Bol Med Hosp Infant Mex. 2016;73(4):219–227

Boletín Médico del
Hospital Infantil de México

www.elsevier.es/bmhim

REVIEW ARTICLE

Child abuse: knowledge, attention and diffusion in three pediatric hospitals in Mexico☆

Arturo Loredo Abdalá[a,*], Héctor Villanueva Clift[b], Angélica María Aguilar Ceniceros[c], Abigail Casas Muñoz[a]

[a] *Coordinación del Centro de Estudios Avanzados sobre Maltrato Infantil/Prevención/Instituto Nacional de Pediatría, Mexico City, Mexico*
[b] *Clínica de Maltrato Infantil, Hospital Infantil de Especialidades, Chihuahua, Chihuahua, Mexico*
[c] *Hospital General de Mexicali, Mexicali, Baja California, Mexico*

Received 8 March 2016; accepted 31 March 2016
Available online 14 November 2017

KEYWORDS
Child abuse;
Knowledge;
Attention;
Diffusion;
Pediatric hospital

Abstract Child abuse (CA) in Mexico has been described since the early 60s through isolated publications of clinical cases where manifestations of physical injury or sexual abuse predominated.

Since the 90s, the Clinic for Integral Care for the Abused Children was established at the National Institute of Pediatrics, which addressed the care, teaching and research on this topic. This approach was replicated in two more hospital centers in the country: the Clinic for Integral Care of the Abused Children at Children's Specialty Care Hospital of Chihuahua and the Pediatric Service of the General Hospital of Mexicali.

The main objective of this work was to present to the medical community, paramedics, and other professionals who interact with the pediatric population and society, the efforts that have been made in Mexico to address this legal, medical, and social pathology in a logical manner, always aiming at the protection of the victims and their families.
© 2016 Hospital Infantil de México Federico Gómez. Published by Masson Doyma México S.A. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

☆ Please cite this article as: Loredo Abdalá A, Villanueva Clift H, Aguilar Ceniceros AM, Casas Muñoz A. Maltrato infantil: su conocimiento, atención y difusión en tres hospitales pediátricos de México. Bol Med Hosp Infant Mex. 2016;73:219–227.

* Corresponding author.
E-mail address: cainm_inp@hotmail.com (A. Loredo Abdalá).

https://doi.org/10.1016/j.bmhime.2016.03.002
2444-3409/© 2016 Hospital Infantil de México Federico Gómez. Published by Masson Doyma México S.A. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

PALABRAS CLAVE
Maltrato infantil;
Conocimiento;
Atención;
Difusión;
Hospital pediátrico

Maltrato infantil: su conocimiento, atención y difusión en tres hospitales pediátricos de México

Resumen El maltrato infantil (MI) se ha visualizado en México desde la década de los 60 a través de publicaciones aisladas de casos clínicos donde predominaban las manifestaciones de daño físico o abuso sexual.

A partir de la década de los 90, se estableció la Clínica de Atención Integral al Niño Maltrato en el Instituto Nacional de Pediatría, cuyo accionar se orientó a la asistencia, docencia e investigación del tema. Este enfoque fue imitado en dos centros hospitalarios del país: en la Clínica para la Atención Integral del Menor Maltratado del Hospital Infantil de Especialidades de Chihuahua y en el Servicio de Pediatría del Hospital General de Mexicali.

El objetivo básico de este trabajo fue presentar a la comunidad médica y paramédica, a otros profesionales que interactúan con la población pediátrica y a la sociedad civil los esfuerzos que se han realizado en México para enfrentar esta situación médica-social y legal de una manera lógica, siempre orientada a proteger a las víctimas y a sus familias.
© 2016 Hospital Infantil de México Federico Gómez. Publicado por Masson Doyma México S.A. Este es un artículo Open Access bajo la licencia CC BY-NC-ND (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

Child abuse (CA) in Mexico has been described since the 60s through isolated publications of clinical cases where manifestations of physical injury or sexual abuse predominated.[1–4]

In the early 80s, Dr. Jaime Marcovich Kuba, a Mexican pediatrician at the Children's Hospital of Mexico Federico Gómez (HIMFG, for its Spanish acronym), took the lead by pointing out the severity of the problem. He published the book *I have the right to live*[5], based on newspaper reports. Two decades before, other physicians, pediatricians, radiologists, and psychiatrists from the HIMFG, and the Pediatric service from the National Medical Center S XXI from the Mexican Institute of Social Security (IMSS, for its Spanish acronym) made occasional remarks, even if they were only efforts to sensibilize the medical community about the issue.[6–8]

