

A multidisciplinary approach in cases of child abuse: The key role of gynaecologist, pediatrician and psychologist.

Angelo Montana¹, Michele Fichera², Pierluigi Giampaolino³, Calogero Salvaggio⁴, Antonella D'Apolito³, Fabrizia Santangelo³, Mariateresa Musone³, Agnese Maria Chiara Rapisarda², Federica Di Guardo², Valentina Lucia La Rosa⁵, Marco Panella²

¹Laboratory of Forensic Toxicology, Department "G.F. Ingrassia", University of Catania, Catania, Italy.

²Department of General Surgery and Medical Surgical Specialties, University of Catania, Catania, Italy.

³Department of Public Health, School of Medicine, University of Naples "Federico II", Naples, Italy.

⁴Azienda Sanitaria Provinciale 2 Caltanissetta, "Sant'Elia" Hospital, Caltanissetta, Italy.

⁵Unit of Psychodiagnostics and Clinical Psychology, University of Catania, Catania, Italy.

Abstract

The aim of this work is to propose a comment on the impact of different forms of child abuse. A multidisciplinary approach (gynecological, psychological and pediatric) is important for an adequate diagnosis and an early recognition of the abuse in order to minimize the serious impact of child abuse on the physical and psychological wellbeing of the victims.

Keywords: Child abuse, Diagnosis, Gynaecologist, Pediatrician, Psychologist.

Accepted October 27, 2017

Introduction

The mistreatment and abuse of minors include all forms of physical and/or emotional mistreatment, sexual abuse, neglect, lack of care, or exploitation (commercial or otherwise) that causes harm to a child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power [1-3]. According to a study conducted by Terre des homes and Cismai (Coordinated Italian Services against Infant Mistreatment or Abuse) in 2012-2013, 6.36% of all the children surveyed in the area in question have been assisted by social services and that 0.98% of those had been subject to abuse. In other words, 1 in every 6 children assisted by social services and 1 in every 100 children in the entire surveyed area were victims of abuse. Abuse therefore represents a primary cause in the intervention of social services, constituting 15.46% of all children assisted by social services. The consequences of abuse are both physical and psychological: difficulty in physical growth and language learning, intellectual deficits, difficulty at school, running away from home, use and selling of drugs, destructive behavior both towards themselves and others, and suicide attempts to name but a few [4,5].

A comment on the impact of different forms of child abuse

Sexual violence is a problem that covers many dimensions, each of which having specific and unique requirements and

neither of which taking precedence over the other [6-8]. Specifically, a case of abuse raises two different questions: the first of which asks whether a problem does in fact exist, and how can it be resolved. The second, instead, poses a different question: does a guilty party exist, and who is it? The first question therefore concerns the area of care, within which a medical visit would aim to acquire diagnostic elements to establish whether abuse was present. Instead, the second question concerns a more judiciary approach in which the true/false categories cannot be overlooked. In this case, the visit becomes a means of constructing a narrative that builds an image of the process and its roots during primary evaluations [9].

The medical diagnosis was for a long time substantially the prerogative of forensic disciplines and has only recently assumed a more general medical and assistive character. In this regard, differential diagnosis with other conditions which may cause vaginal and/or anal bleeding, such as endometriosis [10-14], endocrinological diseases and hormonal dysbalance [15-22] and cancer [23-29], although uncommon, should be carefully taken into account. This has given the diagnosis of abuse or violence a more medical meaning, in the sense that it has become the prerequisite in commencing treatment [30,31]. However, the difficulty that medical practitioners face when recognising the signs of physical and psychological abuse still lurks in the shadows surrounding this particular subject. There has long been a

substantial divergence in the idea that medical structures (doctors, nurses, obstetricians, etc.) are privileged monitors in initially diagnosing child abuse/mistreatment-however, diagnostic awareness and sensitivity (understood not as subjective, but rather as a measurable parameter) are not good. This has been confirmed by various studies in literature [32,33], in which numerous doctors were tested on their ability to diagnose abuse or mistreatment. Only a small percentage of those recognised the child with physical, instrumental and physical signs of abuse. Of these, 65.6% declared having suspected at least one case of abuse during their careers and 48% decided not to raise the alarm due to not having adequate proof, not knowing which procedures to follow, or due to fear of the consequences on the family and child.

