

Managing
**CHILD
ABUSE**

A Handbook for Medical Officers



World Health Organization
Regional Office for South-East Asia
New Delhi

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FOREWORD

Challenges to the health of our children have been changing in recent decades as we are able to tackle many diseases through immunization and child health programmes. However, new challenges are being uncovered. Child abuse and neglect is one of them. This has been poorly recognized as a public health problem in the world, particularly in South-East Asia.

More than strangers, care providers themselves and ideal figures of children are involved in child abuse. Indeed, about 40 million children are estimated to be abused every year resulting in physical, psychological, emotional and social sufferings. Child abuse exists in all sections of society and in all countries. Only the extent of the problem, the nature of abuse and consequences, and child protection and recovery modalities differ in different socio-economic strata.

The major barrier in the prevention of child abuse is to acknowledge that it exists in society. It took several decades of effort in the countries that now have a substantial reduction in child abuse, in acknowledging the fact that child abuse and neglect can be prevented. Therefore, understanding the extent of the problem is the first step towards efforts at prevention.

Countries in South-East Asia have shown their concern in violence and abuse against children. However, the pace of understanding the extent of the problem, the risk factors and the mechanism for protection from abuse as well as providing care for recovering from trauma has been far less than the level of concern. The political will and professional commitment, particularly from the health sector, is the most vital in reducing the suffering from abuse and violence.

This publication is intended to strengthen the capacity of medical officers in understanding the challenges and barriers, identifying child abuse, preventing children from future abuse, and managing physical, psychological and social consequences of these abuses. More importantly health professionals and

medical doctors must come forward as an advocate in protecting the high-risk children from abuse and collaborate with other professionals in lobbying for prevention of child abuse.

Child abuse is unacceptable in any civilized society. Because of its extent and gravity of the consequences, public health systems must be mobilized to prevent child abuse.

Abused children today can be abusers to their children tomorrow. Abused children today are likely to have poor physical and mental health tomorrow.

Let us make the precious lives of our children safer by preventing inhuman abuse and neglect. Let our children grow free from abuse and violence.

May 2004



Samlee Plianbangchang, M.D., Dr. P.H.

Regional Director

NOTE FROM THE AUTHORS

Abuse of children was first described in the West about forty years ago. In developing countries, although the prevalence is likely to be high, it is not a well-recognized clinical entity in the midst of societal denial. It was not that long ago that sexual abuse of children was described in the West, and the development in clinical identification of sexual abuse is recent. The detailed description in identification is recognized only as a specialist area and is not included even in standard postgraduate paediatric textbooks. In developing countries the meagre resources in terms of paediatricians and training do not allow specialists to be mobilized exclusively for clinical work on child abuse and it would be considered a part of the routine workload of a general paediatrician and/or Judicial Medical Officer. Because of the 'hidden' nature of child abuse, it is not considered a priority compared to the burden of other acute emergencies, infectious diseases and chronic illnesses in a developing country. Physical abuse was first described in Sri Lanka in the mid-1980s and has been increasingly reported over the succeeding years, while sexual abuse was highlighted in the early 1990s (de Silva *et al* 1997). With growing awareness by the public and increased reporting there was a need to make clinicians more aware of the problem in terms of identification, documentation and management. The National Child Protection Authority of Sri Lanka arranged a series of workshops for clinicians with the help of Dr Chris Hobbs of Leeds UK, a renowned specialist in identification of child physical and sexual abuse, and Prof Harendra de Silva, Chairman of the National Child Protection Authority, a pioneer in the identification of child abuse in Sri Lanka. There was also a need to illustrate the teaching material with "local" cases since it was misbelieved that child abuse does not occur in this part of the world. This also led to the development of a manual for doctors in Sri Lanka. Prof De Silva extended this training for participants from South Asia and is a trainer in South Asian

meetings (India, Pakistan, Nepal, and Maldives). This book has been developed in view of the paucity of knowledge in Asia, especially in the poorer countries. It is anticipated that this book with data and case reports from the Region will improve the recognition of both physical and sexual abuse by clinicians and judicial medical officers.

INTRODUCTION

About 40 million children under the age of 14 years are estimated to suffer from abuse and neglect around the world (WHO 99). Child abuse in developing countries, including South Asia, is yet to be recognized as a major social and health problem with an enormous burden on the economy and society. Therefore it is imperative not only to recognize child abuse from a clinical perspective but also for society, including professionals, to understand and accept it as a malady as well as to change their attitudes towards it.

This handbook has the primary objective to help medical officers to identify child abuse, provide guidance on its management, as well as the process of emerging from social denial by many developing countries as a public health problem. This manual is also intended to make physicians aware of what is known historically and some of the sociological and economic issues, emphasizing the need for intervention. At the outset, the description of the types of child abuse and definitions of the more important types of child abuse would be helpful to understand the social and economic perspectives.

Types of Child Abuse

- ♦ Physical abuse
- ♦ Nutritional / medical neglect
- ♦ Emotional abuse
- ♦ Sexual abuse
- ♦ Intentional drugging and poisoning
- ♦ Munchausen by proxy
- ♦ Child labour
- ♦ Conscription by armies, and use of children by proxy

The latter two types are usually not included in standard textbooks on child abuse.

Definitions of Child Abuse

What is child abuse? There are many definitions of child abuse. The originally used definition is as follows:

"Acts or omissions by a care-giver leading to actual or potential damage to health and development, and exposure to unnecessary suffering to the child".

A wider definition is:

"Anything which individuals, institutions, or processes do (acts) or fail (omissions) to do which directly or indirectly harms children or damages the prospects of safe and healthy development into adulthood".

The World Health Organization Report on the Consultation on Child Abuse and Prevention (1999) proposed modified definitions for child abuse, which cover wider areas.

General definition

“Child abuse or maltreatment constitutes all forms of physical and/or emotional ill treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power”.

(WHO, 1999).

Physical Abuse

Physical abuse of a child is that which results in actual or potential physical harm from an interaction or lack of interaction, which is reasonably within the control of a parent or person in a position of responsibility, power, or trust. There may be single or repeated incidents (WHO, 1999).

Sexual Abuse

Child sexual abuse is the involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violate the laws or social taboos of society. Child sexual abuse is evidenced by an activity between a child and an adult or another child who by age or development is (WHO, 1999) in a relationship of responsibility, trust or power,

the activity being intended to gratify or satisfy the needs of the other person. This may include but is not limited to:

- ♦ The inducement or coercion of a child to engage in any unlawful sexual activity.
- ♦ The exploitative use of a child in prostitution or other unlawful sexual practices.
- ♦ The exploitative use of children in pornographic performances and materials.

(WHO, 1999)

Neglect and Negligent Treatment

Neglect is the inattention or omission on the part of the care-giver to provide for the development of the child in all spheres: health, education, emotional development, nutrition, shelter and safe living conditions, in the context of resources reasonably available to the family or caretakers and causes, or has a high probability of causing harm to the child's health or physical, mental, spiritual, moral or social development. This includes the failure to properly supervise and protect children from harm as much as is feasible. (WHO, 1999)

Emotional Abuse

Emotional abuse includes the failure to provide a developmentally appropriate, supportive environment, including the availability of a primary attachment figure, so that the child can develop a stable and full range of emotional and social competencies commensurate with her or his personal potential, and in the context of the society in which the child dwells. There may also be acts towards the child that cause or have a high probability of causing harm to the child's health or physical, mental, spiritual, moral or social development. These acts must be reasonably within the control of the parent or person in a relationship of responsibility, trust or power. Acts include restriction of movement, patterns of belittling, denigrating, 'scapegoating', threatening, scaring, discriminating, ridiculing, or other non-physical forms of hostile or rejecting treatment (WHO, 1999).

Exploitation

Commercial or other exploitation of child refers to the use of the child in work or other activities for the benefit of others. This includes, but is not limited to, child labour and child prostitution. These activities are to the detriment of the child's physical or mental health, education, moral or social-emotional development. (WHO, 1999)

Conscription of Children in Armed Conflict

For proposed definitions of abuse under conscription, see Annex 2.

HISTORY OF CHILD ABUSE

It is important to educate professionals about the history of child abuse, especially in relation to their respective country or region. This is particularly important for the developing countries that have still not addressed the issue of child abuse adequately. Some aspects of the history of child abuse are from the following publications: Hobbs, Hanks, & Wynne 1999, De Mause L 1980, Lynch MA, 1985, Raddbill SX 1987, Kempe J, et al 1962.

Physical Abuse

Although child abuse is often denied in South Asia, probably one of the oldest recorded histories of child abuse, more than 2500 years ago, was in India, depicted in the Buddhist story of a boy called Sopaka. He was tied to a corpse and left in a cemetery by the jealous stepfather to be eaten by wolves. Buddha came to his rescue and preached to the child, probably one of the earliest instances of counselling. The Buddhist scriptures also record the story of Mattakundali, who was severely neglected by a miserly father, who also deprived him of medical care. (de Silva 2000)

In the 1940s and 1950s reports of fractures in children that could not be attributable to previously described disease but to trauma was hardly recognized till Henry Kempe *et al* (1962) described the "Battered Baby Syndrome".

Sexual Abuse

Ancient Egyptian, Jewish, Greek and Roman history reveals that sexual abuse of boys and girls was common, including commercial sexual exploitation in the form of boy brothels and "rent a boy" services. Aristotle is quoted to have commented that homosexuality could become habitual in those who have had sexual experiences from childhood. Descriptions of sexual abuse of children by servants, both male and female, have been documented. Research on the subject



of sexual abuse and exploitation is scarce in Asia. Documentation in the North West Frontier Province (NWPF) of Pakistan has revealed a practice of older and rich men having "attractive beardless" youth for their sexual pleasures often referred to as "*Balkey*" and in some areas referred to as "*Ashnas*" (Khan, 2000). A similar situation has been described amongst Afghans who are tribally similar. The "*Devadasi*" system in India, although now legally banned, is still in existence, and the "*Deuki*" system in Western Nepal offer children and women to the temple system to function as sex slaves to pilgrims and priests (Frederick & Kelley, 2000). Historically, for centuries Devadasi's earnings from prostitution contributed significantly to the temple's earnings. The use of so-called lower castes and downtrodden women and children for prostitution in South Asia has been "legitimised" by society through religious justifications. The mean age of entry into prostitution in the Daulotdia brothel in Bangladesh has been estimated to be around 13½ years, indicating the extent of sexual exploitation and abuse of children (Frederick & Kelley, 2000).

