


Iowa Dependent Adult Abuse Prosecutions From 2006 Through 2015: Health Care Providers' Concern

Journal of Primary Care & Community Health
2017, Vol. 8(3) 153–162
© The Author(s) 2017
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/2150131916688561
journals.sagepub.com/home/jpc


Jeanette M. Daly¹, Yinghui Xu¹, and Gerald J. Jogerst¹

Abstract

Background: In most states, health care providers are required to report abuse. Some states provide investigation feedback/findings to the reporter. The reporters rarely know if the perpetrator is convicted. The purposes of this study are to determine the incidence of Iowa dependent adult abuse prosecutions from 2006 through 2015, the incidence of convictions, and the association between dependent adult abuse prosecutions with county census and government characteristics. **Design and Methods:** Through the Iowa Court Information Systems, dependent adult abuse prosecution data were purchased for a 10-year time period. County demographics were obtained through the US Census and government data were Iowa State Association of Counties and the US Department of Agriculture. **Results:** During 2006–2015, there were 368 dependent adult abuse prosecution cases accounting for 482 original charges. Exploitation greater than \$100 was the dependent adult abuse charge most frequently cited. Within the 10 years, it accounted for 60% of the original charges. Of the 482 disposed charges, 251 (52%) of the charges were dismissed. A total of 122 (14%) counts resulted in probation, 73 resulted in prison, and 37 in jail. **Conclusions:** For the first time, information about dependent adult abuse prosecutions in Iowa is available. The latter 5 years, 2011 to 2015, of dependent adult abuse prosecutions are significantly higher than the first 5 years, 2006 to 2010. This project encourages health care providers to report dependent adult abuse to law enforcement if appropriate as well as adult protective services.

Keywords

community health, dependent adult abuse investigations, prosecutions

Dependent adult abuse conjures striking images, such as restraints, malnourishment, broken bones, burn marks, financial destruction, and confinement. Evidence suggests that abuse knows no cultural, ethnic, or geographic boundary. Health care providers in primary care services, community health programs, and other institutions are required to report allegations of abuse.

Law is an important public health tool that guides health care provider reporters of abuse, protects victims and those at risk of abuse, and that penalizes perpetrators who should be prosecuted.^{1,2} As of 1993, all states and the District of Columbia had enacted laws addressing abuse in domestic and institutional settings and in most states the law requires health care providers to report abuse.^{3–5} State laws addressing abuse vary by the age of those served. In 41 states' adult protective services laws, including Iowa, the age of those served is 18 years and older.⁵ There is a paucity of literature regarding dependent adult abuse, and even rarer is information regarding its prosecution.^{6,7} It is thought that a small fraction of dependent adult abuse cases ever reach a prosecutor's

office. But the phenomenon of abuse is now being recognized as a complex set of problems that involves health care, social service, and the legal system.⁶

The Iowa Code defines dependent adult abuse as “any of the following as a result of the willful or negligent acts or omissions of a caretaker”: (a) physical injury; (b) commission of a sexual offense; (c) exploitation of a dependent adult; (d) deprivation of the minimum food, shelter, clothing, supervision, physical or mental health care, or other care necessary to maintain a dependent adult's life or health; and (e) self-neglect (235B. Iowa Code Ann. §235B.2.5.a). In Iowa in 2015, 2391 cases of dependent adult abuse were accepted for investigation by Adult Protective Services, of

¹University of Iowa, Iowa City, IA, USA

Corresponding Author:

Jeanette M. Daly, Department of Family Medicine, University of Iowa, 01290-F PFP, 200 Hawkins Drive, Iowa City, IA 52242, USA.
Email: jeanette-daly@uiowa.edu



which 376 (15.7%) were substantiated.⁸ The number of those substantiated cases that were prosecuted is unknown.