In Italy, the interception of violence against children was described in a study conducted in 2015 by the Mangiagalli Clinic in Milan, involving 500 doctors (paediatricians, general medical practitioners, hospital doctors and freelance) who were surveyed in terms of their ability to recognise the signs of abuse, the quality of their response and more generally, their knowledge of the subject. From the 398 questionnaires collected, it was deduced that 75% of the doctors interviewed had been working for over 20 years and during that time the majority (65%) had come upon cases of suspected abuse. The 57% of those who had anything to do with the phenomenon (226) declared that they had activated the warning procedures, also highlighting an analogous percentage in which these procedures were not activated.

Another extremely important aspect is fear concerning the impact that these warning procedures can have on the parents of abused children: 16% of doctors retained that the activation of these procedures is equivalent to losing a patient. There was also a common feeling regarding the necessity of being able to refer to professional figures with specific experience in this field, as well as a widespread need for training on the subject. More than half of those interviewed would welcome the possibility of working with a colleague with more expertise, to whom they could refer cases of suspected abuse, not only to feel more sure (59%) but also to be able to guarantee a more complete protection of the victims (76%). Lastly, around half of the doctors stated that they had never received any training on the subject, with 93% in favour of specialist training. In managing such a complex and multidisciplinary phenomenon, a key role is undertaken by three specialist medical figures closely collaborating, these being the gynaecologist [2,34], psychologist [5] and paediatrician [35].

Given the prevalence of this phenomenon, every paediatrician will eventually be faced during the course of his/her career with abuse in one of its varying typologies [36]. Particular attention should be paid by pediatricians to victims of abuse when they demonstrate specific traumatic elements, signs of emotional or physical abandonment,

and/or late growth, modified behavior, poor performance at school, signs of low self-esteem, impulsivity, and violent behavior. The difficulty faced primary assistance pediatricians is that, despite around 10% of examined children having been exposed to mistreatment in the previous year, few in reality show injuries or clinical symptoms directly caused by abuse [37,38].

Traumatic lesions are frequently found on abused children in the pediatric population. A retrospective comparative analysis of the last 10 years on abused minors and hospitalised children with non-intentional lesions showed that, in the context of abuse, 10.6% of all blunt traumas were observed on patients under 5 years of age [39-41]. Cutaneous lesions (ecchymosis and contusions) were found to be the most common, followed in second place by fractures. The incidence rate of signs of abuse increases with the age of the child – however, fatal abuse and severe lesions are still common among children under 2 years of age [6]. Therefore, particular attention must be paid to the signs, symptoms, and risk factors of abuse in very young children. For example, up to 35% of children diagnosed with “shaken baby syndrome” had shown previous signs of physical abuse, indicating that some of these cases could have been avoided [42].

A study, which analyzed the impact of abuse in the first six years and the subsequent six years of a child’s life (relationships between 8 categories of childhood adversity: psychological abuse, physical abuse, sexual abuse, abandonment, use of alcohol by caregiver, depressive symptoms exhibited in caregiver, criminal behavior at home), demonstrated that if a child had been exposed to five or more adversities, there was a significant increase in the risk of health damage in the subsequent six years of life [42], including adult obesity or Child Type 2 Diabetes, and related eating disorders [43-45].

