Residência RP Pediátrica
Publicação Oficial da Sociedade Brasileira de Pediatria
ISSN-Online: 2236-6814

Submitted on: 01/07/2020
Approved on: 24/05/2022

REVIEW ARTICLE

Illness fabricated or induced in a child by a caregiver: what the doctor needs to know

Marcia Maria Costa Giacon Giusti[1], Carolina Machado Benites[1], Amanda Beatriz Andrade[1], Renan Gianecchini Vignardi[1], Anna Carolina Macieira Feitosa[1], Gabriel Stecca Canicoba[1], Carmen Silvia Molleis Galego Miziara[1], Ivan Dieb Miziara[1]

Keywords:
Munchausen Syndrome by Proxy,
Violence,
Child Abuse,
Fabricated or Induced Illness (FII) in Children.

Abstract

The caregivers fabrication, induction, or exacerbation of disease has been known as Munchausen syndrome by proxy since the last century, although this name is currently considered inappropriate. For this study, we will adopt this second designation. Child abuse is not a recent problem, nor is it easy to identify. The perpetrator can practice multiple forms of aggression, but one of them assumes importance not only because of the immediate or late consequences but also because the aggressor, in most cases, is the mother. This study aimed to broadly address the syndrome with information about the diagnosis and medical and legal conduct, according to literature data.

[1] Nove de Julho University, Medical Ethics - São Paulo - São Paulo - Brazil .

Correspondence to:
Carmen Silvia Molleis Galego Miziara.
Nove de Julho University. Av. Professor Luiz Ignacio Anhaia Mello, nº 1363, Vila Prudente.
São Paulo - SP. Brasil. CEP: 03155-000. E-mail: carmen.miziara@hc.fm.usp.br

DOI: 10.25060/residpediatr-2022.v12n3-398

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INTRODUCTION

The fabrication, induction, or exacerbation of disease by the caregiver has been known as Munchausen syndrome by proxy since the last century, although this name is currently considered inappropriate, as it removes the child's focus and directs the theme to the psychiatric disorder of the child perpetrator[1]. For this study, we will adopt the name fabricated or induced illness (FII) in children by a caregiver.

Disease induction is established when the aggressor uses some mechanism to trigger a morbid condition (disease or injury) in the victim, as can occur with the use of poison. In turn, fabrication would be the use of lies, omitting or stating the occurrence of a non-existent disease condition, such as adding blood to a child's urine simulating hematuria[2].

The term Munchausen syndrome by proxy was coined by Roy Meadow (English pediatrician), in 1977, as a serious and persistent form of child abuse in which the caregiver, usually the mother, "actively fabricates", exacerbates, falsifies, simulates, or induces diseases in children under their care, trying to convince pediatricians that there is a need for medical attention[3].

According to Roesler, 2015[4], any pediatric disease can be fabricated in several ways, especially those in which the information provided by the caregiver is a fundamental basis for diagnostic success[5], such as epilepsy. The clinical manifestations of seizures can be simulated using incorrect/inaccurate information or even produced by the administration of substances such as alimemazine (or trimeprazine - N, N, 2-trimethyl-3-phenothiazin-10-ylpropan-1-amine which is a derivative of phenothiazine related to chlorpromazine). The refractoriness of the disease can also be related to the low adherence to treatment by the person responsible for the care of the child[6].

The consequent abuses against children, based on the factual disorder of the aggressor, are not easily identified or measured. It is estimated that 200 children are victimized each year in the United States of America, but this number is certainly underestimated[7].

Failure to recognize or delay the diagnosis of FII, due to its diagnostic complexity, is a factor in high rates of child morbidity and mortality, it is estimated that the mortality rate is around 10% and morbidity is more than 50%[8].

Failure to identify this disease exposes victims to physical and mental risks and suffering of large proportions, both by investigation methods and unnecessary treatments. Knowing the topic is the best way to alert professionals to the possibility of the disease and avoid the perpetuation of maltreatment. The aim of this study was to broadly address the syndrome with information about the diagnosis and the procedures to be adopted, according to data in the literature.