DENIAL

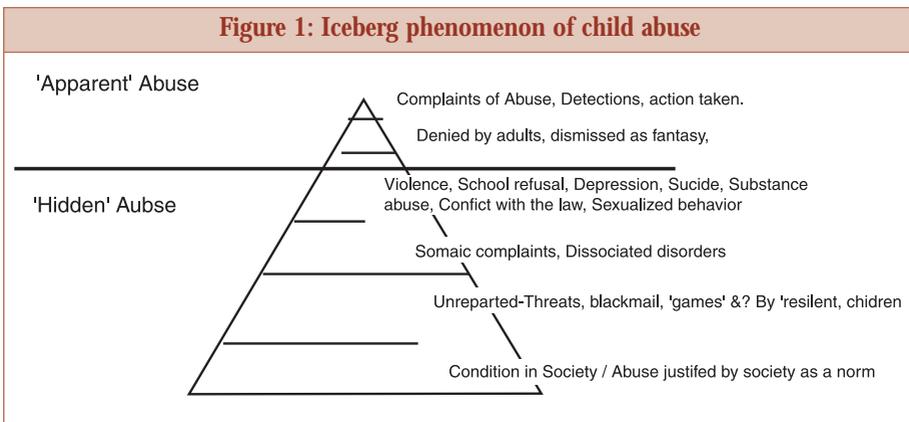
Ambrose Tardieu (1880), a French forensic scientist described and attempted to highlight sexual abuse of children. However, those who followed, including his students, criticized him for interfering with family life and denied the existence of child abuse, by blaming children for imagining and fantasising, possibly with the intention of extortion of rich adults. Even Freud, himself a victim of childhood sexual abuse, initially recognized sexual abuse but later possibly due to fear of rejection and isolation by colleagues, changed his theory in favour of the Oedipus Complex. Kempe & Helfer (1980) indicated that doctors often hesitated to refer to legal authorities. The description of a large number of cases of sexual abuse over a short period in Cleveland in 1987, led to widespread disbelief and denial.

Is child abuse a problem in developing countries, especially in the South Asian region? Don't we often deny its existence? Is it a new phenomenon, or do we not recognize it? Western countries, where it is considered a problem, have gone through the "phase of denial", while most developing countries are still "denying" its existence. On the other hand, in the less developed countries, there are small groups (e.g. "activists", some professionals) who may accept the problem. Child abuse is often considered to demonstrate an "iceberg" phenomenon, where only a small proportion would be seen "above the surface", i.e. identified. When the public is made aware of the problem and children made aware of their rights, reporting of cases would increase. At the same time, when professionals like doctors, teachers, lawyers, judges, police, and child care/social workers become aware of its existence and are often given training, there would be more recognition as well as appropriate action taken. As a result of more reporting and increased recognition, the "iceberg would surface" and an apparent increase in the incidence would be seen. In the West, physical abuse was recognized as a problem only in the 1960s, and the "incidence" (i.e. reporting) of child physical abuse has increased manifold since then. Similarly, in sexual

abuse; only after it was initially considered a problem in the West in the mid-1980s was the apparent "epidemic" observed subsequently. Here again, these apparent "epidemics" were most likely seen not necessarily due to a true increase in incidence, but due to increased reporting and recognition.

Why is There a Tendency for Society to Dny Child Abuse?

We as individuals, as a society, or as a nation are proud of ourselves when one (or a team) of our nationals performs well in sports or any other activity. Individuals in society who may not have had even the remotest affiliation to this success would try to identify with it and would like to have "ownership" to this success. However, in contrast, when your national team has done badly, the society would not accept the responsibility or ownership, fearing that the negative effect would reflect on them, and may even attack the houses of players. Similarly, when incidents of child abuse stigmatise our society, neither the society nor the individuals would like to belong to that society and it would not be surprising for them to reject reality. It is also easy to justify this denial because of the hidden nature of abuse. At the same time, this denial, which is also partly responsible for the stigma, becomes an important factor that makes the issue a hidden phenomenon (Figs 1 and 2).

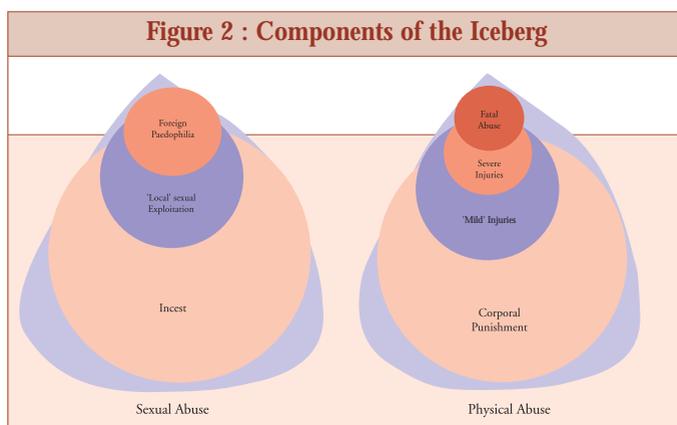


Iceberg phenomenon of Child Abuse (Modified from, Protocol for study of Interpersonal Physical abuse of Children; WHO/FHE/CHD 94.1 &, Shekar Sheshadri (personal communication) 2002).

Child abuse in society has been endemic for generations and is a hidden phenomenon with only a small percentage being apparent. The most obvious cases "seen" by society and authorities are the complaints and detections by concerned adults (Figure 1). However, some of these cases would be denied by adults, dismissing them as an imagination or fantasy. Child abuse often presents

indirectly as violence, school refusal, depression, suicide, substance abuse, in conflict with the law, or with sexualised behaviour, and therefore not recognized as abuse. Some children present with somatic complaints such as abdominal pain, while others may come with "dissociated" disorder. A larger number of children would not complain because they have been threatened, blackmailed or tricked with "bribes" and the abuse described as "games". The largest numbers of abuse that occur in society do not get recognized because it may be justified in society as a "norm" such as corporal punishment with or without injury, child labour, sexual molestation of children or child marriages. Society may not only justify but may even glorify child soldiers. With increased awareness society reporting would increase and with training and development of skill of professionals, the detection would increase with identification of these different manifestations, with "surfacing" of the iceberg. The incidence of child abuse is apparently high in most developed countries because of increased reporting and recognition.

The previous figure "dissected out" the reasons for the iceberg phenomenon, Figure 2 shows the different components of both sexual and physical abuse. Some forms of abuse are more apparent than other types, and the dynamics could vary in different countries. With changing socio-economic status, priorities would change in countries and some of these components would become more apparent than previously. Corporal punishment would be justified and not accepted by many societies as "abuse".



PREDISPOSING FACTORS TO CHILD ABUSE

Child abuse is prevalent in all social, economic, ethnic and religious groups but would be more common in poor socio-economic groups with increased number of crises, including violence in life, with limited economic and social resources.

The abuser is often a related care – giver - male or female - or someone close to the family, often a "trusted" person. When the father is unemployed and/or an alcoholic, abuse by the father is more common, and it may be associated with spouse abuse, domestic violence and marital difficulties. The "triad" of alcoholism, spouse abuse and child abuse - physical, sexual and/or emotional - is a common observation; however, alcoholism should not be considered a primary cause, but is often an "excuse". In most of these instances, the mother does not report abuse for fear of social/economic/'survival' repercussions.

A male sexual partner of the mother or "stepfather" is a more likely male perpetrator of both physical and sexual abuse of the children. Some men, who are compulsive sex abusers of children (paedophiles), often initially have sexual relationship with the mother (or even get legally married) as the first step of approaching the children. In this type of situation, the mother often becomes aware of the abuse at some stage, but "helpless" in reporting because of the possibility of her involvement being divulged or due to reasons of financial dependency.

Many factors predispose to child abuse, and these factors may be variable in different societies and may be inter-related. Although several theories ranging from medical, psychological, sociological, and legal models have been proposed, no single theory would stand alone, but all these factors would play complex roles, with varying extents in different societies. These risk factors would arise

from a spectrum of foci ranging from the individual child, parent/s, family, and wider society (WHO 1994).

Factors Related to Characteristics of Children

Some may argue that some children are "inherently bad" and "deserved to be beaten" or they "asked for sex". Blaming children is a way of "justifying" the abusive behaviour of an adult, and putting the blame on relatively powerless children. Children who show violent behaviour are often so because of the violence they have experienced or seen. Sexualised behaviour in children is usually because of previous sexual abuse. Children who have "attention deficit hyperactive disorder" (ADHD) and those having learning difficulties, including dyslexia, would often not be recognized as having a problem and would often be physically beaten to "put them right". Other causes of disability, including physical and mental, perceived by the family as a "burden" may predispose to neglect, discrimination and abuse. Abuse may be in the form of physical, emotional and sexual abuse. In societies where there is a son preference, the girl child may be discriminated and abused. Doubts of paternity and beliefs that a particular child has brought "ill-luck" to the family are common reasons for abuse and neglect.

Characteristics of Care-giver and Exposure to Media Violence

Fathers with prior violent criminal records are more likely to abuse or neglect their children. Violent, humiliating and degrading punishment during childhood make them aggressive, which make them violent and aggressive teenagers, and then adults with similar behaviour. It is also known that media violence could make already violent tendencies worse in a child, while media violence on its own may play a relatively minor role. However, the media often justifies violence and portrays violence as a norm, which could have harmful effects on a young mind. Very young parents, single parents, and those with poor parenting skills are more likely abusers of children, while substance abuse and mental disease are additional risk factors.

Characteristics of the Family

It has been argued that the extended family system in developing countries, especially in South Asia, protects children from abuse. On the one hand, it may be true at times when one member saves a kid from being "battered", on the other hand, all or a majority of the extended family could justify the physical beating and cover up the incident to prevent "shame" if others get to know. They (the family) also justify their right to solve a private family crisis informally rather

than use formal legal controls or community involvement. The rights of the child would hardly be addressed by families in communities that view the child as their "property" and could do what they would want with it. The extended family also could predispose to sexual abuse, especially in closed and overcrowded family environments, with increasing risks.

Domestic Violence

It is known that people are more likely to be killed or experience violence in their own home than outside. Domestic violence is often a hidden phenomenon behind closed doors. The "triad" of violence against the wife, child abuse and substance abuse, including alcoholism, are common associations, which usually are justified, denied and ignored. "Scream quietly or the neighbours will hear", illustrates the strange phenomenon of fear of stigma and shame paradoxically blended with justification. The incidence of child abuse is higher in families of poor socioeconomic status and in families living in social isolation. However, it is prevalent in all social and religious groups.

Society

The integrity of the social fabric is crucial in providing a safe and non-violent environment for a child. Violence in society may be related to armed conflict and other social and political pressures. It is also associated with social, political and legal impunity to laws that are supposed to protect the public and children from violence, and/or the non-existence of such laws or a legal system to protect children. Refugee situations encompass a majority of risk factors, such as stress, socio-economic pressures, overcrowding and societal violence. Refugees living far away from apparent crises in Western countries also are more likely to experience domestic violence and child abuse.

In societies with inequalities, whether it be gender, race, caste, disability, or a combination of these factors, it would be more likely that children too are likely to be affected since they would be considered as a group with minimal rights. In a social atmosphere with such perceived norms and justifications, "denial" would not be surprising with a huge "iceberg" of child abuse.

HEALTH, FINANCIAL AND SOCIO-ECONOMIC BURDEN OF CHILD ABUSE

Why Should We Prevent Child Abuse?