In the decade of 1980, the Department of Internal Medicine of the National Institute of Pediatrics (INP, for its Spanish acronym), a third-level hospital in Mexico City, increasingly detected children with CA who were initially admitted to the hospital for other reasons. At that time, this was called the *battered child syndrome*. The medical group led by Dr. Arturo Loredo Abdalá gained experience on the topic and began publishing articles in Mexican indexed pediatric journals, emphasizing the most remarkable medical and surgical aspects of the children and adolescents who had been physically or sexually assaulted.[9]

Simultaneously, the National System for the Integral Family Development (DIF Nacional, for its Spanish acronym), a government institution, worked with a program called PREMAN (abuse prevention), addressing the cases where the Mental Health and Legal staff diagnosed an abused child. Given this situation, which prevailed in the second half of the twentieth century, all cases diagnosed in the INP should have been channeled to that institution for their comprehensive care. Years later, the law established the obligation to notify each case to the public prosecutor's office, to clarify the legal status of the child, the family, the potential aggressor, and the momentary or final destination of the victim. The paper published by Dr. Carlos Baeza Herrera and his team about *surgical cases treated at ''De la Moctezuma Children's Hospital''* also stood out.

Over time, administrative authorities, medical and paramedical staff working at the INP and other pediatric hospitals, and citizens in general became aware of the medical-social and legal importance of CA. To understand and analyze the problems that arose around this subject, we present the history of the Comprehensive Care Clinic for Abused Children INP (CAINM-INP, for its Spanish acronym) in Mexico City, the Comprehensive Care Clinic for Abused Children at Chihuahua's Children Hospital (HIECH, for its Spanish acronym) in Chihuahua, and the Pediatrics General Hospital, in Mexicali, Baja California. The examples were taken from these three institutions because of their continuous actions around this subject in Mexico on a period of 10 to 20 years.

2. Comprehensive Care Clinic for the Abused Child

In 1997, the Comprehensive Care Clinic for the Abused Child was established in the INP (CAINM-INP) to develop

actions regarding care, teaching, and research on the subject.[10,11]

Unlike what happened in some industrialized and developing countries, at this time in Mexico and in the INP, the conditions to address this problem were very precarious. Therefore, the plan was to begin with a basic strategy, which only considered care actions, although in other countries there were more advanced approaches.[12,13]

2.1. Awareness of the administrative authorities and the medical and paramedical staff of the INP

While facing this new vision to address the problem, Dr. Arturo Loredo Abdalá, med-ped physician, proposed several strategies to develop the foundations regarding care, teaching, and research on CA to the director of INP. Initially, the approach was oriented towards the INP staff, later on for similar medical institutions, and almost simultaneously for civilians.

In this manner, the need to address CA, which was a scourge affecting all humanity, as a medical-social-legal matter was established. Additionally, in 1999, the World Health Organization (WHO) recognized CA as a public health problem worldwide.[14,15]

The program CAINM-IN took 16 years to develop around the following platforms of action:

2.1.1. Care platform

A first step was to gather a group of professionals from different disciplines interested and prepared on the subject, and that interacted with children and teenager CA victims at the INP. The founder and team coordinator was Dr. Arturo Loredo Abdalá.

The group was finally integrated by three pediatricians, a social worker, a psychologist, and a nutritionist. The Subdirectorate of Legal Affairs of the INP covered the legal aspects. Thus, medical, social, emotional, and legal aspects were covered as a whole. At the same time, support from research methods experts was obtained to handle the data and publish the obtained results.

This platform had three core functions:

A. It was necessary to develop a strong communication campaign (inside and outside of the INP) through joint meetings, conferences, training sessions, and the publication of books, papers, and pamphlets to raise awareness of the medical and paramedical group at INP to suspect the CA diagnosis.[16–18]

B. Improve CA diagnosis. In this matter, the group developed a definition that covered key aspects of violence against children and adolescents, specifically on CA, highlighting the *intentionality* of the potential aggressor.[19] The active and dynamic intervention of all the professionals already mentioned was needed in this process. The reason why the intervention of so many professionals for each suspected CA case is needed is to make an accurate differential diagnosis and dismiss situations which consequences can be similar to the characteristics regarding any CA modality. The possible conditions to rule out are the following:[17]