METHODS

A narrative literature review was conducted at the *Nove de Julho* University, with no search time limit, applying the descriptors Munchausen syndrome by proxy and Munchausen syndrome caused by third parties. The database was PubMed and *Periódicos da Capes*. The inclusion criteria were articles that contained the words Munchausen by proxy or fabricated or induced illness in children in the title or abstract and articles obtained in full.

Historical summary

Munchausen's syndrome was inspired by the historical background of Karl Friedrich Hieronymus, known as Baron Münchausen, 1720-1797, and eternalized for his fabulous and exaggerated stories[6,7], and was first cited by Dr. Richard Alan John Asher in 1951. In his article, Asher wrote, "*Here is described a common syndrome which most doctors have seen, but about which little has been written*"[9]. Munchausen's syndrome is included in the International Classification of Diseases, 10th edition, as being the false production of symptom signs, repeatedly, with no obvious reason with internal motivation and which is often associated with personality and relationship disorders[10].

In an article published in "The Lancet", in 1977, Meadow described two cases of mothers who for years provided "systematically" factual information about their children's clinical symptoms. The first case was a six-year-old girl with hematuria and pyuria since she was three years old, and was resistant to multiple therapeutic regimens. The second case was of a boy with hypernatremia since he was six weeks old and who presented with intermittent drowsiness and vomiting. One of his tests showed 160-175mmol sodium. The autopsy showed gastric erosion that could have been caused by some chemical substance. In this medical article, the term *Munchausen by proxy syndrome*, translated as Munchausen syndrome by proxy or caused by a third party, was applied for the first time[11]. Recently, another term has been suggested to designate this condition, medical child abuse[4] or fabricated or induced illness (FII)[12].

Nomenclature

Since Meadow's first publication in 1977 (*Munchausen syndrome by proxy*), several other terminologies have been used to represent the caregiver's fabrication, induction or exacerbation of illness or symptoms in children. In the United Kingdom, the term "fabricated or induced illness by caregivers" is used to designate Munchausen syndrome by proxy, stressing that the focus of the problem is the child (victim) and not the psychiatric illness of the aggressor[1] and, in the United States of America, the nomenclature "medical child abuse" is applied[4,13], reinforcing the fact that many damages are caused by the doctor's performance due to the failure or the impossibility of recognizing the condition.

The term pediatric condition falsification (PCF), whether due to illness, impairment or symptom, has also been suggested by the American Professional Society on the abuse of children in substitution of the name Munchausen by proxy.

In 2013, the fifth edition of the Manual of Mental Disorders (DSM -5) included among the "somatic symptoms and related disorders" the factitious disorders imposed on others in substitution for the designation of factual disorder by proxy, as stated in the fourth edition (DSM-4)[14].

Definitions

FII is a serious form of violence, with consequent damage, resulting from the actions of parents/caregivers in the most diverse ways: fabrication of signs and symptoms (may include untrue information in the child's medical history); fabricating falsified signs and symptoms in medical documents; and induction of disease manifestations in the most diverse forms[15].

An international multicenter study concluded that the fabrication or induction of bleeding, substance abuse, reports of epileptic seizures, provocation of fever or delayed development were the means mostly used by the aggressor in an attempt to induce the doctor to investigate, often in an invasive, and or to institute treatments with the potential for adverse events[16].

Epidemiology, incidence, and prevalence

Few studies focus on the incidence and prevalence of the syndrome, but they fail to mention that underreporting is evident due to the great difficulty of diagnosis. It is estimated that the FII rate is 0.04% of all abused children[17].

An Irish study published in 1996, showed that the incidence of non-accidental poisoning or suffocation mistreatment in children under 16 was 0.5/100 thousand children, when they analyzed children under 5, the incidence was 1.2/100 thousand and in children under 1 year, the incidence increased to 2.8/100 thousand[18]. In New Zealand, the rate was 2/100 thousand[19].