The role of pediatricians, on the same level as gynecologists, includes the prevention of abuse as well as the surveying and medical management of victims. After accurately identifying suspected victims of abuse, pediatricians should facilitate the referral of the case, the following investigations, and the outcome for these children and their families [46]. Within the general pediatric framework, there are numerous opportunities to intervene and prevent abuse by providing parents with adequate information. However, the surveying of child abuse is not always easy [47]. Pediatricians and gynecologists should also be capable of identifying children and families at risk of abuse (for example, disabilities, poverty, substance abuse, mental health problems, maternal depression, poor parenting skills in both parents and relatives, and domestic violence) [48,49].

When prevention and anticipation fail, the next step for the relevant specialists is to accurately identify the child abuse. As indicated above, the first symptoms of abuse can be physical signs and/or scholastic, social, psychological

and/or behavioral changes in children of any age or sex. This falls under the role of specialist gynecologists, who should be the one of the first healthcare professionals in contact with the abused child, despite the difficulties of reaching a concrete diagnosis. It must also be remembered that a genital examination is normal in more than 50% of children suspected of having been abused, and that less 10% of these will present characteristic lesions; more than 90% of children aged between 3 and 8 years that describe vaginal penetration (fingers, penis) do not exhibit signs of genital lesions. The absence of physical signs neither excludes nor confirms a diagnosis of abuse [50-52]. Furthermore, the morphological aspect of the genitals as the only present indicator is not sufficient to confirm sexual abuse. Concrete indicators of abuse are represented by pregnancy, sperm found in the genitals/anus, and/or sexually transmitted diseases. In these cases, the psychologist undertakes an equally important role as the gynecologist. It has been noted that victims of physical abuse during childhood are more likely to develop a variety of behavioral and functional problems, such as behavioral disorders, physically aggressive behavior, poor school performance, reduced cognitive functions [53]; many of these children will also exhibit sleep disorders, anxiety, oppositional and violent behavior and lack of success at school [54].

These problems can persist for a long time, even after the abuse has ceased. A prospective analysis of the long-term effects of physical abuse during early childhood and of the consequent behavioral and psychological problems in adolescence showed that adolescents who were abused in their first years of life were absent 1.5 times more days from school than non-abused adolescents of the same age. At the same time, they enrol later at university, show higher levels of aggression, anxiety/depression, disassociation, as well as symptoms of Post-Traumatic Stress Disorder, social problems, cognitive problems and social withdrawal, with a standard deviation three quarters higher than non-abused adolescents of the same age [55].

The work of psychologists is undertaken either directly or indirectly with the person in question, collaborating with other people or agencies in the area (relatives, school, operators of other services, magistrates) with the objective of offering support, discussion, and consultation. The individual in question is encouraged to follow a route of *self-care*: it promotes understanding and re-elaboration of the event through sharing the traumatic experience and the feelings related to it. In this way, the individual regains a sense of the event and of their emotions, re-elaborating the traumatic event in order to form a new plan [9].

Thus, in conclusion, citing the initial definition of abuse, it is evident that clinical visits play a fundamental role, not in the "judiciary" sense but instead from a clinical perspective, due to all the different sides of abuse (physical, sexual, emotional, neglect), each one with specific requirements

in terms of treatment. It represents, along with anamnesis, the start of a diagnostic process. A systematic examination is essential to better understand difficult situations in order to reach a differential diagnosis, as well as having a rational foundation for raising the alarm. The identification and diagnosis of physical abuse, as in any other health issue, depends on doctors' ability to recognise suspect lesions, in order to reconstruct an accurate and complete clinical history, as well as a physical examination using all appropriate auxiliary tests. It also depends on the ability of doctors to discern whether the explanations provided by caregivers are coherent with the characteristics of the lesions and the child's developmental capacities.

