

## ORIGINAL RESEARCH

## Munchausen Syndrome by Adult Proxy: A Review of the Literature

M. Caroline Burton, MD<sup>1\*</sup>, Mark B. Warren, MD<sup>2</sup>, Maria I. Lapid, MD<sup>2</sup>, J. Michael Bostwick, MD<sup>2</sup><sup>1</sup>Division of Hospital Medicine, Department of Medicine, Mayo Clinic, Jacksonville, Florida; <sup>2</sup>Department of Psychiatry, Mayo Clinic, Rochester, Minnesota.

**BACKGROUND:** Munchausen syndrome by proxy (MSBP), more formally known as factitious disorder imposed on another, is a form of abuse in which a caregiver deliberately produces or feigns illness in a person under his or her care so that the proxy will receive medical care that gratifies the caregiver. Although well documented in the pediatric literature, few cases of MSBP with adult proxies (MSB-AP) have been reported. This study reviews existing literature on MSB-AP to provide a framework for clinicians to recognize this disorder.

**METHODS:** We searched Ovid MEDLINE, Ovid EMBASE, PubMed, Web of Knowledge, and PsychINFO, supplemented by bibliographic examination.

**RESULTS:** We identified 13 cases of MSB-AP. Perpetrators were caregivers, most (62%) were women, and many

worked in healthcare. The age range of the victims was 21 to 82 years. Most were unaware of the abuse, although in 2 cases the victim may have colluded with the perpetrator. Disease fabrication most often resulted from poisoning.

**CONCLUSIONS:** MSB-AP should be included in the differential diagnosis of patients presenting with a complex constellation of symptoms without a unifying etiology and an overly involved caregiver with suspected psychological gain. Early identification is necessary so that healthcare providers do not unknowingly perpetuate harm through treatments that satisfy the perpetrator's psychological needs at the proxy's expense. *Journal of Hospital Medicine* 2015;10:32–35. © 2014 Society of Hospital Medicine

Asher first described Munchausen syndrome by proxy over 60 years ago. “Like the famous Baron von Munchausen, the persons affected have always traveled widely; and their stories like those attributed to him, are both dramatic and untruthful.”<sup>1</sup> Munchausen syndrome is a psychiatric disorder in which a patient intentionally induces or feigns symptoms of physical or psychiatric illness to assume the sick role. In 1977, Meadow described the first case in which a caregiver-perpetrator deliberately produced physical symptoms in a child for proxy gratification.<sup>2</sup> Unlike malingering, in which external incentives drive conscious symptom falsification, Munchausen syndrome by proxy (MSBP) is associated with fulfillment of the abuser's own psychological need for garnering praise from medical staff for devoted care given a sick child.<sup>3,4</sup>

MSBP was once considered vanishingly rare. Many experts now believe it is more common, with a reported annual incidence of 0.4/100,000 in children younger than 16 years, and 2/100,000 in children younger than 1 year.<sup>5</sup> It is a disorder in which a parent, often the mother (94%–99%)<sup>6</sup> and often with training or interest in the medical field,<sup>5</sup> is the perpetrator. The medical team caring for her child often

views her as unusually helpful, and she is frequently psychiatrically ill with disorders such as depression, personality disorder, or prior personal history of somatoform or factitious disorder.<sup>7,8</sup> The perpetrator typically inflicts physical harm, although occasionally she may simply lie about symptoms or tamper with laboratory samples.<sup>5</sup> The most common methods of inflicting harm are poisoning and suffocation. Overall mortality is 6% to 9%.<sup>6,9</sup>

Although a large body of literature addresses pediatric cases, there is little to guide clinicians when victims are adults. An obvious reason may be that MSBP with adult proxies (MSB-AP) has been reported so rarely, although we believe it is under-recognized and more common than thought. The primary objective of this review was to identify all published cases of MSB-AP, and synthesize them to characterize victims and perpetrators, modes of deceit, and relationships between victims and perpetrators so that clinicians will be better equipped to recognize such cases or at least include MSB-AP in the differential of possibilities when symptoms and history are inconsistent.