Why do we need to address the problem of child abuse? The effects of child abuse are enormous, although not directly felt by society, administrators, professionals, or governments. Unlike acute illnesses like malaria, dengue or some chronic diseases like tuberculosis or HIV, where patients are seen ailing or dead, some conditions like child abuse or even chronic malnutrition with stunting does not often pose an acute need for intervention, especially when there are other apparent health priorities. Apart from situations of acute injury in physical abuse or rape (the identification of which may also go unrecognized), a majority of the effects of abuse, which are often "hidden", are chronic and indirect and the cause of which would often go unidentified. Apart from this, the factors already mentioned in the "iceberg phenomenon" also keep the problem submerged without being addressed as a major social problem. These immediate and long-term effects as well as the degree of affection would vary with age, frequency, duration, severity and type of abuse as well as the resilience from child to child.

Physical abuse

Corporal punishment and physical abuse

All over the world, including in South Asia, society has justified corporal punishment of children through phrases like "spare the rod and spoil the child", "The taste of the curry depends on how well it is stirred", and through verses; e.g. "Ganadevi hella"¹ .

¹ An 18th century verse (translated from Sinhala- Sri Lanka). (de Silva 2000)

*“Canes, eckles, gripped in hand, used as whips
My eyes are always filled with tears while in class
Although I hear the soft and loving voices of my parents
My body is full of red lumps and bumps.”*

Although adult physical punishment is not acceptable by today's society, it persists as regards children. Physical punishment remains an important strategy justified by parents and teachers and legitimised in educational systems, used to hold power and control over children. The perception that children belong to parents or guardians is another factor in the process of justification. Children are often not considered as individuals with human (child) rights. Psychologists consider corporal punishment to discipline children to be ineffective. Although it may quieten a child momentarily, it teaches children violence as well as resentment and a desire for revenge, and it may result in delinquency. It could induce fear and learned imitative behaviour in the child and his/her self-esteem may be affected. Corporal punishment of children and physical abuse are closely connected. Many of the parents who end up abusing a kid have started out by disciplining the child through corporal punishment. It would be difficult to control the degree of the blow when you are angry and then things go out of hand. Although some classifications define abuse as "an injury that produces a mark", the demarcation between corporal punishment and physical abuse is thin and does not take into consideration emotional effects. The degree of danger to a child is related to the age. A small bruise in a baby may predict future serious or fatal abuse, while the presence of a similar injury in an older child would not be a predictor of a threat to life. Parents who abuse children have often been abused or faced violence as children. Although most instances of abuse occur because of parents losing control of themselves at times of stress, some instances are premeditated and sadistic in nature.

PRESENTATION OF PHYSICAL ABUSE

It could be the child, if old enough, who complains of abuse. A parent or a person in contact with the child, such as a teacher, neighbour or relative, may also be a complainant. In a developing country, society as well as the child often justifies corporal punishment. Since physical abuse is often an extension of corporal punishment, children may not comprehend the assault as something wrong against them, and at the same time, children in the developing world are not taught their rights, whom to complain to or when to complain. It is a parent or a care-giver who commonly abuses a child and therefore may not come with a direct complaint. However, they may take the child to a health institution for treatment with alternative explanations. This is why training, awareness and sensitization of medical personnel are important to become suspicious, detect and report physical/child abuse. In most developing countries that are still in the phase of denial, medical personnel may fail to detect, or even when obvious they may just treat the injury without reporting. Non-reporting after recognition of child abuse may be due to the medical officer's personal experience influencing the interpretation and justification of corporal punishment and/or abuse, or due to the absence of a procedure to report and manage child abuse. Some other medical officers would not be bothered to go through a tedious process of reporting, investigation and management. They may also fear having to go to courts repeatedly without remuneration. There would be others, especially in private practice who would be reluctant to report one of their regular patients (parents) for fear of losing clients. Sensitization of doctors and other medical professionals about their obligation towards children and society is a crucial aspect of attitudinal training. Third party complaints may be the commonest in a developing country. However, the attitude of "mind your own business" in an atmosphere with many other priorities, undermines reporting. Although malicious reports are also possible, every complaint should be taken seriously and investigated. It is common for abusive parents to say, "The neighbours are jealous of us ...". Lack of professionalism may justify the acceptance of such explanations without adequate investigation.

PHYSICAL INJURIES

Cardinal features of physical abuse:

Repetitive pattern

Parents sometimes use different doctors/hospitals to avoid detection.

Often there is a delay in getting medical attention.

The explanation for the injury is often implausible; i.e. there is often an inconsistency between the explanations, which usually are trivial, compared to the injuries, which would often be significant. Inconsistency in their explanation considering the age and development of the child is another feature (The injury is not in keeping with the development of the child).

A changing explanation is another feature.

Unusual behaviour of parents. Refusal to allow proper medical advice, or admission, unprovoked aggression towards staff.

Patterns of injury suggestive of abuse:

- ♦ Bruising in a young baby
- ♦ Multiple injuries in a moderate fall
- ♦ Severe head injury in babies or toddlers
- ♦ Rib fractures
- ♦ Subdural haematoma or retinal haemorrhage
- ♦ Multiple cigarette or firebrand burns
- ♦ Fractures in infants and toddlers

Physical abuse is often associated with other forms of abuse, such as nutritional neglect and failure to thrive and other forms of neglect. It may also coexist with sexual abuse.

The injuries are often multiple, at different stages of healing.
(Examples would be illustrated by the case histories described below)

Types of Injuries

Bruises

Bruises are present in 90% of physically-abused children. The time taken for a bruise to appear depends on the depth of the injury - deeper ones taking longer to appear. Yellow bruises usually take more than 18 hours to appear, superficial bruises, may occur at 3 days, while it may take 7-10 days for deeper bruises. Black, blue, purple bruises may be from 1 hour to the time of resolution.

Bruises on the lower back, buttocks and outer thighs are related often to punishment.

Bruises on the genitalia and inner thigh suggest sadistic sexual abuse, or punishment for problems of "toileting". Pinching of penis or ligature marks may sometimes be seen.

Injury to the head and neck is common. Slap marks on cheeks and neck extending to the scalp and linear marks of hands or fingers are seen. A slap would cause parallel linear bruises on the cheeks.

Bruises to the ear are unusual in accidents since the triangle of the shoulder, skull and base of neck is protective to the ear.

Injury to the mastoid, and lower jaw, eyes and mouth is strongly associated with abuse while a bruise around the neck would suggest attempted choking.

Bruises on the trunk would suggest physical abuse while lower abdominal bruises may suggest sexual abuse.

Limbs, chest and face may have grab marks or fingertip bruises.

Rings on the finger of an abuser may leave tell-tale marks.

A pair of small crescent shaped bruises facing each other would suggest a pinch-mark.

Belts, straps, loops of flex (cord) would leave parallel marks, which tend to curve with the contours of the body (usually on the back, buttocks or sometimes on the side of the chest).

A stick or cane could cause linear abrasions with a "tramline" appearance of darker bruising on either side, while the centre is paler. Bite marks are always non-accidental. Identification of the perpetrator is possible if the bite is recent

and clear. The inter-canine distance is usually more than 3.0 cm. in the adult and the older child (> 8 years).

Serial photographs at 24 hr. intervals with a millimetre rule may be compared with dental impressions of the suspected perpetrator. ABO blood grouping can be done from saliva washings of the skin around the bite.

In the case of bruises, a bleeding disorder has to be excluded.

Lacerations may be linear; lacerations of the frenulum, the upper lip are common.

Burns

It is difficult to imagine adults deliberately inflicting burns on young children. As a result, doctors may not consider this possibility and the inflicted injury may be overlooked.

Burns may be the result of an impulsive immediate response of an adult or it may be a premeditated deliberate act. When burns are related to sexual abuse, it may be related to threatening the child into silence or due to sadism. There are no specific sites for burns. However, burns of hand, especially the back of the hand, buttocks (Plates 11 -4, 10-1 & 2), feet (commonly the soles), and genitalia are common. Burns on the dorsum of the hands are less likely to be accidental. Contact burns are usually due to fires, grills, irons or other heated metal objects and cigarettes (Plate 13 -4), in the West. Firebrand burns are likely to be common in a developing country considering its availability, as has been observed in Sri Lanka (Plate 10- 1 & 2, Plate 11 -4). In Western countries, an association of burns, especially of buttocks or genitalia (close to) and sexual abuse has been demonstrated. Cigarette burns may be single or multiple, are circular and the size is comparable to a cigarette (Plate 13 -4), and it may appear as a shallow crater. Scalds are usually due to hot water either being poured or thrown at the child (Plates 1 & 2).

Scalds due to hot water immersion burns

Scalds due to hot water "dunking" (immersion) burns of buttocks or limbs are seen in Western countries. These injuries are less common in warm countries considering the non-availability of hot running water. However, pouring or throwing of hot water on children has been observed (Plates 1 & 2).

Features of inflicted immersion scalds

- ♦ Glove and stocking distribution:
- ♦ Absence of splash marks - restraint of child:
- ♦ Soles may be spared if soles pressed against a cooler base of container:

- ♦ Pour or thrown pattern in unusual sites - back of hand, face, genitals
- ♦ Clear "tide mark":



Fractures

Fractures may be single or multiple, recent or old, or a combination. Important patterns of fractures due to abuse include:

Single fracture e.g. humerus with excessive unexplained bruising.

Multiple fractures in different bones, at different stages of healing- Classic picture.

Metaphyseal/epiphyseal fractures at end of long bones.

Rib fractures - single or multiple.

Periosteal new bone formation.

Skull fractures with intracranial injury.

Long Bone Fractures

Metaphyseal Fractures

The fracture is in a corner or 'bucket handle' in appearance, depending on the orientation of the X-ray. It is due to twisting or pulling forces and is often multiple. Clinically it may be associated with soft tissue swelling. Periosteal new bone formation may be seen with healing in more severe injuries. These fractures are highly related to physical abuse. (Refer Plate 13 - case NI)

Epiphyseal Plate Injuries

It involves separation of the epiphysis due to disruption of the cartilage. It may involve cartilage and bone or cartilage alone. In the latter case, radiological diagnosis will be difficult until healing signs appear in 7-10 days.

Transverse, Oblique and Spiral Fractures

Spiral or oblique fractures are usually due to gripping or twisting.

Transverse fractures may be due to angulation, e.g. direct blow.

Oblique transverse fractures are due to angulation or bending with axial loading (**compression**)

Spiral fractures are a result of axial twisting +/- axial loading.

Oblique fractures are a result of angulation and axial twisting in the presence of axial loading.

Axial loading applies to bones, e.g. tibia, which are weight-bearing at the time of injury.

Periosteal New Bone Formation

Sub-periosteal bleeding causes the periosteum to lift and separate the osteogenic layer from the cortex. A thin layer of subperiosteal new bone is formed in 7-10 days. Grabbing, pulling or twisting of a limb may cause it, without fracture being obviously present.

A fracture of the femur is more often likely to be due to abuse, especially in infancy. Metaphyseal fractures are also seen at the end of long bones and are common around the knee and elbow. The humerus is another bone frequently injured in abuse. Diaphyseal or distal metaphyseal fractures as well as any fracture under a year are strong indicators of abuse. Accidental fractures are more likely to be supracondylar (although at times this fracture could also be due to abuse). Injury to a long bone shaft resulting in spiral or oblique fractures usually occurs when an infant is violently grasped by the arms, pulled, jerked or swung. A direct blow could produce a transverse fracture.