   1) Accidents
   2) Some pediatric diseases (osteogenesis imperfecta, rickets, renal rickets, some bleeding disorders, scurvy)
   3) Poverty
   4) Ignorance
   5) Disciplinary strategy
   6) Formative strategy
   7) Customs and habits

   Years later, according to the clinical expression of the victim, cases were recorded as noted in the Internacional Classification of Diseases (ICD-10)[20] in four CA modes:

   - Physical abuse
   - Sexual abuse
   - Psychological abuse
   - Negligence

   Although this classification includes most of the cases, there are other forms of violence against this group of age which often end up in CA:[17]

   - *Few known modalities*. These include the Munchausen syndrome, by proxy, satanic ritualism, fetal abuse, and ethnic abuse.[21,22]
   - *Little considered modalities*. They include children involved in war, child laborers, migrant children, parental alienation syndrome, peer abuse (bullying). Initially, they can be categorized as victims of violence, but eventually many end up as abused children or adolescents.

   At this stage, other medical specialists and health professional are involved, such as radiologists, surgeons, orthopedists, odontopediatricians, paramedics, nurses, and nutritionists. Furthermore, the intervention of other professionals such as philosophers, sociologists, anthropologists, and teachers; almost any professional could participate as long as they are concerned and, of course, prepared on this subject. These actions are taking place in numerous developed countries.[23–25]

   An essential consideration in the actions of CAINM-INP understood that the involvement of every one of the mentioned experts is crucial to the comprehensive care process and the accurate diagnosis. Experience shows that the CA diagnosis is confirmed only in 30% of the suspected cases: one in three children with this diagnostic situation is a real CA victim.[26,27]

   Therefore, if the case is not addressed properly, it can stigmatize an adult, a family, or a minor by a misdiagnosis, with all the legal, social, emotional, and economic repercussions.

C. Monitor the victim in the short- and medium-term. Once the diagnosis is made, a legal notice must be sent to the public prosecutor, who indicates the status of the child, of the potential aggressor, of his family and defines

the place where the victim is channeled to avoid new attacks.

Considering that the Mexican care networks for CA victims are not optimal, CAINM-INP tries to identify a family support network. This way, the right of having a family is not violated, considering that other rights have already been affected.

With this actions, patient monitoring is favored until complete recovery; in a way, this surveillance prevents the child to be continually assaulted (*CA secondary prevention*).

When establishing and developing this program, a comprehensive strategy (intervention of several specialists) was implemented as well as an inter-institutional intervention (intervention of various government and civil institutions), both necessary to provide the basic conditions for complete care. Experience reports that 66% of the attended children do not to suffer any aggression again on a surveillance period from 1 to 3 years.[28]

By collecting and processing clinical information with a proper research methodology, the group published about 80 papers in indexed medical, pediatric journals and four books on the subject. This way, pediatricians and other Mexican specialists have the opportunity to learn about this phenomenon and how to address it within the area of influence of the INP in Mexico City.[29]

2.1.2. Teaching platform

Almost simultaneously, educational programs were established targeting physicians in the pediatrics residency, medical school undergraduates working at INP, as well as nurses and social workers.

A specific program called *Link to Social Sciences in Pediatrics*, which lasted six years was established for the first-year medical residents in the Pediatrics specialty.

Because of the relevance of this issue, the Graduate Division of the School of Medicine from the National Autonomous University of Mexico (UNAM, for its Spanish acronym) supported the development of a graduate course for physicians and specialists, which has been opened for 12 years. This course is unique in the country.

In coordination with the Mexican Institute of Psychiatry, a CA module was developed for the Master's program in Public Mental Health, with the endorsement of the Graduate Division of the School of Medicine from UNAM.

The organization of four annual symposiums in 10 years and two international conventions in collaboration with the *Academia Mexicana de Pediatría A.C* (Pediatrics Mexican Academy) and the *Academia Nacional de Medicina de México* (Mexican National Academy of Medicine) are the results of the relevance of this subject in Mexico. These activities had social workers, psychologists, professors, doctors, sociologists, anthropologists, and the general public as a primary audience.

2.1.3. Research platform

For 16 years, various research protocols based on clinical data were developed. Most of them were clinical studies that allowed publishing the aforementioned papers. The Research Directorate of the INP always supported these projects.