Making information available about the cases that are prosecuted appraises individuals who are abused, the health care providers who reported it, the investigators who work to provide evidence, and the community at large. Providing information raises the public's awareness of the issue, which draws attention to dependent adult abuse. Raising awareness is an important step in bringing about a change in attitudes and behaviors toward the prosecution of abuse.⁹ Prosecutions may help build community support to prevent dependent adult abuse or increase services for those at risk of this multifaceted problem.¹⁰

The importance of conducting this study is to provide valuable information for health care providers in primary care services and community health programs and the victims of abuse. Having assessed patients who are victims of abuse, investigated the abuse, and reported the abuse to state authorities, health care providers need to know the end results—that is, was the victim helped and the perpetrator prosecuted? They need to know if their work was worth their time and effort. Finding credence would encourage continued reporting of allegations and investigations. In addition, the justice system is a vital part of a comprehensive response to dependent adult abuse. Having health care providers report allegations of abuse to mandated agencies is but one component of the process of the investigation. A health care provider can also report allegations of abuse to law enforcement. The purposes of this project were to determine (a) the incidence of dependent adult abuse prosecutions in Iowa from 2006 through 2015, (b) the incidence of convictions of dependent adult abuse prosecutions, and (c) the association between dependent adult abuse prosecutions with county census and government characteristics.

Methods

This proposed study was submitted to the academic institutional review board, which determined it was not human subject research and therefore did not require review. Five resources were used to gather Iowa data: (a) the number of cases charged with dependent adult abuse for years 2006 through 2015, (b) the number of domestic dependent adult abuse investigations and substantiations from Adult Protective Services for years 2006 through 2015, (c) county demographics, (d) government characteristics, and (e) rural-urban continuum codes.

Definitions for the data gathered were (a) an *investigation*, which is the process undertaken to evaluate the potential victim after a report has been filed, (b) a *substantiation*, which is the finding that abuse actually existed according to state law, and (c) *prosecution*, the legal proceedings in which a person accused of a criminal offense is tried in a court for final judgment. Iowa's abuse legislation is

encompassed in its dependent adult abuse legislation. The *original charge* was the formal accusation filed by the prosecutor's office that a specific person has committed a specific crime. A *disposed charge* was the final accusation of the specific crime.

Dependent Adult Prosecution Data

A search of the Iowa Judicial Branch website did not provide information on the number of cases charged with dependent adult abuse. To determine if dependent adult abuse prosecution data were available, an Iowa Court Information Systems Application Support team member was contacted. This contact provided us with an estimate of the cost to pull the data requested and clarify the variables needed. After 6 months of e-mail correspondence, to determine the variables to pull and the cost, it took another 2.5 months to obtain the Iowa dependent adult abuse prosecution data from 2006 through 2015, at a cost of \$1650. The information obtained was not considered confidential and was available through the Iowa Public Records Law (Iowa Code Chapter 22).

The data provided were case ID, original charge, disposed charge, disposed date, and the disposition results for all charge codes pertinent to the case. The nine charge codes for dependent adult abuse in Iowa included the following: 235B.12 wrongful communication, 235B.20(2) intentional serious injury (Felony C), 235B.20(3) reckless serious injury (Felony D), 235B.20(4) intentional physical injury (Felony C), 235B.20(5) exploitation greater than \$100, 235B.20(6) reckless serious injury (Aggravated Misdemeanor), 235B.20(7) otherwise intentionally knowingly commits dependent adult abuse, 235B.20(8) exploitation, and 235B.3(12) failure to report dependent adult abuse. The data available from courts online allowed for no profiling of those prosecuted or not.

Adult Protective Services Dependent Adult Abuse Data

The Iowa Department of Human Services dependent adult abuse program manager prepares a biannual report of dependent adult abuse cases that is published on the Iowa Department of Human Services website. Reports were obtained from 2006 through 2015. For comparison in the 10-year period, the investigation and substantiation data are provided.

County Demographics

County demographics were obtained through the US Census State and County QuickFacts.¹¹ Six continuous demographic variables were selected based on earlier research^{12,13} and are as follows: 2010 population 18 years and older, percent of persons 25 years and older that are high school

graduates (2008-2012), percent population Hispanic or Latino, median household income (2008-2012), percent persons below poverty level (2008-2012), and 2010 persons per square mile.