Rib fractures are diagnosed usually by radiography although grating can be felt or heard in fresh injury when the chest is gently palpated. They may be single or multiple and seen most often posteriorly near the costo-transverse process articulation. Posterior rib fractures are highly specific for abuse, and occur as a result of a child being held with palms laterally, the thumbs anteriorly and the fingers posteriorly causing antero-posterior compression often associated with violent shaking. On X-ray there may be little evidence during the acute stage, especially when posterior. Callus formation enhances identification within two weeks, while in one month the only remaining change may be slight cortical thickening. Cardiopulmonary resuscitation of children rarely causes rib fractures. Antenatal rib fractures have been seen as a form of abuse in the unborn child in

attempting to abort the child by blows or by purposeful falls. Rib fractures have been described uncommonly after traumatic deliveries, especially breech. Spinal injury is usually due to forced extension or flexion and may occur at different levels. Defects in the lucency of the anterior superior edge of the vertebral bodies, often in the lower thoracic/upper lumbar with narrowed disc spaces, are typical.

Skull Fractures

Skull fractures are common in severe child abuse. If present, a haematoma indicates a recent fracture confirmed by skull X-ray. Skull fractures usually result from impact with a solid object. When a baby is shaken violently, there could be intra-cranial injury without skull fracture, unless it is associated with an impact with solid surface. Skull fractures cannot be readily aged since they do not heal with callus formation.

Skull fractures can be classified as:

- Single** unbranched fracture linear, zigzag, or curved - maximum width of 2mm.
- Multiple (complex)** more than one fracture, single fracture with a branching or stellate appearance.
- Depressed** inward displacement of bone
- "Growing fracture"** more than 3 mm, may enlarge with time, sometimes associated with a leptomenigeal cyst.

Skull fracture reports should include site, whether suture lines crossed, configuration (as above), orientation, length, other features, presence of suture separation, presence of soft tissue swelling. Most skull fractures are in the parietal bone in both accidental and non-accidental injury, while fractures of the frontal bone are much less common. Occipital fractures are more common in abuse while a depressed occipital fracture is virtually diagnostic of abuse. "Growing fractures" are associated with severe injury, and abuse should be excluded.

A skeletal survey should be considered mandatory in suspected physical abuse in the following circumstances:

- Suspected physical abuse of a child less than 3 years
- Older child with marked soft tissue injury
- Localized pain, limp or reluctance to use a limb
- Past history of fracture
- Unexplained neurological symptoms or signs

A child dying under suspicious or unusual circumstances

Chest, long bones, hands, skull, spine and pelvis all antero-posterior views should be done.

Very often there would be no clinical evidence of fractures, and the number of radiologically evident fractures may surprise the clinician. Multiple fractures at different stages of healing signify repeated physical abuse.

Different types of fractures in child Abuse

Different types of fractures in child Abuse



Plate 4

A two year 3 month old girl with (1) a fracture of the right humerus, (2) spiral fracture of the left femur and (3) fracture of lower end of left tibia. (X-rays: Courtesy Dr I.N.A.Gooneratne)



Plate 5

Two-year-old girl admitted with multiple fractures. (1) Fractures of right radius and ulna are present at different stages of healing. Note; elevated periosteum on radius. (2) Comminuted fracture of the upper end of left ulna is also present. Elevated periosteum of the humerus is suggestive of sub-periosteal bleeding. (3) Second admission three months later. Note: increased sub-periosteal elevation on humerus and a 'bucket handle' fracture. Healing of old fracture of ulna is seen. (4) Third admission. Extensive sub-periosteal reaction is observed. Healing of the old fracture of ulna is seen. (X-rays: Courtesy Dr I.N.A.Gooneratne)



Plate 6

(1) A twelve-month-old girl with multiple fractures at different stages of healing. A fracture of the upper end of the humerus with an old fracture of the lower end of ulna is seen. (2) A fracture of upper end of fibula - note angulation. (3) A fracture of the left lower femur with callus formation. (X-rays: Courtesy Dr I.N.A.Gooneratne)



Plate 7

Multiple fractures of both upper limbs in a child at different stages of healing. (X-rays: Courtesy Dr I.N.A.Gooneratne)

Osteogenesis Imperfecta

Osteogenesis imperfecta is an inherited disease of connective tissue in which decreased calcification and fractures occur with minimal trauma. Excessive Wormian bone formation in the skull is a clue to diagnosis. There are four main types:

- Type I:** Dominantly inherited, blue sclera, mild to moderate affliction.
- Type II:** Sporadic dominant, lethal, and intrauterine fractures present; Blue sclera present.
- Type III:** Very rare dominantly inherited, moderate to severe, blue early then grey sclera.
- Type IV:** Dominantly inherited - mild to moderate affection, normal sclera, osteoporosis may be present, sometimes normal. Type IV A; the teeth are normal, (IV B abnormal teeth). Type IV may cause diagnostic difficulties, especially since the sclera are normal, and because of an increased tendency to bruise. However, fractures of ribs, skull, metaphysis and intracranial injury are not features.

Case history

A two-month-old baby boy was admitted with pain on movement of the left lower limb. An X-ray of the left femur showed a spiral fracture of the femur, giving rise to suspicion of child abuse. However, the bones also showed decreased mineralization of the bones with cortical thinning. The femur, tibia and also the fibula showed some angulation. Other X-rays revealed generalized reduction of mineralization and cortical thinning of long bones. Skull X-rays showed poor ossification and absence of wormian bones. When the family history was probed; it was revealed that the 28-year-old father was a beggar on a train. His limbs were deformed and he was unable to walk. X-rays of the father showed poor mineralization of long bones, spine and ribs, and cortical thinning with healed fractures on the ulna and radius. The tibia/fibula on both sides showed multiple fractures at different stages of healing with marked angulation around mid-shaft with formation of pseudo-arthritis. The skull X-ray did not show wormian bones. Both father and son had normal sclera, while the father's teeth were normal. The dominant inheritance pattern, the absence of blue sclera and wormian bones, normal teeth and moderate affection suggests osteogenesis imperfecta type IV in this child.



Plate 8

A two-month-old boy. (1) Note spiral fracture of left femur with marked reduction in mineralization of bone and angulations of long bones. (2) 28-year-old father - tibia/fibula on both sides showed multiple fractures at different stages of healing with marked angulations around mid-shaft with formation of pseudo-arthritis. Note osteoporosis.

Intra-cranial injuries include subarachnoid haemorrhage, subdural haematoma, bleeding into ventricles and to cerebrum, cerebral contusion and oedema. Coma, fits and apnoea are associated features. Retinal haemorrhages are common if you look for them.

Subarachnoid haemorrhage may be due to a ruptured aneurysm or due to trauma and is often difficult to diagnose since blood-stained CSF may be dismissed as a "traumatic" tap. However, the presence of retinal haemorrhage should arouse suspicion.

Subdural haemorrhage should always be considered as traumatic; although a clotting problem could theoretically cause bleeding, it is considered unlikely. Subdural haemorrhage may be a consequence of violent shaking or banging of the head on a hard surface in a child held by the shoulders. When there is violent shaking ("shaken baby syndrome" or a sudden impact, the veins that bridge across the subdural space tear with the "shearing" forces of this movement. When the veins get avulsed, blood collects in the subdural space. Recent evidence indicate that shaking alone may not be the sole contributor, and shaking followed by impact caused an acceleration factor 50 times that of shaking only. These findings led to the proposal of "Shaken impact syndrome". Fundoscopy is important since retinal haemorrhages are associated with subdural bleeding. A CT scan would demonstrate the subdural collection. It is indicated in children with fractures of the skull, or children brought unconscious or semi-conscious without any other explanation or with retinal haemorrhages. (an MRI scan is sometimes more useful)

Blunt injuries to the abdomen could cause lacerations of the liver, stomach and mesentery. Children with such injuries may be collapsed or brought dead. In cases where children are brought dead and if there are suspicions of physical injury, X-rays before the post-mortem examination is desirable. Some important aspects include:

Figure 3: A Handbook on Managing Child Abuse

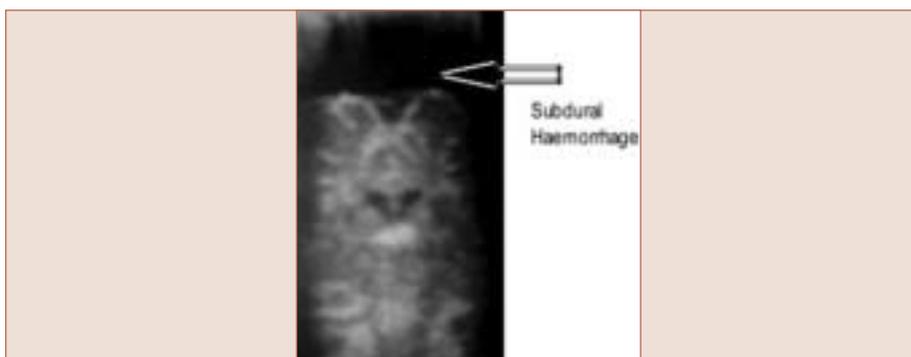
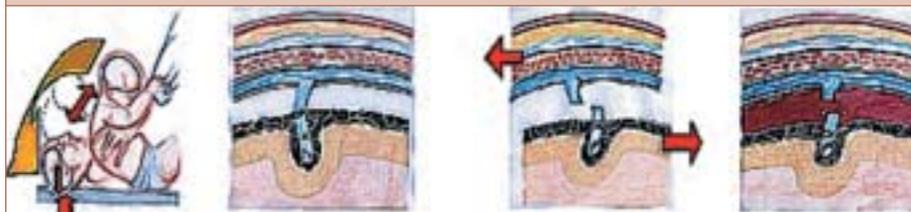


Plate 9

Ultrasound of the cranium of an infant done through the open anterior fontanel showing a subdural haemorrhage. . (Ultrasound: Courtesy Dr I.N.A.Gooneratne)

There may not be any external injuries.

Delay in presentation and/or denial of trauma.

Other injuries to head, limbs and trunk may be present.

Free gas in mediastinum, under the diaphragm in some patients on X-ray

When the child is in shock and in a poor condition, a high index of suspicion is needed.

A few case histories of physical abuse and neglect would establish the existence of child abuse in Sri Lanka, and would illustrate some of the difficulties in identifying it, as well as its typical features. Unless the doctor is sensitised to suspect physical abuse, identification would be difficult.



Plate 10

Case history of NK: Presented with multiple burns (1 and 2) all over the body at different stages of healing. The explanation given by the mother was that the elder child who had lit a piece of polythene had taken it across the room and the melting polythene had dripped on the baby. This explanation was not in keeping with the injuries we observed. The pattern of the burns, the different stages of healing of the burns and the presence of burns on both the front and back were not consistent with the explanation. Multiple fractures (3 and 4) were also observed. The X-rays show fractures of ulna r/ radius (left) and humerus (above) at different stages of healing.