2.1.4. Prevention platform

Since 2013, the General Direction of INP authorized the creation of the Coordination for Advanced Study on Child Abuse-Prevention (CEAMI-P, for its Spanish acronym) under the coordination of Dr. Arturo Laredo Abdalá. The primary objective is CA *prevention*. The basic goals are oriented towards the enrichment and communication of social conditions of everyday life of Mexican children and adolescents, which is an opportunity to have a *window* to Mexican Social Pediatrics.

The basic programs are the following:[30]

1. Recognition and communication of children and adolescents' rights.
2. The development of a humanized breeding based on an effective childcare.
3. CA detection in the general population through the construction and operation of a specific method.
4. The strengthening of family ties.
5. To promote and support programs regarding the Culture of Peace.
6. Brain damage studies in CA victims.

Therefore, our conclusions are the following:

The experience gained in the INP through the actions of the CAINM-INP with an uninterrupted work, from July 1997 to May 2013 (16 years), sets the tone to indicate some fundamental and necessary aspects to provide comprehensive care to children and adolescents victims of any CA and their families. It is believed that these actions, and the fact that patients are treated comprehensively, decrease the chances that any of the 54 rights of this group age are violated.

These actions have been implemented in only some third level hospitals in the country. Not all pediatric hospitals in Mexico, neither the National DIF, nor the public prosecutors have the required human and economic resources for this subject.

Unfortunately, Mexico does not have a capable and sufficient infrastructure to deal with this sad reality. Therefore, emphasis should be placed on developing campaigns to avoid CA; hence, we must work intensively on primary prevention.

It is very likely that this comprehensive care strategy is different from what it is done in other countries, where almost the entire process is conducted by a group of social workers and the differential diagnosis is probably made later on, or children are separated from their family's while the CA diagnosis is confirmed. Although these actions

apparently benefit the children, they often violate some of the children's human rights.[31]

3. Clinic for the Abused Children

The interest in addressing this issue began in September, 1981, when the first symposium of CA was held in the city of Chihuahua. Dr. Jaime Marcovich Kuba, a nationwide pioneer in studying this problem, attended the event, which took place during the local work of the HIMFG in collaboration with the Pediatrics College of Chihuahua and the Children's Hospital of the State of Chihuahua (HIECH for its Spanish acronym).

On March 12, 1982, the Association for Child Rights in Chihuahua, A. C. (APRODENICH, for its Spanish acronym) was officially constituted. In September of the same year, the Office for the Defense of Children and Families (PDMF, for its Spanish acronym) began activities. From this date until 1999, the outlined actions were from APRODENICH.

The Clinic for Abused Children began as a civil association based on the model proposed by Marcovich, that of a Latin American Center for the Attention of the Abused Child. It offered the following medical specialties: Pediatrics, Psychiatry, Orthopedics, Gynecology. In addition, allied professions such as nursing, dentistry, psychology, educationalists, social workers, and lawyers were also included.

In 1984, the Latin American Association against Child Abuse (ALACMI, for its Spanish acronym) was established in Montreal, Canada, where Dr. Héctor José Villanueva Clift was secretariat for three years. This organization coordinated the Latinamerican Congress in Mexico City, 1987, at the headquarters of the National DIF. The ALACMI disappeared five years later.

In 1985, the Consultative Council, dependent on DIF, was established in Chihuahua for the abused child benefit, where Dr. Héctor José Villanueva Clift was a member for two years. Almost immediately, the Council ceased to exist. In 1992, he participated with the American Federation against Child Abuse (FICOMI, for its Spanish acronym), as coordinator of the state of Chihuahua and at conferences in Mexico City and Monterrey, Nuevo León. This organization suspended its activities in 1997.

The Clinic for Abused Children was officially constituted at the HIECH in October 2000, under the coordination of Dr. Villanueva Clift, with the involvement of personnel from the areas of pediatrics, social work, neurology, trauma, psychiatry, psychology, and odontology. The initial name was Interinstitutional Clinic for Comprehensive Care of Abused Children. Several institutions were involved: health institutions (IMSS, Institute of Social Security and Services for State Workers, Secretariat of Health and hospitals in Chihuahua), Chihuahua's state DIF, the education sector, and social workers. This scheme functioned for only six years. At present, they only maintain a direct relationship with the Legal and Social Assistance Office at local DIF, and their primary objective is to report, manage, and monitor the diagnosed cases in the new HIECH.

3.1. Healthcare platform

A care manual for abused children was created, serving as a base for addressing the suspected CA cases.