Government Characteristics

The county government resources included the following continuous variables: county attorney mean salaries, years worked as county attorney, sheriff's mean salaries, and years worked as county sheriff in 2010. Data were retrieved from the Iowa State Association of Counties survey.¹⁴ Government variable selection was based on earlier research in which higher dependent adult substantiations were significantly associated with higher rates of prosecuted felonies and the county attorney's and sheriff's annual salary.¹⁵

Rural-Urban Continuum Codes

The Rural-Urban Continuum Codes are a classification scheme that distinguishes metropolitan counties by the population size of the metropolitan area, and in nonmetropolitan counties by the degree of urbanization and adjacency to a metropolitan area. The 9 codes range from 1, designated as "metro-counties in metropolitan areas of 1 million population or more" to 9, designated as "completely rural or less than 2500 urban population, not adjacent to a metropolitan area." As delineated by the US Department of Agriculture, codes 1-3 designate metropolitan areas and codes 4-9 designate nonmetropolitan areas.¹⁶ Based on the 2010 census, in Iowa, 20 counties were designated metropolitan and the other 79 were designated nonmetropolitan.

Statistical Analysis

For the first purpose, descriptive statistics are calculated for prosecution cases and original dependent adult abuse charges. For the second purpose, descriptive statistics are calculated for all dispositions of the disposed charges.

For the third purpose, the outcome variable is the prosecution rate by county and was correlated with county demographics, government characteristics, and rural-urban continuum codes. The prosecution rate was determined by dividing the 10 years of total prosecutions by the total population 18 years and older by county. The prosecution rate could not be determined by using the number of dependent adult abuse substantiations in the formula because the number of dependent adult abuse substantiations that were investigated and prosecuted by the courts is unknown. The outcome variable did not have a normal distribution, and it skewed in the positive direction. Therefore, Spearman's correlation was used to test the outcome, prosecution rate, for an association with independent variables.

Table 1. Dependent Adult Abuse (DAA) Criminal Cases, Original and Disposed Charges, Adult Protective Services (APS) Investigations and Substantiations for 2006-2015.

Year	APS Investigations	APS Substantiations	DAA Original Charges	DAA Disposed Charges	DAA Prosecuted Cases
2006	1442	280	27	24	24
2007	1674	398	23	21	20
2008	1858	359	25	24	23
2009	2423	538	64	60	32
2010	2794	439	56	56	42
2011	2766	530	49	51	36
2012	2379	363	40	38	35
2013	2140	388	73	72	51
2014	2031	283	65	64	53
2015	2391	376	55	55	52
Total	21 898	3954	477	465	368

The number of prosecutions was categorized into 2 groups; the first 5 years 2006-2010 and the second 5 years 2011-2015 to determine if there was a significant difference in number of prosecutions over time. *T* test was conducted to determine any significant difference between the groups. All analyses were performed using SAS version 9.3 (SAS Institute Inc, Cary, NC).

Results

In a 10-year period, 2006-2015, there were 368 cases of dependent adult abuse prosecuted in Iowa. Cases ranged from a low of 20 in 2007 to a high of 53 in 2014 (see Table 1). The mean number of prosecution cases the first 5 years was 28.2 significantly different from the mean number of cases, 45.4, the latter 5 years ($P = .016$). Within the 368 individual cases, there were 482 original charges, of which 477 were dependent adult abuse charges and 5 were lesser charges of theft. At the time of the disposed charge, 465 remained dependent adult abuse charges and 17 were changed to other charges (see Table 1). Those 5 original theft charges were changed to dependent adult abuse in the disposed charges. In the same time period, Adult Protective Services investigations ranged from the lowest 1442 in 2006 to the highest 2794 in 2010, with 280 (19%) substantiated in 2006 and 439 (16%) substantiated in 2010 (see Table 1). For the 10-year period, there were 21 898 Adult Protective Services investigations, of which 3954 (18%) were substantiated. No significant changes in Adult Protective Services investigations or substantiations were found in the 10-year period.

Of the 9 Iowa charge codes for dependent adult abuse, no one was charged with wrongful communication. Exploitation greater than \$100 was the dependent adult abuse charge code most frequently cited each year (see Table 2). Within the 10 years, it accounted for 60% of the

Table 2. Dependent Adult Abuse Original Charges for Cases 2006-2015.