Although he (NK) had been treated for a fracture of the humerus and an X-ray of the humerus had been taken, a skeletal survey had not been done. It is imperative that a skeletal survey (of X-rays) is done in all cases where there is suspicion of physical abuse. X-rays of the forearm demonstrated multiple fractures of both ulnar/radius on both sides. These multiple fractures were at different stages of healing with varied periosteal reactions in the different fractures. A fracture of the right humerus was forming a callus. He also had multiple fractures of ribs at the angle of the rib where it typically occurs due to compression injuries to the chest.

Intentional Poisoning

A one-year-old child was transferred from a General Hospital to the ENT ward with stridor. A burn with a "drip" mark aroused our suspicion, and it turned out to be a case of intentional poisoning with acid. (Plate 3)

Case History of MA:

MA was a child of an estate labourer. Both partners were divorced, and they had families of their own. This is the youngest child of the father by a previous marriage. The stepmother was the most likely abuser. She was an ill looking girl, with multiple swellings of the thighs, arms and with scars. Multiple parallel linear abrasions on the skin of the side of the chest were observed. A stick most likely caused it. The explanations given were far-fetched. Multiple fractures of ribs were observed typically due to a compression force. A swelling of the left hip was observed, and the left lower limb and the hip were flexed. A fracture of the neck of the femur was confirmed by X-ray. Another "old" fracture (at a different stage of healing) of the lower end of tibia on the left side was also seen. The child also had a swollen arm, and a fracture of the lower end of the humerus was seen on X-ray.

A skull X-ray showed a wide linear fracture. A CT done two months after admission (delay due to repairs to CT machine/waiting list) showed a resolving subdural effusion. (Plates 11, 12)



Plate 11

MA. Clinically, (1) a swollen elbow. (2) radiologically a supracondylar fracture was confirmed. (3) multiple fractures of lower limb. A recent fracture of the femur is seen. Note an old fracture of tibia (white arrow). (4) burns on Buttocks, probably caused with a firebrand

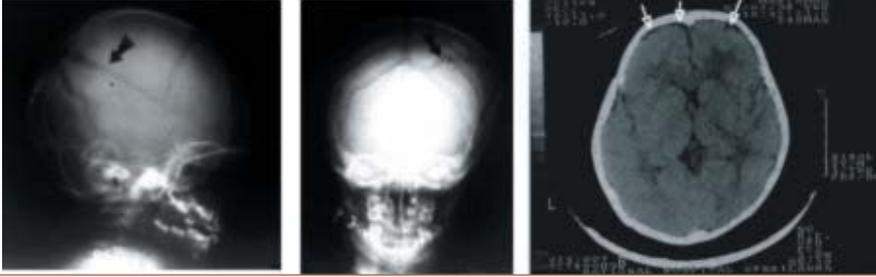


Plate 12

MA: (1and 2) Skull X-rays show A wide fracture of the Parietal bone. (3) CT scan showed a subdural Hemorrhage

Case history of NI

The mother, who was living alone in a rural village from Hambantota, brought NI, a 7/12 old girl. The father was working away in the city, and a male friend of hers probably abused the child. The mother refused to speak (most likely because her love affair would have then be exposed). NI had been seen in three different hospitals. From the last hospital, she was referred to the ENT surgeon for the repair of an injury to the nasal septum. The ENT surgeon referred the child for management of severe malnutrition. Moving from one hospital to another arouses suspicion.

Multiple, parallel, linear abrasions with a 'tramline appearance' were seen on the side of the chest which are characteristic of a stick or a cane causing this (Plate 13-2). The explanation given was inconsistent with the injury; because the mother said, "it was caused by the mat", which is a very unlikely explanation. Two small round burns were also seen on the side of the chest which were most likely due to cigarette burns (Plate 13-2). Hence the reason to suspect a "male friend" of the mother. The laceration on the nasal septum was supposed to have been caused by the child falling against an arm of a chair. This explanation is implausible, as a child of 7 months cannot walk (i.e. not in keeping with the development of the child), and the height of the child and the arm of a chair is not consistent.

A fracture of the skull was seen. X-rays of the knees and ankles showed multiple "bucket handle" fractures of the metaphysis, also known as "chip" fractures (Plate 13-4). Pulling or twisting of the legs causing the bone to "chip" at the attachment of tendons leads these fractures. Periosteal thickening of the tibia/fibula was also seen.

A chest X-ray revealed multiple fractures of ribs, suggestive of compression of the chest.

The presence of severe malnutrition ('nutritional neglect' - another form of child abuse) demonstrated the association of physical abuse and nutritional neglect. A period in the ward (Plate 13-6) and with the grandmother completely reversed the nutritional status (Plate 13-7)



Plate 13: NI.

- (1) gross nutritional neglect ;
- (2) bruising on chest. Multiple, parallel, "tramline" linear abrasions and 'two small round cigarette burns;
- (3) injury to nasal septum. Scar on L/S face, which the mother attributed to striking against the chair while walking. The explanation was not in keeping with the development since a 7-month-old child cannot walk;
- (4 - 5) multiple "bucket handle" fractures of the metaphysis also known as "chip" fractures;
- (5). after 2 months in the hospital ward;
- (6). NI-after a few months with the grandmother

Intentional poisoning by other substances is not uncommon, depending on the availability of poisonous, toxic and corrosives in the geographic areas concerned.

These case studies illustrate most of the features in terms of history and injuries, in physical abuse. It also illustrates that it occurs in all ethnic groups. A high degree of suspicion is needed to identify child abuse. It is also clear that unless clinical suspicion led to skeletal surveys, most injuries would not have been identified.

MEDICAL EXAMINATION

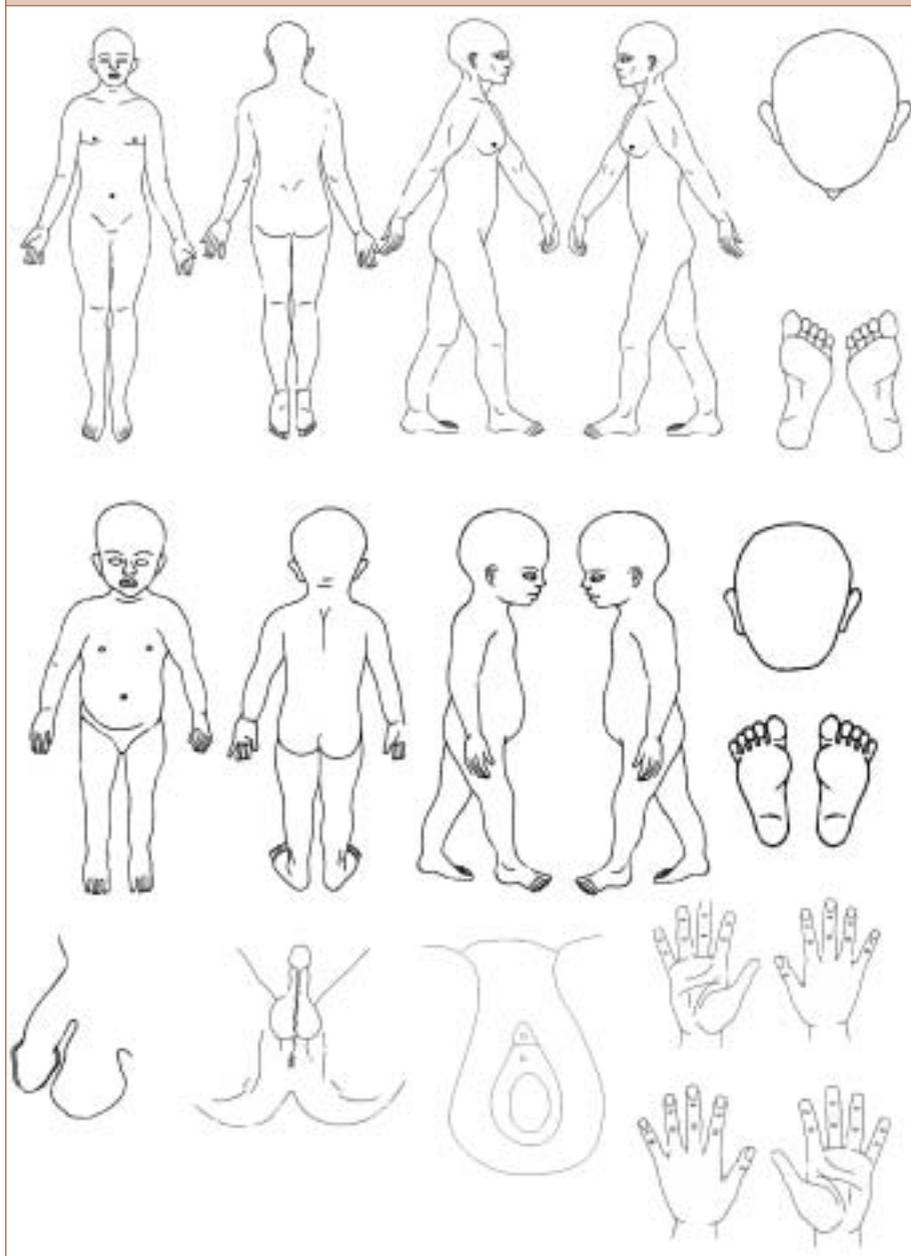
The examination setting should be calm, pleasant and colourful, with pictures and toys for appropriate gender and age. The paediatrician/JMO should try to allocate a separate time and place for the examination since the normal clinical environment, such as a busy clinic or an in-patient ward in a developing country, would be chaotic and not suitable to questioning and examining already distressed and agitated children and parents.

Accurate notes have to be made and history taken separately from the child and each parent/care-giver. The injuries have to be described in detail, describing the lesion (probable nature, e.g. laceration, burn etc), size/shape/sight as well as an approximate age of the lesion. If possible, the likely cause/weapon should be noted (e.g. hand, stick, belt, knife etc). Drawings of the injuries are useful to note the details (Fig IV). It would be useful to have standard figures of children and adolescents available for the medico-legal procedure. In some developing countries, forms such as medico-legal examination forms or medico-legal reports are routinely available but are most often designed for adults. It is useful to develop a form with figures (Fig 3) and another section for documentation in text. A questionnaire type of form, custom designed for use in the relevant countries would be useful since the questions to the doctor would "direct" even the inexperienced officer to conduct a proper examination and documentation (e.g. site, size and shape of injury; type of injury with options (e.g. laceration etc.); are there burns? if so, the age of burn etc). Another useful addition to such a form would be a "tear off" slip with some details that could be used as a database for documentation of the incidents and monitoring of follow-up if used by a central body or administration.

If adequate resources are available, the JMO or the paediatrician should be provided with a colposcope (for examination in sexual abuse) and/or a camera to

further document the injuries that could be useful not only in the court procedure and recollection for the doctor, but also for training of medical officers and students. A macro-lens and a suitable flashgun are useful.

Figure 4: Suggested drawings to be used in the documentation of injuries



CHILD LABOUR

Child labour is usually not included in textbooks as a form of abuse since it is not prevalent in most Western/industrially developed countries. In developing countries it is a common practice and may lead to different forms of abuse. Every child has a right to live with his/her parents. Apart from the abuse of hard physical labour, a significant number of these children may be abused physically. They are also more likely to be sexually abused. Emotional abuse, as well as nutritional and medical deprivation is also seen. A majority are deprived of an education. There are many other aspects of the Convention of the Rights of the Child that these children are deprived of; especially aspects of participation, expression of views, access to information, identity as a child etc. It would not be discussed in detail since it is beyond the scope of this book.