## METHODS

The Mayo Clinic Rochester Institutional Review Board approved this study. The databases of Ovid MEDLINE, Ovid EMBASE, PubMed, Web of Knowledge, and PsychINFO were searched from inception through April 2014 to identify all published cases of Munchausen by proxy in patients 18 years or older. The following search terms were used: “Munchausen syndrome by proxy,” “factitious disorder by proxy,” “Munchausen syndrome,” and “factitious disorder.” Reports were included when they described single or

\*Address for correspondence and reprint requests: M. Caroline Burton, MD, Mayo Clinic, 4500 San Pablo Road, Jacksonville, FL 32224; Telephone: 904-956-0081; Fax: 904-956-1947; E-mail: burton.mcaroline@mayo.edu

Additional Supporting Information may be found in the online version of this article.

Received: June 11, 2014; Revised: August 28, 2014; Accepted: September 13, 2014

2014 Society of Hospital Medicine DOI 10.1002/jhm.2268

Published online in Wiley Online Library (Wileyonlinelibrary.com).

**TABLE 1.** Munchausen Syndrome by Adult Proxy Cases—Victim Descriptions

Author	Gender	Age, y	Presenting Features	Occupation/Education	Outcome
Sigal M et al. (1986) <sup>13</sup>	F	20s	Abscesses (skin)	NP	Death
	F	21	Abscesses (skin)	Child care	Paraplegia
Sigal MD et al. (1991) <sup>14</sup>	M	NP	Rash	NP	Abuse stopped
Smith NJ et al. (1989) <sup>19</sup>	M	69	None	Retired businessman	Continued fabrication
Krebs MO et al. (1996) <sup>10</sup>	M	40s	Coma	Businessman	Abuse stopped
Ben-Chetrit E et al. (1998) <sup>20</sup>	F	73	Coma	NP	Abuse stopped
Feldman KW et al. (1998) <sup>8</sup>	F	21	NP	Developmental delay	NP
Chodorowsk Z et al. (2003) <sup>12</sup>	F	80	Syncope	NP	Abuse stopped
Strubel D et al. (2003) <sup>11</sup>	F	82	None	NP	NP
Granot R et al. (2004) <sup>21</sup>	M	71	Coma	NP	Abuse stopped
Deimel GW et al. (2012) <sup>17</sup>	F	23	Rash	High school graduate	Continued abuse
	F	21	Recurrent bacteremia	College student	Death
Singh A et al. (2013) <sup>22</sup>	F	79	Fluid overload/false symptom history	Retired	Continued

NOTE: Abbreviations: F, female; M, male; NP, not provided.

**TABLE 2.** Munchausen Syndrome by Adult Proxy Cases—Perpetrator Descriptions

Author	Gender	Age, y	Relationship	Occupation	Mode of Abuse	Outcome When Confronted
Sigal M et al. (1986) <sup>13</sup>	M	26	Husband*	Businessman	Poisoning <sup>†</sup> followed by subcutaneous gasoline injection	Confession and incarceration
	M	29	Boyfriend*	Businessman	Poisoning <sup>†</sup> followed by subcutaneous gasoline injection	Confession and incarceration
Sigal MD et al. (1991) <sup>14</sup>	M	34	Cellmate*	Worked in medical clinic where incarcerated	Poisoning <sup>†</sup> followed by subcutaneous turpentine injection	Confession and attempted murder conviction
	F	55	Companion	Nurse	False history of hematuria, weakness, headaches	Denial
Krebs MO et al. (1996) <sup>10</sup>	F	47	Wife	Nurse	"Tranquilizer" injections	Confession and placed on probation
Ben-Chetrit E et al. (1998) <sup>20</sup>	F	NP	Daughter	Nurse	Insulin injections	Denial
Feldman KW et al. (1998) <sup>8</sup>	F	NP	Mother	Business woman	False history of Batten's disease	NP
Chodorowsk Z et al. (2003) <sup>12</sup>	F	NP	Granddaughter	NP	Poisoning <sup>†</sup>	Denial
Strubel D et al. (2003) <sup>11</sup>	M	NP	Son	NP	False history of memory loss	NP
Granot R et al. (2004) <sup>21</sup>	F	NP	Wife	Hospital employee	Poisoning <sup>†</sup>	Confession
Deimel GW et al. (2012) <sup>17</sup>	F	NP	Mother	Unemployed chronic medical problems	Toxin application to skin	Denial
	F	NP	Mother	Medical office receptionist	Intravenous injection unknown substance	Denial
Singh A et al. (2013) <sup>22</sup>	M	NP	Son	NP	Fluid administration in context of fluid restriction/erratic medication administration/falsifying severity of symptoms	Denial