	Wrongful Communication	Intentional Serious Injury ^a	Reckless Serious Injury ^b	Intentional Physical Injury ^a	Exploitation >\$100 ^b	Reckless Serious Injury ^c	Otherwise Intentionally/ Knowingly	Exploitation	Failure to Report	Total
2006	0	0	0	5	16	3	0	3	0	27
2007	0	2	0	4	8	5	0	4	0	23
2008	0	0	1	2	15	2	0	5	0	25
2009	0	0	5	3	46	2	0	6	2	64
2010	0	2	4	2	36	1	8	2	1	56
2011	0	2	4	5	22	3	11	2	0	49
2012	0	0	1	1	30	1	5	2	0	40
2013	0	1	0	2	46	4	7	13	0	73
2014	0	3	0	6	43	1	11	1	0	65
2015	0	3	2	3	26	3	18	0	0	55
Total	0	13	17	33	288	25	60	38	3	477

^a Felony C.^b Felony D.^c Aggravated misdemeanor.

original charges. Two other codes, intentional physical injury and reckless serious injury, were cited each year. For 2 of the 10 years, 3 persons were charged with failure to report abuse.

Once the criminal case is disposed, charges are finalized and disposed charges stand. Some of the original charges were converted to different disposed charges. An example would be an original charge of 235B.20(5) exploitation greater than \$100, which is a felony D penalty, changed to a disposed charge of 714.2(3) theft third degree, which is an aggravated misdemeanor that results in a lesser penalty. Another example was an original charge of 235B.20(4) intentional physical injury, which is a felony C penalty, changed to 235B.20(6) reckless serious injury, which is an aggravated misdemeanor. These 368 cases had 18 different disposed charge types with felony and misdemeanor penalties: 8 of the original dependent adult abuse charges and 10 lesser charges noted in columns 10 through 19 in Table 3. The main disposed charge was 235B.20(5) exploitation greater than \$100 (see Table 3).

Of the 482 disposed charges for the 368 dependent adult abuse cases, for the disposition of counts, 251 (52%) charges were dismissed (see Table 4). A total of 122 (14%) counts resulted in probation. Of the remaining disposition counts, 73 resulted in prison, 52 suspended fines, 52 suspended prison, and 37 jail (see Table 4). Of the 274 disposed charges for exploitation greater than \$100, 169 (62%) were dismissed. In the 10 years, 97 of the 368 cases were in one county, Polk County, Iowa's most populated. Its prosecution rate was significantly higher than that of all the other counties combined ($P < .0001$). Of the 4 charges of failure to report dependent adult abuse, 3 were dismissed and 1 resulted in a fine.

No significant correlations were found of prosecution rates with the county demographics or government characteristics (see Table 5). The persons per square mile and sheriff's salaries by county were trending toward significance. In the ten-year period, there was a significantly higher mean of 11.05 prosecution cases in the metropolitan areas compared to 1.86 mean of prosecution cases in the nonmetropolitan areas ($P < .001$).

Discussion

For the first time, information about dependent adult abuse prosecutions in Iowa is available. It is known that not all cases of abuse are reported to the authorities.¹⁷ The 2391 Iowa Adult Protective Services investigated dependent adult abuse allegations in 2015 are probably a small fraction of the abuses that occur.¹⁸ Of those investigated, 376 (16%) were substantiated. However, in that same year only 52 dependent adult abuse cases were brought forth for prosecution and 14 of those cases were dismissed. Is it appalling or acceptable that only 52 cases were brought forth for

prosecution? Unfortunately, it is unknown if any of these 52 cases are even any of the same 376 Adult Protective Services cases. This study provides a baseline for comparison of prosecution cases across states. In the 10-year period, the dependent adult abuse prosecuted cases have doubled, significantly increasing from the first 5 years to the latter 5 years from a low of 20 (2007) a year to a high of 52 (2015). During this same time, the Adult Protective Services investigations and substantiations have not significantly increased.¹⁹

From the courts' online information, the source that brings forth dependent adult abuse cases that are prosecuted is unknown. If any of the cases are reflective of the cases that are investigated and substantiated by Adult Protective Services that is also unknown. However, some investigations of reported dependent adult abuse do lead to substantiations of the allegation, and then some do proceed to prosecutions. Neither does the Iowa Public Records Law allow for any Adult Protective Services' victim information to be disclosed to the public nor is the information available from courts online. It is unknown who the 3 persons were that were charged for failure to report. In Iowa, the statute listing the mandatory reporters includes health care providers and peace officers (Iowa Code Ann. §235B.1).