Clinic targets are listed below:

1. Prevention of child abuse in all its forms by understanding the problem and with the support of professionals dedicated to childcare.
2. Early detection and immediate management to avoid or reduce the possibility of injuries that endanger lives of children and alter family dynamics.
3. Immediate and comprehensive care (medical, social, nursing, psychologic, educative, and legal if necessary) of abused children and their families.
4. Rehabilitation of children and their families or guardians, always looking for family integration.

Also, additional proper clinical diagnostic instruments were established *(check list)* to set the type of abuse, which was classified into four categories:

Physical abuse
Sexual abuse
Psychological abuse
Negligence or omission of care

Confirmed cases are reported directly to the Legal and Social Aid Office at DIF Chihuahua, the official organism for minor's protection. If necessary, the report is also sent to the public prosecutor.

Within this category, three main points should be noted (as in CAINM-INP):

A) Raising awareness and training for medical and supporting staff, attending minors and their families, for suspecting CA diagnosis.
B) Diagnosis confirmation from the team of the Child Abuse Clinic (CMM-HIECH).
C) Perform the report and follow the case with the department of Social Work.

3.2. Awareness and prevention

We can proudly say this is the area that has developed with greater intensity and quality, carrying out the following activities:

1. Organization and participation on training sessions, as well as on local and national conventions aimed at mainly three groups of professionals:
   A) Pediatricians, general practitioners, and other different specialties.
   B) Profesional paramedics from psychology, social work, education, nursing, odontology, and law.

   C) In preschools, primary, secondary, and high-schools for students, parents, and teachers.
2. Since 2000, the creation of workshops for health professionals at national conventions of pediatrics from various pediatric organizations in the country. Since 2011, with the Mexican Academy of Pediatrics.
3. The presentation of papers and posters at the International Child Abuse Congress of ISPCAN (International Society for the Prevention of Child Abuse and Neglect) in 1982 (Paris), 1984 (Montreal), 1992 (Chicago), and 2002 (Denver). Also, at the 2004 World Congresses of Pediatrics (Cancún), 2007 (Athens), and finally at the Latin-ISPCAN Congress in Toluca in April 2015.
4. Dr. Héctor Villanueva has been a member of the editorial board of *The International Journal of Child Abuse and Neglect*, from 1984 to 1990.
5. Publications in the popular press.
6. Permanent diffusion and prevention program in HIECH.
7. Mexican reports for the World Perspectives of ISPCAN in the following editions: 3rd, 5th, 7th, 9th, 11th y 12th (2014) by Dr. Héctor José Villanueva Clift.

3.3. Teaching and research

At a lesser extent, the following achievements have also been obtained:

A) A department for thesis development, with interns studying Medicine (6), Nursing (4), Psychology (4), Odontology (4), Social Work (6), and Law (3).
B) A certificate course in *Prevention and Management of Child Abuse*, with a six-month duration for professionals in Psychology, Social Work, and Nursing. Eight people were graduated in 2005.
C) Since 2000, annual workshops on CA have taken place at HIECH with interns and staff from the following areas: Medicine, Pediatrics, Nursing, Psychology, Odontology, Teaching, and Social Work.
D) Multicenter research with members of the Coordination of Advanced Studies on Child Abuse from the INP (CEAMI-INP) regarding the shaken child syndrome.
E) A collaboration agreement with the School of social work in the state of Chihuahua was established. Currently, a research study titled ''Comprehensive study for the prevention of child abuse in favor of the human development: research in participatory and qualitative action'' is being conducted.

Since 1981, the state of Chihuahua has come a long way regarding child abuse. Society will now face a great challenge: to coordinate the actions between official, academic, and legal institutions. An important issue is to appeal to professionals from different disciplines to work in favor of comprehensive care and increase the attention towards the government, academic, and civic organizations, not only in Chihuahua but also in the rest of the country.

It is evident that Mexico is experiencing an issue of daily violence, and children and adolescents are among the most affected, both directly and indirectly. If we want to ''rescue Mexico'' we must work together, considering that currently it is easier to create programs for primary, secondary, and tertiary prevention; and that relationships with the local, regional, national, and international professionals interested in CA are already established. In this way, it will be possible to leave our children and grandchildren a country free of violence against minors.

4. Pediatric Service of the General Hospital of Mexicali

The General Hospital of Mexicali (HGM) is a medical center in secondary care, which receives patients up to 14 years of age, insured or not, from Mexicali, its valley, and the state of Sonora, both in the north of the country.