Ferrara et al. (2013)[20] evaluated 751 hospitalized pediatric patients (mean age 8.4 years) and found a prevalence of 1.8% factitious disorder and 0.53% (mean age 10.5 years) of FII, with an average duration of abuse of 10.3 months.

Gender: there is no difference between genders[18], or with a slight predominance of males (54%)[16]. Age - children under 5 years are the most frequent victims[18], with a mean age between 20 and 31 months[18,19,21,22]. Children under 3 years old correspond for 26%, from 3 to 13 years old to 52%, and over 13 years old 12%[16].

Forms of action by the perpetrator: several ways can be applied by the perpetrator in order to fabricate or induce the manifestations of illness in the child, the following are cited as the most commonly employed[1].

a) Induction of symptoms by administration of drugs or other substances or intentional asphyxiation[18];
b) Not following medical recommendations regarding treatment (modifying or discontinuing administration);
c) Inventing subjective symptoms such as pain, polyuria, vomiting, and epileptic seizures;
d) Exaggerating the symptoms;
e) Falsifying test results or adulterating biological material leading to incorrect laboratory analysis;
f) Obtaining specialized treatments or equipment for children that are not needed;
g) Affirming that the child has a mental illness.

Diagnosis

The complexity of the disease makes the diagnosis very difficult and not always possible to be determined. Many signs and symptoms are present in other diseases, in the same way, that some means applied by the aggressor can also mimic other conditions, such as poisoning, hematuria, vomiting, etc.

As with any other type of violence, the diagnosis of FII depends more on the circumstances than on the evidence, since rarely the act of fabricating, inducing or exaggerating the disease is directly witnessed. Therefore, the diagnosis consists of aspects related to the child's clinical manifestations and also an analysis of all situations involving the child and his family, especially with regard to the family's medical conditions. Some criteria are suggested and, among them, are those described by Rosenberg (2003)[23] as a way to enable the identification of FII syndrome from other morbidities. The inclusion diagnosis is one that is supported by objective findings and the exclusion diagnosis is the one that remains, after an exhaustive investigation. The author cites as inclusion criteria, the following conditions in association: indisputable evidence of the perpetrator's action, whether by a reliable witness or by filming, is rarely possible; cases in which the child has a medical history of multiple visits by different professionals; evidence of tampering with test results or medical documents; supplementary exam results with low or no credibility; results inconsistency of the additional tests concerning the clinical information or clinical conditions; clinical findings have no other explanation than the falsification of the disease.

In cases involving older children, the victim may also be involved in counterfeiting collusion to be accepted by the mother[24].

Warning signs and symptoms

Recognition of warning signs and symptoms for FII is not only a matter for the health team but for the whole society. The discrepancy between the history provided by the companion, in general, the mother, and the findings of the physical examination, the set of symptoms without biological explanation, the signs and symptoms that manifest only in the presence of the caregiver, the inconsistent and inexplicable response to the recommended treatment, the new symptoms repeatedly reported, the search for numerous consultations

by different professionals to maintain the investigation despite the diagnosis having been concluded and the excessive use of resources for the child's daily life despite not being indicated by the doctor (wheelchair, probes, etc.) should be considered as probable of the syndrome[12].

The falsified fabrication of epileptic seizures occurs in 42% of cases of FII[25], nor is it unusual to use insulin to cause hypoglycemia and consequent epileptic seizures. The C-peptide test is a method to identify the administration of exogenous insulin. Poisoning with alimemazine, warfarin, mercury, salt, sodium hydroxide, and others is also frequent[26].

Greiner et al. (2013)[27], reviewed hospital records of children seen at the child protection service with vomiting, diarrhea, apnea, and epilepsy. The results were compared with children with the same manifestations without a history of mistreatment (control). From the review of medical records, the authors developed an instrument with high sensitivity and specificity of screening that is composed of 15 questions. A score greater than or equal to 4 should be considered a possible FII.