Therefore, the clinical approach towards a new-born or child with lesions resulting from possible abuse is not significantly different to normal pediatric care and should be practiced with the same high standards of quality [36]. Even if the doctor suspects abuse, priority must always be given to the child's immediate medical requirements and safety. The physical examination starts with the basic norms, such as height, weight and head circumference. These data must be compared with a growth chart, with the objective of evaluating appropriate growth speed and the presence of insufficient development, a potentially important sign of emotional and/or physical neglect. Alongside lesions resulting from suspected abuse, a general examination can reveal other indicators of abuse or neglect, such as extensive dental decay, severe dermatitis of the diaper area, or neglected injuries. It is important to note that identifying a form of abuse, for example physical neglect, does not exclude the presence of other forms, such as contusions or fractures. Every time that abuse is suspected, information should be collected in a detailed manner, rather than accusatory.

Conclusion

Clinical history must include all information concerning the behaviour of the child before, during, and after the trauma. This includes observable changes in behaviour as well as the presence of healthcare professionals and people responsible care of the child before, during and after the abuse. Violent parents are not usually capable of providing information regarding the trauma and how it was produced, behaviour usually observed in the pediatric profession.

References

1. American Academy of Pediatrics. Guidelines for the evaluation of sexual abuse of children: subject review. *Pediatrics* 1999; 103:186-191.
2. Adams JA. Evolution of a classification scale medical evaluation of suspected child sexual abuse. *Child Maltreat* 2001; 6: 31-36.
3. Adams JA. Medical evaluation of suspected child sexual abuse. *J Pediatr Adolesc Gynecol* 2004; 17: 191-197.