Approximately 15 years ago, interest began to arise among a group of professionals towards Social Pediatrics because of the suspicion that plenty of children presented CA, especially physical abuse and negligence. A common fact between these patients was the background of addictions in one or both parents. Thus, the first study emerged around the subject ''Risk factors associated with morbidity in children with parents addicted to illicit drugs in a hospital of the second level of health care,'' published in 2000 in a medical journal from Mexico. At that time, the interest in the study and care of these children arose. This small group of professionals grew by integrating others interested in the subject, mainly specialized professionals in Social Work, who had taken a fundamental role in the study of these cases. However, it could not impact other areas of the comprehensive care of patients.

The creation of a Comprehensive Care Clinic of the Abused Child in HGM finally occurred after working with high and lows in the process of raising awareness in the staff and authorities, and establishing academic contacts and counseling with Dr. Arturo Loredo Abdalá, head of the CAINM-INP-UNAM. Immediately, a big drawback from the budgetary standpoint took place since there were no available resources to maintain the clinic. Therefore, this group was authorized to work through the Care Clinic Violence against Women, which had enough budget to start the project. The clinic functioned partially, and the team was formed by a medical doctor responsible for a social worker and a psychologist, who took care of the patients with CA and all the psychological conditions of the patients of the institution, including women victims of domestic violence. The clinic was open for two years but later was closed without any justification.

Therefore, attention for child victims of CA returned to the Pediatrics service. It was an obvious setback because, unfortunately, not all staff (physicians, residents,

paramedics, and staff from other specialties) was involved in the comprehensive and timely care and were not prepared enough on the subject.

They continued to raise awareness on the medical and paramedical staff of HGM through training courses, taking as a model the CAINM-INP-UNAM. Staff from other health institutions, as well as professionals from the public prosecutor, the Attorney General for the Defense of Minors and the Family and the Secretary of Education from the state of Baja California were included.

Briefly, at the emergency department, a pediatrician on duty attends the patient. If injuries or conditions that bring suspicion of CA by physical abuse, an omission of care or negligence are found, they are reported to the social worker, who calls the local police in charge of the Victims from Violence Attention Service. This agency communicates with the Domestic Violence Unit (UVI, by its Spanish acronym), who meets with the doctor and the social worker from the hospital, as well as with the child's family, to collect and confirm information. Depending on the severity of the damage, the UVI determines whether this instance continues with the investigation and monitoring of the discharged patient through home visits. When the injuries are more severe, and the situation endangers the child's integrity, the UVI will notify the public prosecutor and the Attorney General of the State. Afterwards, the agents of the Attorney meet with the social workers, the medical staff, and the child's family. If necessary, the participation of a group of specialists (a medical examiner or a psychologist) is required. The agency from the public prosecutor determines whether the child can return with his family and continue the investigation externally. Otherwise, it issues a document about the child's suitability to enter the DIF temporarily or permanently, once the medical discharge is dictated. The social workers from the Pediatrics unit make a report about the relevant factors of the case, as well as a social and economic study; they also keep in touch with the Public Prosecutor's agent to follow the case until its final resolution.

The main problems surrounding this strategy are the insufficient care network—despite the time that has been considered the CA as a medical, social, and legal pathology and communication around the subject. Moreover, a vast ignorance of the problem, especially for the diagnosis. In some cases, the stigmatization towards the child and the family, as well as a late diagnosis. Frequently, home visits are not possible. Psychological support is incomplete since there is no particular service for this type of patients. Furthermore, the reaction from the public prosecutor and the Attorney General for the Defense of Minors and the Family staff are not agile and expeditious. Finally, temporary shelters are saturated and insufficient.

Despite these shortcomings, and regardless of the work done, it is important to emphasize the relevance of comprehensive and timely patient care. However, there are still many aspects to improve regarding the service and family care to build a trusting bond and attract the interest of parents to participate and address the social, cultural, and medical factors that increase the risk of CA within the family.

Addictions are another important issue in this part of the country. Therefore, there have been suggestions to approach newborns exposed to this condition, since it is an expression of fetal abuse. Training programs are open to cover Medicine, Nursing and Psychology students. Also, a link with the Autonomous University of Baja California has been established to include a CA elective course in the curriculum of the Medicine program, although it is still in the authorization process.