NOTE: Abbreviations: F, female; M, male; NP, not provided.

\*Same person.

<sup>†</sup>Benzodiazepines.

<sup>‡</sup>"Sleeping pills" mixed with alcohol.

multiple cases of MSBP with victims aged at least 18 years. The search was not limited to articles published in English. Bibliographies of selected articles were reviewed for reports identifying additional cases.

## RESULTS

We found 10 reports describing 11 cases of MSB-AP and 1 report describing 2 unique cases of MSB-AP (Tables 1 and 2). Two case reports were published in French<sup>10,11</sup> and 1 in Polish.<sup>12</sup> Sigal et al.<sup>13</sup> describes 2 different victims with a common perpetrator, and another report<sup>14</sup> describes the same perpetrator with a third victim. One case, though cited as MSB-AP in the literature was excluded because it did not meet the criteria for the disorder. In this case, the wife of a 28-year-old alcoholic male poured acid on him while he

was inebriated, ostensibly to vent frustration and coerce him into sobriety.<sup>15,16</sup>

Of the 13 victims, 9 (69%) were women and 4 (31%) were men. Of the ages reported, the median age was 69 years and the mean age was 51 (range, 21–82 years). Exact age was not reported in 3 cases. Lying about signs and symptoms, but not actually inducing injury, occurred in 3 cases (23%), whereas in 10 cases (77%), the victims presented with physical findings, including coma (3), rash (2), skin abscesses (2), syncope (1), recurrent bacteremia (1), and fluid overload (1). Seven (54%) of the victims were poisoned, 2 via drug injection and 5 by beverage/food contamination. A perpetrator sedated 3 victims and subsequently injected them, 2 with gasoline and another with turpentine. Two of the victims were involved in business, 1 worked in childcare, 1

attended beauty school after graduating from high school, 1 attended college, and 1 was developmentally delayed. Victim education or occupation was not reported in 7 cases.

Of the 11 perpetrators, 8 (73%) were women, and 3 (27%) were men (note that the same male perpetrator had 3 victims). Median age was 34 years (range, 26–55 years), although exact age was not reported in 4 cases. The perpetrator was the victim's mother in 3 cases, wife in 2 cases, son in 2 cases, and daughter, granddaughter, husband, companion, boyfriend, or prison cellmate in 1 case each. Five (38%) worked in healthcare.

All of the perpetrators were highly involved, even overly involved, in the care of their victims, frequently present, sometimes hovering, in hospital settings, and were viewed as generally helpful, if not overintrusive, by hospital staff. When confronted, 3 perpetrators confessed, 3 denied abuse that then ceased, and 4 more denied abuse that continued, culminating in death in 1 case. In 1 case, the outcome was not reported.<sup>8</sup> At least 3 victims remained with their perpetrators. Two perpetrators were criminally charged, 1 receiving probation and the other incarceration. The latter began abusing his cellmate, behavior that did not stop until he was confronted in prison.

## CONCLUSION/DISCUSSION

Our primary objective was to locate and review all published cases of MSB-AP. Our secondary aim was to describe salient characteristics of perpetrators, victims, and fabricated diseases in hopes of helping clinicians better recognize this disorder.