As for the caregiver, he is a person with characteristics of Munchausen syndrome (multiple diagnoses, surgeries, and hospitalizations without a specific diagnosis), mental illness, a history of previous child abuse and insists on leaving the hospital or expressing a desire to transfer the child. In relation to the victim, a history of cyanosis is common, with multiple hospital visits in the last six months, frequent consultations with several specialists, showing remission of symptoms when the caregiver is absent, frequent history of apnea after discharge from the nursery, symptoms of diarrhea with or without vomiting for several days and without a definite diagnosis, or tests showing a toxic level of medication on more than one occasion[27].

Flaherty et al. (2013)[22] described the main warning symptoms for FII according to the different systems: musculoskeletal (lameness, muscle weakness, or bone fractures); nervous (headache and epilepsy); respiratory (sleep apnea, breathing difficulty, asthma, or hypoxia); endocrine (diabetes); digestive (diarrhea, vomiting, weight loss, abdominal pain, the need for parenteral nutrition); urinary (infection) and skin (rash, bruises, or abrasions).

Half of the victims present neurological manifestations such as sedation, coma, gait disorder, and epilepsy[19], although many epileptic seizures are refractory to conventional treatment, as they are caused by the perpetrator, as well as sedation that can be induced by the use of the psychoactive substance or even by insulin and asphyxiation[28]. Gastric disorders can be fabricated by the use of laxatives or emetics and respiratory disorders can be fabricated by an obstructive mechanism (suffocation) or the use of bronchial constricting substances. Hematological complaints characterized by nasal bleeding (epistaxis), hematuria, hemoptysis, or hematochezia that can be fabricated by adding the perpetrator's own blood or by administering anticoagulants are not uncommon. Caustic substances can cause a skin rash or the lesions can be falsified by the use of dyes. It is also described that the caregiver can infuse feces, urine, or other infectious elements in the vein of children to cause sepsis[29].

Briefly, we can mention some aspects that should be understood as a warning for the diagnosis of FII: clinical history is inconsistent; symptomatology is atypical; symptoms do not correlate with medical findings; the caregiver is never satisfied with the treatment; the response to treatment is unsatisfactory or absent despite being well indicated; symptoms manifest in the presence of the caregiver; the caregiver does not express relief with the improvement of the victim's symptoms or conditions, and the caregiver publicly requires sympathy or donation[22,30].

Perpetrator profile

Most of the perpetrators are female (97.6%), married (75.8%), with an average age (at the time of the child's diagnosis) of 27, 6 years, with a high frequency of being a person with a health-related profession (45.6%), with a history of obstetric complications in 23.5%, or with a history of child abuse in 30%. The mother is the aggressor in 95.6% of the cases and is a person with a psychiatric disorder, with the factitious disorder imposed on her being the most prevalent (30.9%), but she can also present personality disorder (18.6%) and depression (14.2%)[30]. These disorders do not prevent her from developing a good relationship with the medical team and she rarely distances herself from the victim during hospitalizations[17].

The DSM-5 applies the term factitious disorder imposed on another to characterize the FII and defines it as the falsified characterization of physical or psychological signs or symptoms, or the induction of injury or illness to another person, in this case, the child, who is presented to third parties as being ill, disabled or injured. This abnormal behavior persists even without evident external rewards and cannot be explained by another mental disorder, such as delusional disorder or another psychotic disorder[14]. The factual disorder imposed on another should not be considered for the victim, but for the perpetrator.

Factitious disorder

A perpetrator is a person with a factitious disorder, that is, it is a simulated condition produced intentionally (dissimulation syndromes) without external incentives[14].

