that cases of elder abuse are being missed. This phenomenon has been reported in other countries as well.¹³

The comparative analysis shows that in 1996, the prevalence of elder abuse was lower in Wisconsin as compared to the national prevalence based on the number of cases reported to the APS. This finding could be either because of a lower rate of reporting elder abuse to APS, or a lower rate of abuse in Wisconsin. Our finding suggests that the national data is not representative of the Wisconsin data. This means that states and counties should use the local data rather than the national data for programs and policies. This analysis also shows that the number of reported cases of elder abuse is on the rise in Wisconsin. Since accurate national data is lacking for the last 2 years, these local trends may reflect a similar increase at the national level.

Self-neglect was the most common type of elder abuse reported to APS in Wisconsin and NEAIS. This finding suggests that elder abuse management and prevention programs should target specifically factors that might lead to this type of abuse. This report shows that both at the national and Wisconsin levels, cases of elder abuse reported to APS were more likely to be women and in the very old age

group. Also, both data showed that perpetrators are more likely to be family members. These findings have important clinical implications. Patients and caregivers with these characteristics should be screened for elder abuse, and a more detailed evaluation should be performed if elder abuse is suspected. Patients should be queried about feeling safe, whether someone is “hurting or harming them,” or whether they have been “confined against their will.”¹⁵⁻¹⁸ The physical exam should include identifying evidence of injury, malnutrition, or neglect.¹⁵⁻¹⁸

Our geographic analysis shows that larger counties had the highest number of reported cases of elder abuse to APS in Wisconsin. However, when accounting for the elderly population distribution in the different counties, more rural counties had the highest prevalence and the highest increase of prevalence between 1990 and 1998. The increased prevalence in those smaller counties could be explained by either increase in reporting or by an increase in the occurrence of elder abuse cases. Our interviews with the different APS agents in the counties with the highest rates suggest that a better outreach and screening program has led to a seemingly increased rate of elder abuse due to an increase in case finding rather than an actual increase in the occurrence of elder abuse cases. A similar finding has been reported previously in other states.¹⁴ State agencies should be alerted to these findings and try to identify explanations for this geographic variation and start programs for better case identification. They could provide insights on developing community programs that would improve elder abuse reporting.

These results should be interpreted cautiously. Our analysis was based on counts of cases reported to APS. No community-based information was obtained in Wisconsin. Therefore, the present data may not be an accurate estimate of the prevalence of elder abuse in the community but represents a call for action to calculate the exact prevalence of such a troubling phenomenon.

Although the epidemiological study of elder abuse is still evolving, many trends were identified. The progressive increase in elder abuse prevalence at the local level is a warning sign for researchers and health care workers to study further this form of domestic violence. Investigation, at the local and national level, should be conducted to explore reasons that lead to more elder abuse. Also, standardization of reporting programs and processes within a state and across states is needed so that the scope of the problem is properly understood and compared. Further studies are needed to identify factors that could explain the geographic variations that we have identified in our analysis. A detailed sociodemographic analysis by county of the state of Wisconsin and trying to correlate patterns that may have led to these variations would identify factors that improve elder abuse reporting or risks that lead to an increase in elder abuse.

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