Information by victim is not tracked in either the Adult Protective Services' reports or courts online databases, but the Adult Protective Service's reports do list 7 aggregate outcomes of their investigations, including referred to law enforcement, court order requested to prevent further abuse, charged with a crime, sentenced, offender program, service provided, and no services provided. No other specific information about the outcomes is provided in the report. It is worthwhile to note, that the services provided is an assortment of programs that can be implemented depending on the needs of the dependent adult.

At this time, there are no other states to compare dependent adult abuse prosecutions. Meirson²⁰ notes that the Rhode Island Department of Elderly Affairs has approximately 900 elder abuse complaints each year, with about 85% of those substantiated, 7% investigated by police, less than 2% resulting in criminal charges, and few if any resulting in convictions. Those cases were tracked through the same department, and it is unknown in Rhode Island how many cases were investigated by other agencies and then were charged and prosecuted.

Reviewing the original dependent adult abuse charges, no wrongful communication charges were charge and it is evident that exploitation is the leading charge. The Iowa Code defines exploitation as the "act or process of taking unfair advantage of a dependent adult or the adult's physical or financial resources for one's own personal or pecuniary profit, without the informed consent of the dependent adult (235B. Iowa Code Ann. §235B.2.5.a.(c))" The law distinguishes between exploitation exceeding one hundred dollars

Table 3. Dependent Adult Abuse and Theft Disposed Charges for Dependent Adult Abuse Cases 2006-2015.

	Assigned Charge Categories										Added Charge Categories							
	Intentional Serious Injury ^a	Reckless Serious Injury ^b	Intentional Physical Injury ^a	Exploitation >\$100 ^b	Reckless Serious Injury ^c	Otherwise Intentionally/Knowingly	Exploitation	Failure to Report	Burglary with Aggravation	Theft Second Degree ^c	Theft Third Degree ^c	Theft Fourth Degree ^b	Assault ^c	Domestic Abuse Assault Without Intent Causing Injury	Theft Fifth Degree ^b	Wanton Neglect	Accessory to Felony	Total
2006	0	0	3	15	3	0	3	0	0	1	0	0	1	0	0	0	0	27
2007	1	0	3	7	5	0	5	0	0	0	0	0	0	0	0	0	0	23
2008	0	2	1	14	1	0	6	0	0	0	0	0	1	0	0	0	0	25
2009	0	4	2	45	2	0	5	2	0	0	0	0	0	1	1	0	0	64
2010	2	2	0	35	5	9	2	1	0	0	0	0	0	0	0	0	0	56
2011	2	4	3	23	5	12	2	0	0	0	0	0	0	0	0	0	0	51
2012	0	0	1	26	2	7	2	0	0	0	2	0	0	0	0	0	0	40
2013	1	0	1	42	5	10	13	0	0	1	0	0	0	0	1	0	0	74
2014	3	0	4	41	3	12	1	0	0	0	1	0	0	0	0	0	0	65
2015	2	3	2	26	3	17	1	1	1	0	0	0	0	0	0	0	0	57
Total	11	15	20	274	34	67	40	4	1	1	3	4	1	1	3	1	1	482

^a Felony C.

^b Felony D.

^c Aggravated Misdemeanor.

^d Serious Misdemeanor.

^e Simple Misdemeanor.

Table 4. Disposition of Counts for the Dependent Adult Abuse Charges 2006-2015.