Factitious disorder is related to the intentionality of behavior and motivation. Thus, of the simulated diseases, the symptoms produced unconsciously are considered somatoform disorders, being divided into those that present mainly neurological complaints (conversion disorder) and those that present complaints of various systems and organs (somatization disorder); and the symptoms intentionally produced are considered diseases concealment, and of these, those that are motivated by external incentives are called simulation and those that are not motivated by external incentives are called factitious disorders[2]. Factitious disorders when imposed on another person are called factitious disorder by proxy or Munchausen syndrome by proxy[4,5].

Most of the perpetrators are the mothers who show great affection to the child, are careful, and insist on staying with the child during hospitalization, facts that can confuse doctors. In general, it induces the team to carry out sophisticated diagnoses and treatments that are not always without risks. It demonstrates disproportionate concern for the severity of the outcome. Even when confronted, she denies the fabrication of signs or symptoms[5,7].

Father's profile

Most studies focus on the figure of the aggressor, who in the vast majority is the mother. In general, the father tends to stay away from the child, he does not usually get emotionally or physically involved with the victim as much as with the family environment, so he assumes a passive and absent attitude[24,31].

Prognosis

Prognosis depends on the method applied by the aggressor, the time of exposure and the child's condition. It is estimated that the mortality rate is 9%[7], but this percentage is certainly underestimated, as many diagnoses are not made. Physical injuries (both by the action of the perpetrator and by means of investigation and treatment) and psychological damage (dependence on the mother and the disease itself, anxiety, aggression, hyperactive, and depressive behavior, learning disorders, difficulty in social interaction) are often observed[5].

Psychiatric injuries can occur without the presence of more serious physical injuries and are related to the breach of trust in the mother-child relationship[13].

Little is discussed in the medical literature about the consequences of this violence throughout the adult lives of the victims. In an article published in 1995, the author obtained information from adults who were victims of FII during childhood and the result showed that the main impacts experienced by these victims in adult life were difficulty in maintaining relationships, insecurity, and difficulty in separating fantasy from reality in relation to the disease[32]. This study has several limitations, including the small sample and the way in which the FII was identified (declared by the respondents).

Shapiro (2011)[33] described the psychological sequel of this disease in an adolescent who, even far from the mother's contact (perpetrator) and distant from the "fabrications of clinical manifestations", persisted with various symptoms of non-existent diseases, from the physical point of view, denoting psychological damage to the victim with significant damage to reality, also called "*folie à deux*". The victim can also develop a relationship of extreme attachment to the aggressor even in the face of the risk that is exposed, which can be compared to the Stockholm syndrome[34].

Non-medicated medical conduct: forensic aspects in Brazil

Law No. 6,259, of October 30, 1975, establishes the rules related to compulsory notifications, in article 8, establishes that all doctors and other health professionals are obliged to report suspected or confirmed cases of diseases that are part of the list prepared by the Ministry of Health, to be updated periodically[35].

The Statute of the Child and Adolescent Article 13 establishes that cases of suspected or confirmed mistreatment against a child or adolescent must be obligatorily communicated to the local Guardianship Council, which is responsible for analyzing the case and, if necessary, calling the Public Ministry, the police authority and/or Justice, therefore, even without a certain diagnosis of Munchausen syndrome caused by third parties[36].

Ordinance No. 204, of February 17, 2016, defines the list of diseases, injuries and health events that must be reported, including violence, to the Notifiable Diseases Information System (SINAN)[37].

Therefore, the physician in the face of a suspected or confirmed case must inform the supervisory board and carry out the compulsory notification under penalty of the ethical infraction (article 73) of CFM Resolution No. 2217/2018[38] (Code of Medical Ethics) and penal (Art. 269 - "*Letting the doctor denounce to the public authority a disease whose notification is mandatory: Penalty - detention, from six months to two years, and a fine*")[39].

In 2002, the American Professional Society on the Abuse of Children (APSAC) ratified the importance of the new name for Munchausen syndrome by proxy and analyzed the FII under two aspects: the identification of child victimization and suggested the term "falsification of the pediatric condition" and the identification of the aggressor's motivation[13].