4. Debowska A, Boduszek D. Child abuse and neglect profiles and their psychosocial consequences in a large sample of incarcerated males. *Child Abuse Negl* 2017; 65: 266-277.
5. Norman RE, Byambaa M, De R, et al. The long-term health consequences of child physical abuse, emotional abuse and neglect: A systematic review and meta-analysis. *PLoS Med* 2012; 9: e1001349.
6. Cafrey J. Multiple fractures in the long bones of infant suffering from chronic subdural hematoma. *AJR* 1946; 561: 57-70.
7. Finkelhor D, Jones L, Shattuck A. Updated trends in child maltreatment. *Crime against Children Research Center. University of New Hampshire* 2009; 1-4.
8. Finkelhor D, Ormrod R, Turner H, et al. The victimization of children and youth: A comprehensive, national survey. *Child Maltreat* 2005; 10: 5-25.
9. Cattaneo C, Gentilomo A, Motta T, et al. Abuse and sexual violence. *Edi.Ernes* 2006.
10. Laganà AS, Vitale SG, Granese R, et al. Clinical dynamics of Dienogest for the treatment of endometriosis: from bench to bedside. *Expert Opin Drug Metab Toxicol* 2017; 13: 593-596.
11. Laganà AS, Vitale SG, Salmeri FM, et al. Unus pro omnibus, omnes pro uno: A novel, evidence-based, unifying theory for the pathogenesis of endometriosis. *Med Hypotheses* 2017; 103: 10-20.
12. Vetvicka V, Laganà AS, Salmeri FM, et al. Regulation of apoptotic pathways during endometriosis: from the molecular basis to the future perspectives. *Arch Gynecol Obstet* 2016; 294: 897-904.
13. Laganà AS, Triolo O, Salmeri FM, et al. Natural Killer T cell subsets in eutopic and ectopic endometrium: a fresh look to a busy corner. *Arch Gynecol Obstet* 2016; 293: 941-949.
14. Butticiè S, Laganà AS, Mucciardi G, et al. Different patterns of pelvic ureteral endometriosis. What is the best treatment? Results of a retrospective analysis. *Arch Ital Urol Androl* 2016; 88: 266-269.
15. Chiofalo B, Laganà AS, Palmara V, et al. Fasting as possible complementary approach for polycystic ovary syndrome: Hope or hype? *Med Hypotheses* 2017; 105: 1-3.
16. Caruso S, Malandrino C, Cicero C, et al. Quality of sexual life of women on oral contraceptive continued-regimen: pilot study. *J Sex Med* 2013; 10: 460-466.
17. Laganà AS, Rossetti P, Sapia F, et al. Evidence-based and patient-oriented inositol treatment in polycystic ovary syndrome: Changing the perspective of the disease. *Int J Endocrinol Metab* 2017; 15: e43695.
18. Cicinelli E, De Tommaso M, Cianci A, et al. Oral contraceptive therapy modulates hemispheric asymmetry in spatial attention. *Contraception* 2011; 84: 634-636.
19. Muscogiuri G, Palomba S, Laganà AS, et al. Current insights into inositol isoforms, mediterranean and ketogenic diets for polycystic ovary syndrome: From bench to bedside. *Curr Pharm Des* 2016; 22: 5554-5557.
20. Caruso S, Agnello C, Malandrino C, et al. Do hormones influence women's sex? Sexual activity over the menstrual cycle. *J Sex Med* 2014; 11: 211-221.
21. Paul C, Laganà AS, Maniglio P, et al. Inositol's and other nutraceuticals' synergistic actions counteract insulin resistance in polycystic ovarian syndrome and metabolic syndrome: State-of-the-art and future perspectives. *Gynecol Endocrinol* 2016; 32: 431-438.
22. Caruso S, Rugolo S, Agnello C, et al. Quality of sexual life in hyperandrogenic women treated with an oral contraceptive containing chlormadinone acetate. *J Sex Med* 2009; 6: 3376-3384.
23. Chiofalo B, Palmara V, Laganà AS, et al. Fertility sparing strategies in patients affected by placental site trophoblastic tumor. *Curr Treat Options Oncol* 2017; 18: 58.
24. Vitale SG, La Rosa VL, Rapisarda AMC, et al. Fertility preservation in women with gynaecologic cancer: The impact on quality of life and psychological well-being. *Hum Fertil (Camb)* 2017: 1-4.
25. Vitale SG, Laganà AS, Capriglione S, et al. Target therapies for uterine carcinosarcomas: Current evidence and future perspectives. *Int J Mol Sci* 2017; 18.
26. Rossetti D, Vitale SG, Tropea A, et al. New procedures for the identification of sentinel lymph node: Shaping the horizon of future management in early stage uterine cervical cancer. *Updates Surg* 2017.
27. Vitale SG, Rossetti D, Tropea A, et al. Fertility sparing surgery for stage IA type I and G2 endometrial cancer in reproductive-aged patients: evidence-based approach and future perspectives. *Updates Surg* 2017; 69: 29-34.
28. Cignini P, Vitale SG, Laganà AS, et al. Preoperative work-up for definition of lymph node risk involvement in early stage endometrial cancer: 5 year follow-up. *Updates Surg* 2017; 69: 75-82.
29. Bellia A, Vitale SG, Laganà AS, et al. Feasibility and surgical outcomes of conventional and robot-assisted laparoscopy for early-stage ovarian cancer: A retrospective, multicenter analysis. *Arch Gynecol Obstet* 2016; 294: 615-622.