	Community Service		Prison	Jail	Probation		Community Corrections	Deferred Judgment	Other/Miscellaneous	Imposed	Time Served	Not Guilty	Not Filed	No Supervision	Suspend	Suspended Fine	Revoked	Suspended Prison	Residential Facility	Suspended Jail	Prior Orders Continued	Restitution Service	DNA Required	Structured Fine	Drug Court	Sex Offender Program	Total
	Community Service	Extended Probation																									
2006	14	2	5	2	7	1	2	3	3	1	1	1	1	1	1	6	1	3	1	1	1	1	1	1	1	1	46
2007	6	1	1	1	7	1	2	2	3	1	1	1	1	1	1	4	1	2	1	1	1	1	1	1	1	1	47
2008	7	2	7	2	7	1	2	2	1	1	1	1	1	1	6	1	2	2	1	2	1	1	1	1	1	1	49
2009	52	4	4	1	4	1	2	2	2	1	1	1	2	2	1	1	1	2	1	1	1	1	1	1	1	1	72
2010	36	13	13	1	13	5	8	8	1	3	2	2	2	2	5	1	6	6	2	2	2	1	1	1	1	1	102
2011	30	11	11	2	11	2	1	1	1	2	1	2	2	1	3	1	9	9	1	3	1	1	1	1	1	1	86
2012	21	11	12	1	12	4	7	7	2	3	1	1	1	1	5	2	2	2	1	3	1	1	1	1	1	1	86
2013	32	2	28	2	28	5	4	4	2	2	2	1	1	1	12	1	15	15	3	7	1	1	1	1	1	1	162
2014	33	3	9	2	9	6	2	2	6	6	1	3	2	2	6	1	5	5	4	4	4	3	3	1	1	1	110
2015	20	26	26	2	26	15	6	6	8	2	2	2	2	2	4	3	8	8	6	5	4	6	6	1	1	1	132
Total	251	102	102	1	102	42	35	35	8	20	7	12	9	9	2	52	8	52	6	26	1	1	9	1	1	1	892

Table 5. Spearman Correlations of Dependent Adult Abuse Prosecution Rates (2006–2015) with County Demographics and Government Characteristics.

	Prosecution Rate	
	Spearman Correlation Coefficient	P
County demographics		
Population 18 years and older	0.150	.138
Percent Hispanic population	0.126	.215
Percent high school graduates 25 years and older	-0.015	.886
Median household income	0.040	.694
Percent persons below poverty level	0.062	.544
Persons per square mile	0.176	.082
Rural/urban continuum code	-0.106	.298
Government characteristics		
Mean county attorney salary	0.085	.403
County attorney's years in office	-0.013	.902
Mean sheriff's salary	0.175	.084
Sheriff's years in office	-0.008	.937

whose penalty is a felony and a hundred dollars or less as a simple misdemeanor. Over the ten-year study period, 88% of the exploitation charges were felonies. A paper trail is easier to follow in an investigation of exploitation compared with an investigation of verbal altercations. Financial exploitation was the main disposed charge, at 274 charges for 2006–2015. However, 62% of those charges were dismissed. Other research has found that of 42 charges filed for financial exploitation through an Elder Abuse Forensic Center during a 21-month period, 38 (90%) of the 42 were successful in a plea/conviction.²¹ Another study of 71 Adult Protective Services–substantiated elder abuse cases in Virginia resulted in 13 (18%) being prosecuted, with the majority of those cases being physical abuse.²² From these 3 studies, it is difficult to compare prosecution rates because the method of finding and reviewing criminal cases is diverse, the type of abuse covered by individual state statutes is not the same across states,²³ and the individual data elements are defined differently.¹³ Noting that financial exploitation was the main dependent adult abuse charge, it is worthwhile for health care providers to also report allegations to law enforcement, which may lead to increased prosecutions of abuse.

Many guidelines are available for the assessment and evaluation of abuse to help health care providers make

decisions about appropriate interventions and/or services. Some key recommendations for practice include routinely inquiring if the patient feels safe in their home, conducting a screen for abuse, screening for cognitive impairment, completing a history and physical assessment. It is important to interview the patient alone in a calm manner and to separately interview the significant other/caregiver.^{24,25}

Connolly^{6(p51)} notes there are “hundreds of specialized courts, dockets, and procedures in the country that focus on juvenile cases, family matters, drug prosecutions, complex multidistrict litigation, and more.” These specialized courts are working with other entities to enhance their function and services. As the aging and vulnerable populations grow and policy makers learn of these successes, courts specializing in vulnerable adult abuse will evolve.

In previous studies, the county demographics and government characteristics were significantly associated with Adult Protective Services investigations and substantiations.^{12–15} In this study, prosecution rates associated with these variables were tested and population per square mile were close to statistically significant. These may explain the one county, Polk County, with highest sheriff's mean salary and densest population had higher prosecution rate than that of the average of all other counties. In other states with varying population per square mile and sheriff's salaries, similar or different findings may be found.