Our review shows that perpetrators were exclusively the victims' caregivers, including mothers, wives, husbands, daughters, granddaughters, or companions. These perpetrators, many with healthcare backgrounds, were attentive, helpful, and excessively present. In the majority of cases, hidden physical abuse yielded visible disease. Less commonly, perpetrators lied about symptoms rather than actually creating signs of disease. The most common mode of disease instigation involved poisoning through beverage/food contamination or subcutaneous injection. Geriatric and developmentally delayed persons appeared particularly vulnerable to victimization. Of the 13 victims, 5 were geriatric and 1 was developmentally delayed.

The adult cases we report are similar to child cases in that the perpetrators are caregivers; however, the caregivers of the adults are a more diverse group. Other similarities between adult and child cases are that physical signs occur more often than simply falsifying information, and poisoning is the most common method of disease fabrication. Suffocation, although common in child cases, has not been reported in adults. Though present in only a minority of cases, another feature distinguishing these cases from those

reported in the pediatric literature is the presence of collusion between the perpetrator and victim. When MSBP was first described, Meadow believed that victims would reach an age at which the disorder would cease because they would fight back or report the abuse.<sup>2</sup> In 7 of the adult cases, the victims were unknowingly poisoned; however, in 2 cases,<sup>17</sup> the victims knew what their mothers were doing to them and yet denied that they were harming them. To explain this collusion, Deimel et al. proposed Stockholm syndrome, a condition in which a victim holds a perpetrator in high regard, despite experiencing at their hands what others might consider brainwashing and torture.

The data from the individual cases are sometimes frustratingly incomplete, with inconsistent reporting of dyad demographics and outcomes across the 13 cases, which compromises efforts to compare and contrast them. However, because no published studies have thoroughly reviewed all existing cases of MSB-AP, we believe our review provides important insights into this condition by consolidating available information. It is our hope that by characterizing perpetrators, victims, and common presentations, we will raise awareness about this condition among healthcare providers so that it may be included in the differential diagnosis when they encounter this dyad: a patient's medical problems do not respond as expected to therapy and a caregivers appears overly involved or attention seeking.

The diagnosis of a factitious disorder often presents an immense clinical challenge and generally involves a multidisciplinary approach.<sup>18</sup> In addition to the incomplete data for existing cases in the literature, we recognize the ongoing difficulties in precise diagnosis of this disorder. Because a hallmark of pathology is secrecy at the outset and often denial, and even abrupt transition of care, upon confrontation, it is often very difficult, especially early on, to uncover patterns of perpetration, let alone posit a motive. We recognize that there may be some perpetrators who are motivated by something other than purely psychological end points, such as financial reward or even sexual victimization. And when alternate care venues are sought, clinicians are often left wondering. Further, the damage that may come to a therapeutic relationship by prematurely diagnosing MSB-AP is important to keep in mind. Hospitalists who suspect MSB-AP should consult psychiatry. Although MSB-AP is a diagnosis of exclusion and often based on circumstantial evidence, psychiatry can assist in diagnosing this disorder and, in the event of a confession, provide immediate therapeutic intervention. Social services can aid in a vulnerable adult investigation for patients who do not have capacity.

When Meadow first described MSBP, he ended his article by asking "Is this degree of falsification rare or is it under-recognized?" Time has answered Meadow's

question. Now we ask the same question with regard to MSB-AP, is it rare or under-recognized? We must remain vigilant for this disorder. Early recognition can prevent healthcare providers from unknowingly perpetuating victimization by treating caregiver-induced pathology as if legitimate, thereby satisfying the perpetrator's psychological needs. Despite Meadow's assertion that proxies outgrow their victimization, our review warns that advanced age does not preclude vulnerability and in some cases, may actually increase it. In the future, the incidence and prevalence of MSB-AP is likely to increase as medical technology allows greater survival of cognitively impaired populations who are dependent on others for care. The elderly and developmentally delayed may be especially at risk.

Disclosures: M.C.B., M.B.W., and M.I.L. report no conflicts of interest. J.M.B. receives payment for lectures, including service on speakers bureaus, from nonprofit continuing medical education organizations and universities for occasional lectures; however, this funding is not relevant to this review.