MUNCHAUSEN (FACTITIOUS ILLNESS) BY PROXY

In developing countries, although this condition is undescribed or is considered a rarity, it may be that it is not recognized like all other forms of abuse because the physician may not consider the diagnosis as a part of "denial" and/or is unaware of this relatively recently-described entity. This condition is always linked to the crucial factor that a parent or care-giver, more often the mother, with the father usually playing a passive role (Hobbs, Hanks & Wynne 1999). The perpetrator fabricates an illness in a child and misleads a physician into believing that the child has an illness, which needs investigation. Fathers, grandparents, foster parents and even nurses or teachers have been described as perpetrators (Hobbs, Hanks & Wynne 1999). "Doctor shopping" is a feature. Medical investigations that are undertaken include, invasive procedures, exploratory surgery, multiple x-rays, laboratory investigations and poisoning. Often it may lead to life-threatening situations and can be fatal. Tampering of laboratory samples is a feature.

In factitious illness by proxy (Munchausen by proxy), the mother has a great need to be cared for, who then "taps" into the professional's need to care for others. This leads to a vicious cycle of abuse where the professional is inadvertently "pushed" into a blind situation of investigation and treatment of an apparently unusual and "unsolvable" clinical condition without realizing and catering to the real health and emotional needs of the child, or to the rights and best interests of the child (Schreir, Libow JA 1993, Hobbs, Hanks & Wynne 1999).

In the process of development, the baby has to gradually learn to separate from the mother to gain a sense of "self" and independence. The carer, usually the mother, has to help and guide the baby in this process. In factitious illness by proxy, the carer/s does not have a sense of this natural process and do not allow

this development of independence to develop as part of their parental duty (Winnicott 1982).

The parent usually supports and acknowledges the work of the doctor and promotes the doctor's self-esteem and lures them to consider more investigations and treatment procedures promoting a feeling of "expertise" by the doctor. This traps the doctor into a cycle of abuse by proxy without realizing his or her own adverse role. The mother/carer is often clever to be critical of the professional's colleague/s while promoting the professional, which contributes to the process of entrapment (Schreir, Libow JA 1993, Hobbs, Hanks & Wynne 1999). Unless the professional, especially the physician, is aware of this condition, he or she may fall a prey to this unfortunate situation of child abuse by proxy.

Key features of factitious (Munchausen) illness by proxy:

- ♦ Intentional production of physical or psychological signs and symptoms in another person (proxy) who is under the individual's care.
- ♦ Repeated visits to doctor.
- ♦ Perpetrator denies the etiology of the child's illness.
- ♦ Motivation for the perpetrator's behaviour is to assume the sick role by proxy.
- ♦ External incentives such as economic gains is absent (at least initially)
- ♦ The behaviour does not fit into any mental disorder.
- ♦ Symptoms and signs disappear when the child is separated from the carer. (Hobbs, Hanks & Wynne 1999)

Common clinical presentations in factitious illness by proxy

- ♦ Bleeding (haematuria, haematemesis)
- ♦ Seizures
- ♦ CNS depression (drowsy, coma)
- ♦ Apnoea
- ♦ Failure to thrive
- ♦ Diarrhoea
- ♦ Vomiting
- ♦ Fever
- ♦ Rashes, allergy
- ♦ Hypertension
(Hobbs, Hanks & Wynne 1999)

Warning signs of factitious illness
(Hobbs, Hanks & Wynne 1999, Wissow 1990)

- ♦ Persistent or recurrent disease; May even consider a 'new' syndrome or disease entity
- ♦ The apparent good health of the child not in keeping with the serious symptoms and/or laboratory results
- ♦ Clearly attentive mothers, always with the child. Discrepancy between the mother's obvious brightness and the serious nature of the supposed illness
- ♦ The signs, symptoms and anomalies in laboratory results abate on separation from mother
- ♦ Routine treatment protocols hardly works well
- ♦ Previous medical opinions sought ('Doctor shopping') and most if not all medical records are "misplaced".

Management

Includes, extensive psychological and psychiatric assessment of the mother/carer. There is often a tense atmosphere considering the allegations and counter allegations, sometimes with attention of the press. There is an absolute need for a child-centred approach with the best interest of the child in mind (from Jones and Byrne 1996 quoted by Hobbs, Hanks & Wynne 1999).

Key stages of management are:

Multi-professional meetings - to recognize the variety of interests in the professional and or networks

Review the medical records of the child and family. Look for previous psychiatric/psychological illness or previous somatization

Risk assessment. The parents/carer, if acknowledge the situation and are willing to work on the psychiatric/psychological aspects, outpatient assessment may be considered

In-patient assessment and therapeutic protocol (Jones and Byrne 1996) of 6-8 weeks, including the assessment of safety of re-uniting the child with the family

Continued contact, re-assessments, therapy for the family and child

Covert video recordings have also been used in potentially life threatening situations (Southall, Plunkett, Banks, Falkov, & Samuels 1997)

PEER ABUSE (BULLYING)

Bullying is a wilful, conscious desire to hurt another and put him/her under stress, and is often seen as "peer abuse" in schools. It may include physical assault and intimidation, social isolation, theft and extortion, verbal abuse including teasing, racial and sexual harassment or harassment on grounds of religion, race, sexuality or gender. "Ragging" in schools is also a form of bullying. Adults, both parents and teachers sometimes may be responsible or they may be "passive perpetrators" by turning a blind eye. Most school bullies are bullied or abused at home and they are very "insecure"; and because they are so weak inside, they have to appear strong on the outside.

SEXUAL ABUSE

What is Sexual abuse?

This has already been defined in the Introduction, under "Definitions of Child Abuse" (WHO, 1999).

In a study in Sri Lanka (de Silva 2001), an anonymous questionnaire to 899, A-level and undergraduate students was administered. Eighty-five (18%) boys admitted to having been sexually abused during childhood. Nineteen (4.5%) of the girls had been abused.

In both studies, in the case of boys a majority had been abused either by a relative or neighbour. Others included, brother, teachers and priests. A significant fact was that older women abused 19 boys. In the case of girls, a relative or neighbour abused a majority. Many of the girls had not divulged the abuser, which suggested the abuser to be an immediate family member. This indicates that sexual abuse is most often by persons trusted by the child or the parents.

The modes of abuse of boys include Inter-crural, rectal, oral, intercourse, pornography and fondling. The methods of abuse of girls included, penetrative, inter-crural, oral intercourse as well as fondling.

Research is scarce from the South-East Asian Region and there is a need for more data from different countries. Qualitative research done in Pakistan indicates commercial sexual exploitation, especially of boys by locals as relatively common and the use of girls posing as dancers, brothels run by "*Naikas*" where girls are sold. "*Balkeys*" are young boys kept by rich older men for sexual pleasures.

Sexual Exploitation

Sexual exploitation by tourists has become a problem in countries where tourists flock for other reasons such as beautiful scenery, culture, ancient

history etc. Thailand, Philippines and Sri Lanka were countries that were affected most in the 1980s and 1990s. Other countries affected to a variable extent include India, Cambodia, Vietnam, Myanmar and Nepal. An observation in Sri Lanka is: foreign paedophiles often get legally married to local widows or divorcees, to be socially viewed as "respectable" persons, whereby access to children becomes easier. These women are often paid a salary for the position of "wife". However, it must be emphasized that every foreigner married to a local should not be looked at in the same way (de Silva 2000).

"Paedophiles" need not necessarily be "white" or foreigners. A typical "Sri Lankan paedophile" is described in the "Kadugannawa Parcel Bomb Case" (Alles 1962) of 1945 heard in the Kandy Court even long before the terms "child abuse" or "paedophilia" were described. Unfortunately in these instances of exploitation, children may wrongly get "labelled" as "homosexuals" or "child prostitutes".

Physical Examination in Sexual Abuse of Children

General points to be taken in the history, before examination.

- ♦ Document fully any history including details of where, when, who was involved.
- ♦ Distinguish history from examination.
- ♦ Take the child's history separately from the adult's history.
- ♦ Record common and important symptoms e.g. vaginal bleeding, discharge, pain etc.
- ♦ Take a general paediatric history.
- ♦ Record details of any disclosure including times of assault, nature of assault, anything said, symptoms of child post assault, child's behaviour/activity
- ♦ Family and social history
- ♦ Any medical history (include constipation, skin disease, previous infections, injuries etc)

Examination

(Recommended References: Hobbs, Wynne 1996; Hobbs, Hanks, Wynne 1999; McCann and Kerns 1999, a CD ROM atlas/reference; WHO Guidelines for medico-Legal care for victims of sexual abuse 2004)

Check list for Examination

- ♦ Consent for examination, especially from the legal custodian, is important at the time unless the custodian is the accused (Annex 1).
- ♦ When a child alleges sex assault (72hours for children and 5 days for post pubertal), forensic tests may prove positive. Vaginal, rectal, and skin swabs are ideally done within hours of the assault (Annex 1).
- ♦ Bruising ("love bites"), grip marks, scratches and lacerations, burns should be documented as soon as possible: within 24 hours.
- ♦ Where there is severe vaginal or rectal injury (rare) immediate referral is needed for possible surgery).
- ♦ If pregnancy or genital infection is possible, referral for identification and treatment should be prompt.
- ♦ It is now known that healing of physical signs is rapid, and children underestimate rather than exaggerate the extent of their abuse.
- ♦ The combination of these factors mean that delayed examination may result in negative findings even though there has been penetration described as a "bit" of touching.
- ♦ It is extremely important to investigate the victim for sexually-transmitted diseases, including HIV and appropriate follow-up tests.
- ♦ The physician should also consider the risk of pregnancy and take steps for emergency menstrual regulation with preparations containing combinations of ethinylestradiol and levonorgestrel. The legal statutes of individual countries have to be consulted if termination of pregnancy is sought.

Record

The child's emotional state, demeanour, growth, general health, and results of cardiovascular, respiratory, abdominal examination

In instances where non-genital/anal injury is present - (bruises, bite-marks on breasts, thighs, buttocks, pubic areas, as well as other areas) draw this on body plans with measurements, etc.

Record evidence of maltreatment, skin disorders, and signs of constipation.

Record the stage of sexual development using Tanner's staging.

Record position of examination, method of examination, photographs if taken and drawings

Make notes on cooperation or lack of cooperation.