A limitation of this study is the sparse aggregate data that are available from the Iowa Court Information System and Adult Protective Services. Individual dependent adult abuse case reports are not available to the public. Victim and perpetrator demographics and the reporter of the abuse information are unavailable. Thus, it is unknown if the cases brought forward for prosecution were even investigated by Adult Protective Services. Other agencies investigate abuse, such as law enforcement and the Iowa Department of Inspections and Appeals but there is no link between these agencies or their respective reporting systems.

Prosecutors have a crucial role in the investigation and protection of victims of abuse. Police investigate abuse allegations and find evidence that either corroborates or disproves it. Then, prosecutors review the police investigation and determine whether charges are warranted. Immense power is exercised by prosecutors as an arrest requires “probable cause to believe the suspect has committed a crime and a court must confirm the existence of probable cause for a suspect to be detained before trial and as a precondition of the case proceeding to trial.”^{26(p73)} This specific trial information is not available but it is evident those cases that were charged had probable cause. This prosecution data may have been biased as the most shocking cases may have been brought forth

The number of prosecuted dependent adult charges in Iowa is now known for a 10-year period. These may be the most egregious cases. Health care providers are unaware of

the results of reported case unless they diligently pursue a case through the court system. Raising awareness is an important step in bringing about a change in attitudes and behaviors toward the prosecution of dependent adult abuse. It is important to know the incidence of dependent adult abuse prosecution to allow for a comparison to those cases that were substantiated. Having that understanding will then allow for further exploration of the trends in incidence tracked over time, the comparison of the rates per area, and determination of factors that are associated with higher rates of prosecution incidence. In this initial review of dependent adult abuse prosecutions, no association of county demographics or government characteristics were found.

The dependent adult abuse cases have increased in the 10-year period and more than doubled from 24 cases in 2006 to 52 in 2015. Now, with this report policy makers do know that the Iowa public health law for dependent adult abuse services has indeed resulted in prosecutions of perpetrators of abuse. It is unknown if this is an adequate or inadequate criminal justice system response for dependent adult abuse.

More research is needed to better understand and address dependent adult abuse and the follow through of cases from investigation through prosecution. As noted, the Iowa Adult Protective Services percent of substantiated cases have stayed substantially the same in the 10-year period, whereas the prosecuted cases have increased. In states where the percent Adult Protective Services substantiated cases have increased,¹⁹ it would be worthwhile to compare what their respective prosecuted cases have done. It would also be interesting to note if any state Adult Protective Services data are linked to courts online data following cases through prosecution.

Acknowledgments

Department of Family Medicine, Carver College of Medicine, the University of Iowa.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The authors received funding from the Department of Family Medicine, University of Iowa.