The government's system in Mexico is insufficient to assess this social-legal medical problem due to the following reasons:

a. The lead of the medical group in the initial care of these patients, regardless of the severity of the clinical picture, has not been accepted. In this sense, another problem arises. The current group of professionals does not have the required training to address this situation, a more severe issue in pediatric hospitals without specialists in the field.
b. Both patient and family should receive psychological care after they have been medically treated. The idea is to specify the type and degree of emotional affection. The problem is the shortage of professionals prepared and interested in this discipline.
c. Social workers are absolutely necessary. They provide fundamental information on the victim's family, school, and social environment. This knowledge allows the pediatrician to make an accurate differential diagnosis. Also, they collaborate in the recognition of a family support network that looks after the child while the medical and legal problems of the parents are solved.
d. The public prosecutor's office and, in some cases, the Family Court Judge in charge of the legal aspects do not always have the right information on the different types of CA, as well as their clinical expressions. This knowledge is basic to manage most cases comprehensively. Their decisions have no track to set the desired benefit, and sometimes, the family does not accept these decisions.
e. There are not enough temporary shelters to assist all the children or adolescents who require them. Thus, the authorities rely on NGOs, which do not report their actions and results.
f. National DIF, as a government institution, should address this problem. However, it is not within their current objectives. Surprisingly, they have no medical services that perform clinical diagnosis of CA.

5. Advances and governmental interest

Despite these national deficiencies, in 2014, the Mexican President sent a preferential initiative to the legislative authority to develop the following:

- A General Law for the Children and Adolescents Protection
- The Creation of the National System for the Integral Protection of Children and Adolescents
- The replacement of temporary shelters by Assistance Centers or centers of alternative care.

This initiative was immediately sent to the legislative authority, who approved it, although the results are not yet in sight.

In 2015, the Supreme Court of Justice of the Nation made a statement supporting the benefit of the Higher Interest of the Child. Results on the topic are still expected.

There are numerous obstacles to overcome. Only with the national broadcast of the problem, the interests of all professionals involved in the interaction and healthcare of children and adolescents, the federal, state, and municipal intervention, and the basic and social research of this problem it will be possible to address this universal scourge that harms not only the children, but their families and society in general.

Conflict of interest

The authors declare no conflict of interest of any nature.