Position of Examination - Girls

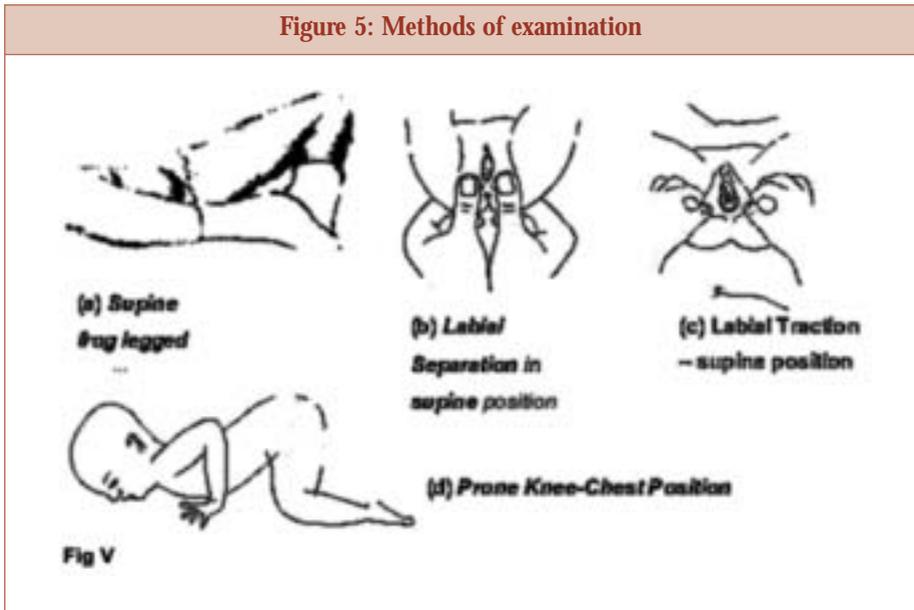
Supine frog-legged position

Prone knee-chest position (Gives a better view of the posterior margin of hymen)

Note any injuries, skin disorders, warts. Etc.

Is the hymenal opening visible and gaping before the thighs are abducted (may be associated with genital abuse)

Figure 5: Methods of examination



Supine frog-leg position (Fig. V-a) is the usual position of examination.

Labial separation (Fig. V-b) in the supine frog leg position is possible with either the thumbs of the examiner (or middle and index finger) used to separate the labia majora.

Labial traction (Fig V-c) is possible with gentle traction to separate the labia majora with the thumb and index finger. Prone knee-chest position (Fig V-d) is used to visualize the posterior hymen.

Examination of Hymen

In newborns and infancy it is thick and redundant due to maternal oestrogen effects.

Pre-pubertal changes. The hymen is thinner and flatter with a clearly defined edge. Clearly visible blood vessels are a feature. (Plates 14,15)

Colour Plates 14 - 34 - reprinted from *Physical Signs of Child Abuse*, second edition, By C.J.Hobbs and J.M. Wynne 2001, by permission of the publisher W.B.Saunders.

Pubertal - The hymen again becomes thicker, pale, and redundant with folds of hymenal tissue. (Plate 16)



Plate 14

Annular hymen in a 3 year old. The hymen is abundant. Note again the clear vascular pattern.



Plate 15

Normal hymen in 4 year old. Note again the clear vascular pattern.



Plate 16

Note the change in the shape of the hymen due to earlier abuse. Early oestrogen changes are apparent. Note the dramatic effect that oestrogen has had on this hymen, which is now redundant, pale and appears to have a deep notch posteriorly (due to earlier injury).

Examination of Post-pubertal Girls

A speculum may be used, in abused post-pubertal girls with marked hymen damage, to swab the cervix for gonorrhoea, and to detect a source of bleeding with a genital injury. A general anaesthetic may rarely be necessary.

Digital examination is not indicated pre-pubertally. In pubertal girls (with oestrogenised hymen - Plate 16), inspection alone will not give adequate information about tears and dilatation. When examining pubertal girls, it is usual to examine with gloves and after looking at the hymen with a dampened cotton wool bud (ref. Fig. 11), a gentle digital examination may be done.

Although recent work has questioned the value of measurements of the hymeneal opening, it could be used with extreme changes and with other clinical findings. At puberty, the "usual" hymeneal opening is about 1.0 cm. And even the

examiner's smallest finger will cause discomfort, and it may be inferred that penile penetration is unlikely and digital penetration infrequent, if at all.

An index finger (1.5-cm), inserted without discomfort would clearly be consistent with digital penetration. A 2-finger examination with ease (3.5-4.5 cm) would be consistent with penile penetration. (Hobbs, Wynne 1996; Hobbs, Hanks, Wynne 1999)

In about 50% of children referred for sexual abuse, no abnormality is found. Delay allows healing which may be rapid and complete.

There may be little correlation between the abuser's confession and reality. In a study of 160 children with diagnosed CSA (a majority with penetration) only 60% had abnormal physical findings. (Hobbs, Wynne 1996; Hobbs, Hanks, Wynne 1999)

Pre-pubertal Examination

Child sexual abuse is the usual cause of pre-pubertal vaginal bleeding. Child sexual abuse is very likely to have occurred in cases of foreign body in the vagina (associated with bleeding/offensive discharge). [Insertion of a FB causes pain, and non-abused children are unaware of the vaginal orifice]

A gaping hymeneal orifice on abduction of legs, before any labial separation, is suggestive of abuse.

Knee chest examination will allow better visualisation of the posterior hymen as it "unfolds". (McCann and Kerns 1999)

Measurements

Dimensions of the hymenal orifice depend on the method (e.g. labial separation/traction, knee chest) used Fig V (a-d), hence the controversy about the value of measurements. Since recently measurements are not widely used because of the controversy of its value.

Figure 6: Normal appearance of the annular hymen supine (a & b), and prone positions (c)

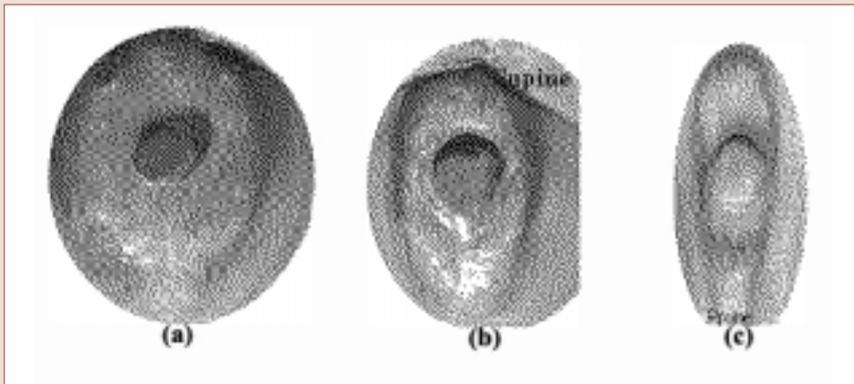
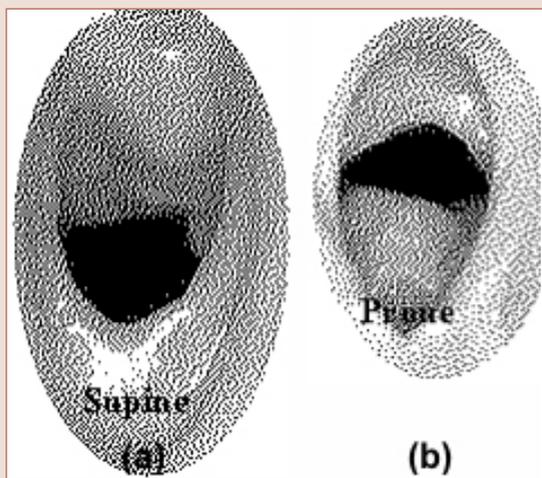


Figure 7: Normal appearance of crescentic hymen supine (a) and prone views (b)



GENITAL TRAUMA

Acute trauma causing swelling, erythema, abrasions and bruising settles over days, and hymenal lacerations may heal rapidly in pre-pubertal girls if the abuse stops. Superficial abrasions and lacerations heal only by regeneration. The process begins with thrombosis and inflammation followed by regeneration of the epithelium with new cell formation and then differentiation into a new surface epithelium. The wound heals by 48-72 hours and differentiation is complete in 5-7 days. The superficial injury has thus healed without residue in a week. (Hobbs, Wynne 1996; Hobbs, Hanks, Wynne 1999)

However, if the laceration has been deeper, repair with formation of granulation tissue may occur, resulting in scar tissue. The regeneration in this situation is followed by organization, which is the replacement of coagulated blood by granulation tissue and wound contraction. The granulation tissue appears red initially but with time as the cellular and vascular components of the tissue decrease, it becomes pale. Most scars mature in about 60 days. However, as the scar contracts, it may distort the surrounding tissue in an unexpected way. The final scar is much smaller than the initial injury.

Points to remember

- ◆ Healing in hymenal trauma is rapid.
- ◆ The hymen, when stretched, may recover even in cases of penetration, and there may be normal findings.
- ◆ Size of the hymenal opening depends on:
 - Age
 - Stage of pubertal development
 - Position examined (supine/knee-chest)
 - Method of examination labial traction or labial separation

- Relaxation
- Obesity (Only the vertical diameter is increased)
- ♦ The usual shape of the hymen is annular or crescentic (Absent 11-1 O'clock)
- ♦ Healing may take place if the child is protected from further abuse.
- ♦ Attenuated hymen due to chronic abuse does not recover.
- ♦ A normal hymenal orifice does not exclude CSA: On the other hand, a minor abnormality (alone) does not prove CSA.
- ♦ The hymenal opening is usually symmetrical in mid-childhood.

The following should be considered as possible signs of previous trauma.

- ♦ Marked asymmetry (e.g.: a small notch at 11 O'clock and a marked notch at 1 O'clock)
- ♦ Sharp or square angles
- ♦ Distortion of hymenal margins ("bumps" and "notches")
- ♦ Minor bumps in the hymeneal margins and if associated with intravaginal ridges are probably normal variants.



Plate 17

There is reddening of the hymen and vaginal wall with a dilated hymenal opening which is **asymmetrical** with notches at 3 and 5 o'clock.



Plate 18

Five year old with intermittent vulval soreness, withdrawn behaviour. Hymenal opening is dilated, 1 cm horizontal diameter and there is a sharp 'V' notch at 6 o'clock. The hymen is reddened, its edge is irregular, rolled and there is anterior asymmetry. The symptoms and signs regressed when the child's stepfather left the family home.

**Plate 19**

Square-shaped hymenal opening. Smooth edge. Possibly attenuated between 6 and 12 o'clock.

**Plate 20**

Female aged 4, reddening with vertical elongation of the hymenal opening and bumps at 3 and 9 o'clock. Appearances are of a deep posterior tear. Note vaginal ridge (normal) visible at 6 o'clock

Hymeneal Tears, Transections, Lacerations

Caused by penile penetration (or attempted), are likely to cause greater damage than digital.

Usually found at 5-7 O'clock (Figs. VIII, IX, Plates 21,22)

May extend to the posterior vaginal wall and occasionally to the fourchette (Plates 18, 20, 22).b

A notch in the posterior half of the hymen is suggestive of abuse.

Lateral or anterior notches, if deeply asymmetrical or associated with distortion and scarring, are consistent with CSA.

A single, shallow, symmetrical notch at 12 O'clock is usually normal.

Attenuation of the Hymen

Attenuation of the hymen is "a sign of damage due to hymenal tissue being rubbed or worn away due to chronic abuse".