References

1. Heisler CJ, Stiegel LA. Enhancing the justice system's response to elder abuse: discussions and recommendations of the "Improving Prosecution" working group of the National Policy Summit on Elder Abuse. *J Elder Abuse Negl.* 2002;14(4):31-54.
2. Moulten AD, Mercer SL, Popovic T, et al. The scientific basis for law as a public health tool. *Am J Public Health.* 2009;99:17-24.
3. American Bar Association. Laws related to elder abuse. http://www.americanbar.org/groups/law_aging/resources/elder_abuse.html. Published 2007. Accessed August 26, 2016.
4. Daly JM, Jogerst GJ, Brinig M, Dawson J. Mandatory reporting: relationship of APS statute language on state reported elder abuse. *J Elder Abuse Negl.* 2003;15(2):1-21.
5. Tataru T. *An Analysis of State Laws Addressing Elder Abuse, Neglect, and Exploitation*. Washington, DC. National Center on Elder Abuse; 1995.
6. Connolly MT. Where elder abuse and the justice system collide: police power, parens patriae, and 12 recommendations. *J Elder Abuse Negl.* 2010;22(1-2):37-93.
7. Daly JM, Merchant ML, Jogerst GJ. Elder abuse research: a systematic review. *J Elder Abuse Negl.* 2011;23:348-365.
8. Iowa Department of Human Services. Dependent adult abuse: Bi-annual Dependent Adult Abuse Reports. http://dhs.iowa.gov/consumers/abuse_reporting/dependent_adult_abuse. Published 2016. Accessed January 3, 2016.
9. Berson SB. Prosecuting elder abuse cases. <http://www.nij.gov/journals/265/Pages/elder-abuse-prosecuting.aspx>. Published 2010. Accessed March 3, 2016.
10. National Center for State Courts. Prosecuting elder abuse cases: basic tools and strategies. <https://www.bja.gov/Publications/NCSC-Prosecuting-Elder-Abuse-Cases-Basic-Tools-and-Strategies.pdf>. Published 2012. Accessed August 24, 2016.
11. US Census Bureau. State & county quickfacts: 2014. <http://quickfacts.census.gov/qfd/states/19000.html>. Updated July 8, 2014. Accessed June 30, 2015.
12. Jogerst GJ, Dawson JD, Hartz AJ, Ely JW, Schweitzer LA. Community characteristics associated with elder abuse. *J Am Geriatr Soc.* 2000;48:512-518.
13. Jogerst GJ, Daly JM, Brinig MF, Dawson JD, Schmuck GA, Ingram JG. Domestic elder abuse and the law. *Am J Public Health.* 2003;93:2131-2136.
14. Iowa State Association of Counties. Salary survey. <http://www.iowacounties.org/member-resources/salary-survey/>. Published 2011. Accessed November 17, 2015.
15. Jogerst GJ, Daly JM. County government resources associated with dependent-adult abuse investigations in Iowa. *J Elder Abuse Negl.* 2008;20:251-264.
16. US Department of Agriculture. Rural-urban continuum codes. <http://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx>. Published 2013. Accessed February 17, 2016.
17. Jackson SL, Hafemeister TL. The impact of relationship dynamics on the detection and reporting of elder abuse occurring in domestic settings. *J Elder Abuse Negl.* 2015;27:121-145.
18. Acierno R, Hernandez MA, Amstadter AB, et al. Prevalence and correlates of emotional, physical, sexual, and financial abuse and potential neglect in the United States: the National Elder Mistreatment Study. *Am J Public Health.* 2010;100:292-297.
19. Jogerst GJ, Daly JM, Dawson JD, Brinig MF, Schmuck GA. Required elder abuse education for Iowa mandatory reporters. *J Elder Abuse Negl.* 2004;15:59-73.

20. Meirson A. Prosecuting elder abuse: setting the gold standard in the golden state. *Hastings Law J.* 2008;60:431-452.
21. Navarro AE, Gassoumis ZD, Wilber KH. Holding abusers accountable: an elder abuse forensic center increases criminal prosecution of financial exploitation. *Gerontologist.* 2013;53:303-312.
22. Jackson SL, Hafemeister TL. How do abused elderly persons and their adult protective services caseworkers view law enforcement involvement and criminal prosecution, and what impact do these views have on case processing? *J Elder Abuse Negl.* 2013;25:254-280.
23. Daly JM, Jogerst GJ. Statute definitions of elder abuse. *J Elder Abuse Negl.* 2003;13(4):39-57.
24. Daly JM. *Evidence-Based Protocol: Elder Abuse Prevention.* Iowa City, IA: University of Iowa, College of Nursing. Gerontological Nursing Interventions Research Center.
25. Hoover RM, Polson M. Detecting elder abuse and neglect: assessment and intervention. *Am Fam Physician.* 2014;89:453-460.
26. Suthers JW. *No Higher Calling, No Greater Responsibility: A Prosecutor Makes His Case.* Golden, CO: Fulcrum; 2008.

Author Biographies

Jeanette M. Daly, RN, PhD is an associate research scientist, Department of Family Medicine. In the practice setting, she has reported and investigated dependent adult abuse and for the past 17 years, she has studied elder abuse/dependent elder abuse.

Yinghui Xu, MS, is a biostatistician manager in the Department of Family Medicine. She performs statistical analysis, designs and maintains databases for multiple studies.

Gerald J. Jogerst, MD, is the Mary Ristine Brodie Geriatrics Education professor and senior vice chair, Department of Family Medicine. In the practice setting he has reported and investigated dependent adult abuse and for the past 20 years he has studied elder abuse/dependent adult abuse.