30. Flaherty EG, Sege R. Barriers to physician identification and reporting of child abuse. *Pediatr Ann* 2005; 34: 349-356.
31. Flaherty EG, Sege RD, Griffith J, et al. From suspicion of physical child abuse to reporting: primary care clinician decision making. *Pediatrics* 2008; 122: 611-619.
32. Marchand J, Deneyer M, Vandenplas Y. Detection, diagnosis, and prevention of child abuse: The role of the pediatrician. *Eur J Pediatr* 2012; 171: 17-23.
33. Gilbert R, Widom CS, Browne K, et al. Burden and consequences of child maltreatment in high income countries. *Lancet* 2009; 373: 68-81.
34. ACOG. The American College of Obstetricians and Gynaecologists. Technical Bulletin 1970: 14.
35. Dubowitz H. Pediatrician's role in preventing child maltreatment. *Pediatr Clin North Am* 1990; 37: 989-1002.
36. Kellog ND. The Committee on Child Abuse and Neglect. Evaluation of suspected child physical abuse. *Pediatrics* 2007; 119: 1232-1241.
37. Stirling J, American Academy of Child and Adolescent Psychiatry; Amaya-Jackson L, et al. Understanding the behavioral and emotional consequences of child abuse. *Pediatrics* 2008; 122: 667-673.
38. Gilbert R, Kemp A, Thoburn J, et al. Recognizing and responding to child maltreatment. *Lancet* 2009; 373: 167-180.
39. DiScala C, Sege R, Li G, et al. Child abuse and unintentional injuries: A 10 year retrospective. *Arch Pediatr Adolesc Med* 2000; 154: 16-22.
40. Schnitzer PG, Ewigman BG. Child deaths resulting from inflicted injuries: Household risk factors and perpetrator characteristics. *Pediatrics* 2005; 116: 687-693.
41. Barlow KM, Milne S, Aitken K, et al. A retrospective epidemiological analysis of non-accidental head injury in children in Scotland over a 15 year period. *Scott Med J* 1998; 43: 112-114.
42. Flaherty EG, Thompson R, Litrownik AJ, et al. Adverse childhood exposures and reported child health at age 12. *Acad Pediatr* 2009; 9: 150-156.
43. Johnson JG, Cohen P, Kasen S, et al. Childhood adversities associated with risk for eating disorders or weight problems during adolescence or early adulthood. *Am J Psychiatry* 2002; 159: 394-400.
44. Noll JG, Zeller MH, Trickett PK, et al. Obesity risk for female victims of childhood sexual abuse: A prospective study. *Pediatrics* 2007; 120: 361-367.
45. Thomas C, Hyponnen E, Power C. Obesity and type 2 diabetes risk in mid-adult life: The role of childhood adversity. *Pediatrics* 2008; 121: 1240-1249.
46. Hudson M, Kaplan R. Clinical response to child abuse. *Pediatr Clin North Am* 2006; 53: 27-39.
47. Woodman J, Pitt M, Wentz R, et al. Performance of screening tests for child physical abuse in accident and emergency departments. *Health Technol Assess* 2008; 12: 1-95.
48. Olds DL, Eckenrode J, Henderson C. Long-term effects of home visitation on material life course and child abuse and neglect: 15 year follow-up of a randomized trial. *JAMA* 1997; 278: 637-643.
49. Scribano PV. Prevention strategies in child maltreatment. *Curr Opin Pediatr* 2010; 22:616-620.
50. Berenson AB, Chacko MR, Wiemann CM, et al. A case-control study of anatomic changes resulting from sexual abuse. *Am J Obstet Gynecol* 2000; 182: 820-831.
51. Adams J, Botash AS, Kellogg N. Differences in hymenal morphology between adolescent girls with and without a history of consensual sexual intercourse. *Arch Pediatr Adolesc Med* 2004; 158: 280-285.
52. Heger A, Ticson L, Velasquez O, et al. Children referred for possible sexual abuse: Medical findings in 2384 children. *Child Abuse Negl* 2002; 26: 645-659.
53. Kolko DJ. Characteristics of child victims of physical violence: research findings and clinical implications. *J Interpers Violence* 1992; 7: 244-276.
54. Flaherty EG, Stirling J Jr; American Academy of Pediatrics. Committee on Child Abuse and Neglect Clinical report-the pediatrician's role in child maltreatment prevention. *Pediatrics* 2010; 126: 833-841.
55. Lansford JE, Dodge KA, Pettit GS, et al. A 12 year prospective study of the long-term effects of early child physical maltreatment on psychological, behavioral and academic problems in adolescence. *Arch Pediatr Adolesc Med* 2002; 156: 824-830.

Correspondence to:

Valentina Lucia La Rosa,
Unit of Psychodiagnostics and Clinical Psychology,
University of Catania,
Via Santa Sofia 78, 95123 Catania (CT),
Italy.
Tel: +39-3345390030; +39-0953782793
Fax: +39-0953782793
E-mail: psicolarosa@gmail.com