The information that must be given to the court so that the judgment of the case can be carried out in an impartial manner and with objective medical elements is fundamental for the protection of the child. Therefore, the search for medical evidence to prove abuse is of great significance.

The investigation of the medical histories of the child (since birth), of the siblings, (especially regarding the occurrence of death), and of the mother, as well as data on family dynamics, prove to be crucial. At this point, it is noteworthy that the hospitalization and previous medical care of the child, in the vast majority, were in different places, with frequent adulteration of test results or medical documentation. The medical records should be analyzed in detail, and checked if the medical team under any circumstances witnessed the complaints described by the mother.

A data of great importance for the establishment of FII is the mother's description of the clinical manifestations[40].

CONCLUSION

FII is a type of maltreatment imposed on children, of both sexes, in the first five years of life, predominantly, whose perpetrator, in general, is the mother who has a psychiatric diagnosis of factitious disorder. Different mechanisms for fabricating illness or worsening previous morbid conditions can be used by the aggressor. Failure by the doctor to diagnose can represent serious damage to the child's physical and mental health, including death. Some diagnostic criteria are suggested and should be known by doctors, but that does not mean that it is an easy diagnosis, but they can help. Faced with suspicion or confirmation, the doctor must adopt medical and legal measures aimed at protecting the child from further aggression.