## References

1. Asher R. Munchausen syndrome. *Lancet*. 1951(1):339–341.
2. Meadow R. Munchausen syndrome by proxy. The hinterland of child abuse. *Lancet*. 1977;2(8033):343–345.
3. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision*. 4th ed. Washington, DC: American Psychiatric Press; 2000.
4. Ayoub CC, Alexander R, Beck D, et al. Position paper: definitional issues in Munchausen by proxy. *Child Maltreat*. 2002;7(2):105–111.
5. McClure RJ, Davis PM, Meadow SR, Sibert JR. Epidemiology of Munchausen syndrome by proxy, non-accidental poisoning, and non-accidental suffocation. *Arch Dis Child*. 1996;75(1):57–61.
6. Rosenberg DA. Web of deceit: a literature review of Munchausen syndrome by proxy. *Child Abuse Negl*. 1987;11(4):547–563.
7. Bass C, Jones D. Psychopathology of perpetrators of fabricated or induced illness in children: case series. *Br J Psychiatry*. 2011;199(2):113–118.
8. Feldman KW, Hickman RO. The central venous catheter as a source of medical chaos in Munchausen syndrome by proxy. *J Pediatr Surg*. 1998;33(4):623–627.
9. Schreier HA, Libow JA. Munchausen syndrome by proxy: diagnosis and prevalence. *Am J Orthopsychiatry*. 1993;63(2):318–321.
10. Krebs MO, Bouden A, Loo H, Olie JP. Munchausen syndrome by proxy between two adults [in French]. *Presse Med*. 1996;25(12):583–586.
11. Strubel D, Docher C, LaPierre M. Munchausen syndrome by proxy in an old woman [in French]. *Revue Geriatr*. 2003;28:425–428.
12. Chodorowski Z, Anand JS, Porzezinska B, Markiewicz A. Consciousness disturbances: a case report of Munchausen by proxy syndrome in an elderly patient [in Polish]. *Przegl Lek*. 2003;60(4):307–308.
13. Sigal MD, Altmark D, Carmel I. Munchausen syndrome by adult proxy: a perpetrator abusing two adults. *J Nerv Ment Dis*. 1986;174(11):696–698.
14. Sigal M, Altmark D, Gelkopf M. Munchausen syndrome by adult proxy revisited. *Isr J Psychiatry Relat Sci*. 1991;28(1):33–36.
15. Alicandri-Ciuffelli M, Moretti V, Ruberto M, Monzani D, Chiarini L, Presutti L. Otolaryngology fantastica: the ear, nose, and throat manifestations of Munchausen's syndrome. *Laryngoscope*. 2012;122(1):51–57.
16. Somani VK. Witchcraft's syndrome: Munchausen's syndrome by proxy. *Int J Dermatol*. 1998;37(3):229–230.
17. Deimel GW, Burton MC, Raza SS, Lehman JS, Lapid MI, Bostwick JM. Munchausen syndrome by proxy: an adult dyad. *Psychosomatics*. 2012;53(3):294–299.
18. Bass C, Halligan P. Factitious disorders and malingering: challenges for clinical assessment and management. *Lancet*. 2014;383(9926):1422–1432.
19. Smith NJ, Ardern MH. More in sickness than in health: a case study of Munchausen by proxy in the elderly. *J Fam Ther*. 1989;11(4):321–334.
20. Ben-Chetrit E, Melmed RN. Recurrent hypoglycaemia in multiple myeloma: a case of Munchausen syndrome by proxy in an elderly patient. *J Intern Med*. 1998;244(2):175–178.
21. Granot R, Berkovic SF, Patterson S, Hopwood M, Mackenzie R. Idiopathic recurrent stupor: a warning. *J Neurol Neurosurg Psychiatry*. 2004;75(3):368–369.
22. Singh A, Coppock M, Mukaetova-Ladinska EB. Munchausen by proxy in older adults: A case report. *Maced J Med Sci*. 2013;6(2):178–181.