References

1. Riojas DU, Manzano SC. Aspectos radiológicos del síndrome del niño maltratado. Jornadas Pediátricas IMSS. 1968;69:70–3.
2. Aguilar-Sánchez A, Kitsu-Owasawara M, Foncerrada-Moreno M. Síndrome del niño maltratado: aspectos psiquiátricos y sociales. Rev Mex Pediatr. 1970;39:621–7.
3. Foncerrada-Moreno M. El diagnóstico del síndrome del niño golpeado. Rev Clin Conducta. 1970;4:27.
4. Espinosa-Morett E, Cáceres-Díaz J, Cortés-Vargas J. Síndrome del niño maltratado: aspectos médicos, psicológicos y jurídicos. Rev Mex Pediatr. 1971;40:807–19.
5. Marcovich-Kuba J. Tengo derecho a la vida. Prevención e identificación del niño maltratado. México: Editores Mexicanos Unidos; 1981.
6. Sauceda-García JM, Foncerrada-Moreno M. Los problemas familiares y sus repercusiones en el niño. Rev Med IMSS. 1985;23:159–66.
7. Baeza-Herrera C, Hoqui-Shafique J, Franco-Vargas R. Síndrome del niño maltratado. Espectro de un problema. Bol Med Hosp Infant Mex. 1986;43:71–7.
8. Loredo-Abdalá A, Reynés-Manzur JN, Martínez SC. El maltrato al menor: una realidad creciente en México. Bol Med Hosp Infant Mex. 1986;43:425–34.
9. Loredo-Abdalá A. Maltrato en el niño. Temas de Pediatría. Asociación Mexicana de Pediatría. México: McGraw-Hill Interamericana; 2001.
10. Loredo-Abdalá A, Bustos-Valenzuela V, Trejo-Hernández J, Velázquez-Sánchez A. Maltrato al menor: una urgencia médica y social que requiere atención multidisciplinaria. Bol Med Hosp Infant Mex. 1999;56:129–34.
11. Loredo-Abdalá A, Trejo-Hernández J, García-Piña C, López-Navarrete GE, Perea-Martínez A, Gómez-Jiménez M, et al. La Clínica de Atención Integral al Niño Maltratado. Implementación de una estrategia de aplicación nacional en investigación, docencia y asistencia. Bol Med Hosp Infant Mex. 2009;66:283–91.
12. Kempe CH, Silverman FN, Steel BF, Droegemueller W, Silver HK. The battered-child syndrome. JAMA. 1962;181:17–24.
13. Caffey J. Multiple fractures in the long bones of infants suffering from chronic subdural hematoma. Am J Roentgenol Radium Ther. 1946;56:163–73.
14. McMenemy MC. WHO recognizes child abuse as a major problem. Lancet. 1999;353:1340.
15. Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R. Informe mundial sobre la violencia y la salud. Washington D.C.: Organización Panamericana de la Salud. Oficina Sanitaria Panamericana. Oficina Regional de la Organización Mundial de la Salud.; 2003.
16. Loredo-Abdalá A, Trejo-Hernández J, Bustos-Valenzuela V. Maltrato al menor. Consideraciones clínicas sobre maltrato físico, agresión sexual y deprivación emocional. Gac Med Mex. 1999;135:611–20.
17. Loredo Abdalá A. Maltrato en niños y adolescentes. México: Editores de Textos Mexicanos; 2004.
18. Perea-Martínez A, Loredo-Abdalá A, Monroy-Villafuerte A, Güicho-Alba E. El abuso sexual: del silencio ignominioso a una realidad estigmatizante. In: Loredo-Abdalá A, editor. Maltrato en niños y adolescentes. México: Editores de Textos Mexicanos; 2004. p. 75–102.
19. Perea-Martínez A, Loredo-Abdalá A, Trejo-Hernández J, Baez-Medina V, Martín-Martín V, Monroy-Villafuerte A, et al. El maltrato al menor: propuesta de una definición integral. Bol Med Hosp Infant Mex. 2001;58:251–8.
20. Organización Panamericana de la Salud. CIE-10. Clasificación Estadística Internacional de Enfermedades y Problemas Relacionado con la Salud. Décima Revisión. Washington D.C.: OPS; 2008.
21. Trejo-Hernández J, Loredo-Abdalá A, Orozco-Garibay JM. Munchausen syndrome by proxy in Mexican children: medical, social, psychological and legal aspects. Rev Invest Clin. 2011;63:253–62.
22. León-López A, Loredo-Abdalá A, Trejo-Hernández J, López-Navarrete GE, García-Piña CA. Maltrato fetal: expresión clínica del recién nacido de madres víctimas de violencia física durante el embarazo. Acta Pediatr Mex. 2007;28:131–5.
23. Dubowitz H, Bennett S. Physical abuse and neglect of children. Lancet. 2007;369:1891–9.
24. Gilbert R, Spatz WC, Browne K, Fergusson D, Webb E, Janson S. Burden and consequences of child maltreatment in high-income countries. Lancet. 2009;373:68–81.
25. Gilbert R, Kemp A, Thoburn J, Sidebotham P, Radford L, Glaser D, et al. Recognising and responding to child maltreatment. Lancet. 2009;373:167–80.
26. Loredo-Abdalá A, Trejo-Hernández J, Bustos-Valenzuela V, Carbajal-Rodríguez L, Reynés-Manzur J, Rodríguez-Herrera R, et al. El fenómeno de maltrato a los niños: aspectos sociales y clínicos del síndrome. Bol Med Hosp Infant Mex. 1998;55:410–6.
27. Loredo Abdalá A, Casas-Muñoz A, Navarro-Ampudia P. Maltrato infantil: elementos básicos para su desarrollo y el grupo interdisciplinario requerido para su atención integral. Evid Med Invest Salud. 2014;7:128–32.
28. Loredo-Abdalá A, Cisneros-Muñoz L, Rodríguez-Herrera R, Castillo-Serna L, Carbajal-Rodríguez L, Reynés-Manzur J, et al. Multidisciplinary care for the battered child: an appraisal of

three years of action in Mexican children. Bol Med Hosp Infant Mex. 1999;56:483–9.
29. Perea-Martínez A, Loredo-Abdalá A. Calidad en la atención integral a los niños y adolescentes maltratados. Una nueva cultura en salud. Rev Mex Pediatr. 2001;68:105–7.
30. Loredo-Abdalá A, Casas-Muñoz A, Navarro-Ampudia P, Villanueva-Clift H, García-Carranza A. Maltrato infantil: riesgo y prevención. México: Academia Mexicana de Pediatría, A.C.; 2016.
31. Casas-Muñoz A, Loredo-Abdalá A. ¿Por qué debemos conocer los derechos de las niñas, niños y adolescentes? Acta Pediatr Mex. 2014;35:437–9.