REFERENCES

1. Royal College of Paediatrics and Child Health (RCPCH). Fabricated or induced illness by carers (FII): a practical guide for paediatricians [Internet]. London: RCPCH; 2012; [access in 2020 May 23]. Available from: https://www.rcpch.ac.uk/sites/default/files/Fabricated_or_Induced_Illness_by_Carers_A_Practical_Guide_for_Paediatricians_2009.pdf
2. Wallace H, Roberson C, Globokar J. Physical child abuse. In: Wallace H, Roberson C, Globokar J, eds. Family violence: legal, medical, and social perspectives. 9th ed. New York: Taylor & Francis; 2019. Chapter 5.
3. Byard RW. "Munchausen syndrome by proxy": problems and possibilities. Forensic Sci Med Pathol. 2019 Feb;5:100-1. DOI: https://doi.org/10.1007/s12024-009-9071-2
4. Roesler TA. Medical child abuse/munchausen by proxy. In: The Encyclopedia of Clinical Psychology. Hoboken: John Wiley & Sons, Inc.; 2015. p. 1-3. DOI: https://doi.org/10.1002/9781118625392.wbecp087
5. Doughty K, Rood C, Patel A, Thackeray JD, Brink FW. Neurological manifestations of medical child abuse. Pediatr Neurol. 2016;54:22-8. DOI: http://dx.doi.org/10.1016/j.pediatrneurol.2015.09.010
6. Gomila I, López-Corominas V, Pellegrini M, Quesada L, Miravet E, Pichini S, et al. Alimemazine poisoning as evidence of Munchausen syndrome by proxy: a pediatric case report. Forensic Sci Int. 2016 Sep;266:e18-e22. DOI: http://dx.doi.org/10.1016/j.forsciint.2016.08.010
7. Artingstall K. Understand factitious disorders and factitious disorder by proxy. In: Artingstall K, ed. Munchausen by proxy and other factitious abuse. Practical and forensic investigative techniques. Boca Raton: CRC Press Taylor & Francis Group; 2017. Chapter 3.
8. Government of UK (UK). Department for Education. Department of Health, Home Office. Safeguarding children in whom illness is fabricated or induced: supplementary guidance to working together to safeguard children [Internet]. London: Government of UK; 2008; [access in 2020 Mar 01]. Available from: https://tinyurl.com/pegbxlf
9. Asher R. Munchausen's syndrome. Lancet. 1951;257(6650):339-41. DOI: https://doi.org/10.1016/S0140-6736(51)92313-6
10. World Health Organization (WHO). International statistical classification of diseases and related health problems (ICD) 10th revision [Internet]. Intentional production or feigning of symptoms or disabilities, either physical or psychological [factitious disorder] [Internet]. Geneva: WHO; 2016; [access in 2020 Mar 13]. Available from: https://icd.who.int/browse10/2016/en#/F68.1
11. Meadow R. Munchausen syndrome by proxy the hinterland of child abuse. Lancet. 1977 Aug;310(8033):343-5. DOI: https://doi.org/10.1016/s0140-6736(77)91497-0
12. Ayoub CC, Alexander R, Beck D, Bursch B, Feldman KW, Libow J, et al. Position paper: definitional issues in Munchausen by proxy. Child Maltreat. 2002;7(2):105-11. DOI: https://doi.org/10.1177/1077559502007002002
13. Glaser D, Davis P. For debate: forty years of fabricated or induced illness (FII): where next for paediatricians? Paper 2: Management of perplexing presentations including FII Arch Dis Child. 2019 Jan;104(1):7-11. DOI: http://dx.doi.org/10.1136/archdischild-2016-311326
14. American Psychiatric Association (APA). Diagnostic and Statistical Manual of Mental Disorders [Internet]. 5th ed. Washington: APA; 2013; [access in 2020 May 23]. Available from: http://www.niip.com.br/wp-content/uploads/2018/06/Manual-Diagnosico-e-Estatistico-de-Transtornos-Mentais-DSM-5-1-pdf
15. Ban S, Shaw D. Fabricated or induced illness in a child. Br J Nurs. 2019 Nov;28(20):1288-90. DOI: https://doi.10.12968/bjon.2019.28.20.1288
16. Feldman MD, Brown RMA. Munchausen by proxy in an international contexto. Child Abuse Negl. 2002;26(5):509-24. DOI: https://doi.org/10.1016/S0145-2134(02)00327-7
17. Abeln B, Love R. An overview of Munchausen syndrome and Munchausen syndrome by proxy. Nurs Clin N Am. 2018 Sep;53(3):375-84. DOI: https://doi.org/10.1016/j.cnur.2018.04.005
18. 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. DOI: https://doi.org/10.1136/adc.75.1.57
19. Denny SJ, Grant CC, Pinnock R. Epidemiology of Munchausen syndrome by proxy in New Zealand. J Paediatr Child Health. 2001 Dec;37(3):240-3. DOI: https://doi.org/10.1046/j.1440-1754.2001.00651.x
20. Ferrara P, Vitelli O, Bottaro G, Gatto A, Liberatore P, Binetti P, et al. Factitious disorders and Munchausen syndrome: the tip of the iceberg. J Child Health Care. 2013 Feb;17(4):366-74. DOI: https://doi.org/10.1177/1367493512462262
21. Sheridan MS. The deceit continues: an updated literature review of Munchausen syndrome by proxy. Child Abuse Negl. 2003 Apr;27(4):431-51. DOI: https://doi.org/10.1016/S0145-2134(03)00030-9
22. Flaherty EG, MacMillan HL, Committee on Child Abuse and Neglect. Caregiver-fabricated illness in a child: a manifestation of child maltreatment. Pediatrics. 2013;132(3):590-97. DOI: https://doi.org/10.1542/peds.2013-2045
23. Rosenberg DA. Munchausen syndrome by proxy: medical diagnostic criteria. Child Abuse Negl. 2003 Apr;27(4):421-30. DOI: https://doi.org/10.1542/peds.2013-204510.1016/s0145-2134(03)00029-2
24. Morrell B, Tilley DS. The role of nonperpetrating fathers in Munchausen syndrome by proxy: a review of the literature. J Pediatr Nurs. 2012 Aug;27(4):328-35. DOI: https://doi.org/10.1016/j.pedn.2011.03.008
25. Rosenberg DA. Web of deceit: a literature review of Munchausen syndrome by proxy. Child Abuse Negl. 1987;11(4):547-63.
26. Davis P, Murtagh U, Glaser D. 40 years of fabricated or induced illness (FII): where next for paediatricians? Paper 1: epidemiology and definition of FII. Arch Dis Child. 2019 Feb;104(2):110-4. DOI: https://doi.org/10.1136/archdischild-2017-314319
27. Greiner MV, Palusci VJ, Keeshin BR, Kearns SC, Sinal SH. A preliminary screening instrument for early detection of medical child abuse. Hospital Pediatr. 2013 Jan;3(1):39-44. DOI: https://doi.org/10.1542/hpeds.2012-0044
28. Fulton D. Early recognition of Munchausen syndrome by proxy. Crit Care Nurs Q. 2000 Aug;23(2):35-42. DOI: https://doi.org/10.1097/00002727-200008000-00005
29. Meadow R. Munchausen syndrome by proxy. Arch Dis Child. 1982;57(2):92-8. DOI: http://dx.doi.org/10.1136/adc.57.2.92
30. Yates G, Bass B. The perpetrators of medical child abuse (Munchausen syndrome by proxy) – a systematic review of 796 cases. Child Abuse Negl. 2017 Oct;72:45-53. DOI: http://dx.doi.org/10.1016/j.chiabu.2017.07.008
31. Beard KV. Protect the children: be on the lookout for Munchausen syndrome by proxy. RN. 2017 Dec;70(12):33-6.

32. Libow JA. Munchausen by proxy victims in adulthood: a first look. Child Abuse Negl. 1995 Sep;19(9):1131-42. DOI: https://doi.org/10.1016/0145-2134(95)00073-H

33. Shapiro M, Nguyen M. Psychological sequelae of Munchausen's syndrome by proxy. Child Abuse Negl. 2011 Feb;35(2):87-8. DOI: https://doi.org/10.1016/j.chiabu.2010.10.005

34. Deimel IV GW, Burton MC, Raza SS, Lehman JS, Lapid MI, Bostwick JM. Munchausen syndrome by proxy: an adult dyad. Psychosomatics. 2012 May/Jun;53(3):294-9. DOI: https://doi.org/10.1016/j.psym.2011.04.006

35. Law No. 6,259, of October 30, 1975 (BR). Establishes the rules related to compulsory notifications [Internet]. Diário Oficial da União, Brasília (DF), 30 Oct 1975; [access in 2020 May 23]. Available from: http://www.planalto.gov.br/ccivil_03/leis/L6259.htm

36. Law No. 8,069, of July 13, 1990 (BR). Provides for the Statute of Children and Adolescents and provides other measures [Internet]. Diário Oficial da União, Brasília (DF), 13 Nov 1990; [access in 2020 Apr 12]. Available from: http://www.planalto.gov.br/ccivil_03/leis/l8069.htm

37. Ministry of Health (BR). Ordinance No. 204, of February 17, 2016 [Internet]. Define a Lista Nacional de Notificação Compulsória de doenças, agravos e eventos de saúde pública nos serviços de saúde públicos e privados em todo o território nacional, nos termos do anexo, e dá outras providências [Internet]. Brasília (DF): Ministry of Health; 2016; [access in 2020 Apr 12]. Available from: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2016/prt0204_17_02_2016.html

38. Conselho Federal de Medicina (CFM). Resolution No. 2217/2018, of September 27, 2018. Medical Code of Ethics [Internet]. Brasília (DF): CFM; 2018; [access in 2020 Apr 12]. Available from: https://portal.cfm.org.br/images/PDF/cem2019.pdf

39. Decree Law no. 2848, of December 7, 1940 (BR). Penal Code [Internet]. Diário Oficial da União, Rio de Janeiro (RJ), 07 Dec 1940; [access in 2020 Apr 12]. Available from: http://www.planalto.gov.br/ccivil_03/decreto-lei/del2848.htm

40. Sanders MJ, Bursch B. Forensic assessment of illness falsification, Munchausen by proxy, and factitious disorder, NOS. Child Maltreat. 2002 May;7(2):112-24. https://doi.org/10.1177/1077559502007002003