May be symmetric, and often posterior or lateral (Fig. 10, Plate 23)

Figure 8: (a) Lateral tear in the prone position, (b) Lateral tear - supine position

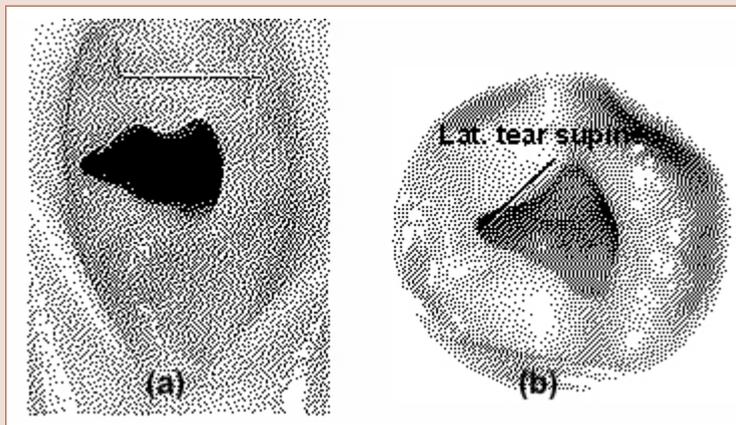
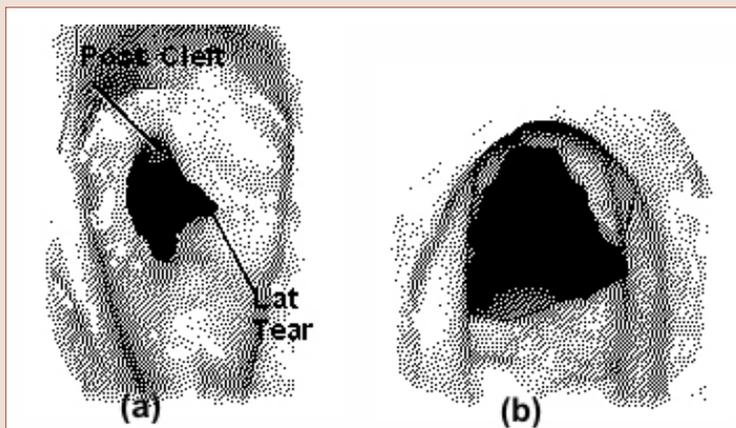


Figure 9: (a) & (b) Posterior and lateral tears - prone position



Attenuation of the hymen, with resultant enlargement of the orifice is a diagnostic sign of penetrative injury.

Attenuation of the hymen does not heal.

The orifice will remain deficient and wide.

Even after puberty, the hymen will remain deficient, unable to develop fully into characteristic "petals" over the attenuated area.

If there has been stretching of the hymen, without loss of tissue, healing will take place (if the abuse stops), and the orifice will become smaller again.



Plate 21

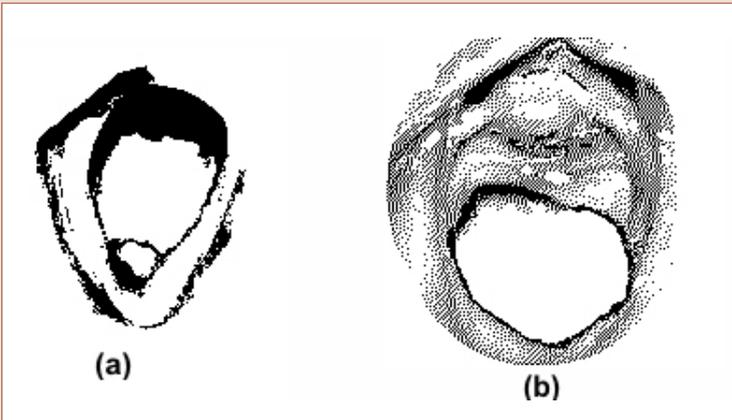
Hymenal notch at 3 o'clock. Minor notch at 12 o'clock.



Plate 22

Dry, reddened skin, gaping vagina with remnants of hymen posteriorly. Old scar visible on posterior vaginal wall between remnants of hymen.

Figure 10: Attenuation of the hymen - very suggestive of recurrent / chronic sexual abuse



Scars are very unusual, but may be seen at the posterior fourchette, after a splitting or shearing injury.

Vulvar coitus may cause a split, which scars or results in labial (posterior) fusion.

Hymenal tears due to digital penetration may be seen circumferentially, but mainly seen between 9 and 3 O'clock, anteriorly.

Hymenal tears heal in 1-3 days, but may be seen in the acute stage with:

Gaping hymen

Oedematous hymen or peri-hymenal tissue.

Localized abrasions.

When tears heal, they leave:

- V shaped "notches" in the hymeneal margins (Plate 18)
- "Clefts" (Cleft at 12 o'clock associated with a crescentic hymen may be normal)
- "Bumps" where a tear has healed, and the opposed sides have not been accurately aligned, there is some thickening and disruption of the hymen [A vaginal ridge or a minor bump is normal]. (Plates 20,21,22)
- An asymmetric, square or distorted shape of the hymeneal orifice (Plate 17)
- Concavities of the hymeneal ring: Posterior/lateral location, angular or irregular features, hymeneal ring narrowing.



Plate 23

Eight year old girl with a smooth hymenal opening, symmetrically reduced hymenal thickness and attenuation.

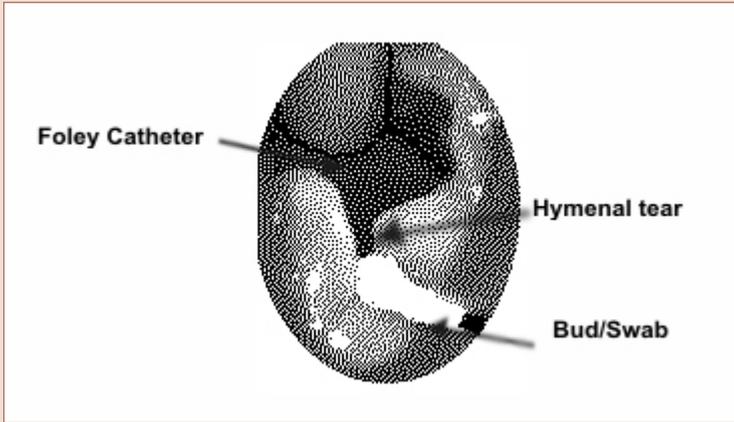
The physical signs and the reported abuse do not always correlate as expected. If the disruption of the hymen is more forceful, causing multiple tears, only remnants or tags of hymen will remain.

However, even if there is a history of penetration, up to 1/3rd of the girls have no abnormality. (57% if digital, 3.5% if penile). With continued healing, fewer signs would be evident. (Hobbs, Wynne 1996; Hobbs, Hanks, Wynne1999)

Scars in the hymen are rare, but thickened, irregular margins in a distorted hymen are seen. Changes are usually lateral or inferior (posterior).

A pubertal child with oestrogenization of the hymen, penetrative hymenal injury may not be visualized by labial separation only. Injury may be demonstrated with a Foley catheter and cotton bud. Separation of the hymenal edge with a cotton bud is often essential to demonstrate hymenal tears in pubertal girls because of hymenal "petals" that are present (Fig XI) (McCann & Kerns 1999).

Figure 11: A Handbook on Managing Child Abuse



Previous teaching in gynaecological practice suggested hymenal tears do not heal. In CSA, however, there is healing if the child is protected from further CSA, except when there is attenuation of the hymen.

Occasionally, traumatised hymen will heal to obliterate the orifice. However, unlike congenital imperforate hymen, it will have a thickened, disorganized appearance.

Labial fusion. Adhesions in non-abused children usually under the age of 2 years, are usually posterior, very superficial, semi-transparent, and easily ruptured by lateral traction. However, it may be indistinguishable from fusion due to abuse. Injury to the posterior fourchette by intra-crural or intra-labial coitus causing trauma to the tissues may lead to posterior labial adhesion. It would be significant in the presence of other features (Plates 24,25)

Urethra. Pouting or dilated urethra as well as urethral prolapse may be associated with CSA (Plate 26). The signs are not diagnostic but significant in the presence of other findings and the range of normal is unclear.

Other Factors

Masturbation - Masturbation is universal, may start in infancy and may not be associated with abuse. However, with obsessive rubbing against an adult's knee, a chair, or manually, CSA or emotional abuse should be considered. Children who have been sexually aroused by an adult by masturbating them (boy or girl), may become sexually excited even during a medical examination (Boys may get a sustained erection or girls may rub their thighs together). Other children, who have been hurt or frightened during CSA, may dissociate and are "absent" during the examination and may even fall asleep Hobbs, (Hobbs, Hanks, Wynne1999).

There is no Association between hymenal damage and gymnastics, cycling/horse riding, or other sport. Tampon use has little effect with only a slight difference in diameter (1.2 cm vs. 1.5 cm in post-pubertal girls) (Hobbs, Hanks, Wynne1999).

Vulvitis and Vulvovaginitis - are non-specific signs associated with abuse. Caused by infection (non-specific or STD) including viral warts, or trauma (e.g. vigorous rubbing). The signs, though associated, are not diagnostic alone.



Plate 24

Female aged 6 years. Anterior and posterior fusion of the labia. Note the gaping hymenal opening, with notch at 9 o'clock.



Plate 25

Female aged 2 years. Extensive thick posterior labial fusion.



Plate 26

There is localised reddening with markedly dilated urethral opening. The hymen is also gaping with little (attenuated) hymen persisting between 9 and 12 o'clock (attenuated).



Plate 27

Introital wart is seen in the anterior vestibule.

Anal injuries. (Hobbs, Hanks, Wynne 1999; McCann and Kerns 1999). Perianal redness may be due to poor hygiene, nappy rash, candidiasis, threadworms, eczema, seborrhoeic dermatitis, lichen sclerosus, excessive washing (sometimes cleaning and inspection as a form of "child abuse"), Beta haemolytic streptococcal infection. Anal injuries are also common in boys who are abused.

It may also be due to:

Intra-crural intercourse where the erythema extends forward to involve the perineum and labia. The posterior fourchette may be red and friable.

Repeated friction of the perianal tissue leads to skin thickening, there may be a loss of skin folds and the skin looks smooth and shiny.

Hyperpigmentation of the inner thighs and perianal area could occur in long-term intracrural intercourse. It is a non-specific sign - more common in pigmented skin and the obese.

The perianal skin should be free of scars, and the midline raphe should be differentiated from a scar. Superficial fissures heal without scarring; but deeper ones may scar.

Infection, continued constipation or abuse might delay healing.

Scars may be fan-shaped, linear or with heaped-up skin or skin tags

Skin tags. Skin tags may form at the end of a healing fissure, or may possibly be congenital (there is no neonatal study to date).

Tags, thickening of skin folds and scars are found more frequently in sexually abused than non-abused children, and should be noted. However, their significance requires critical assessment. (Plate 28)

Swelling of perianal tissue. An oedematous ring around the anus resulting from acute trauma as in forcible penetration is seen 24-48 hours after abuse ("tyre" sign) (Plate 31)

Bruising, in the perianal region is uncommon, but bruises on neck, breasts, lower abdomen, and grip marks on arms thighs and knees are common. Bruising, lacerations, burns, ligatures to genitals are less common but under recognized.

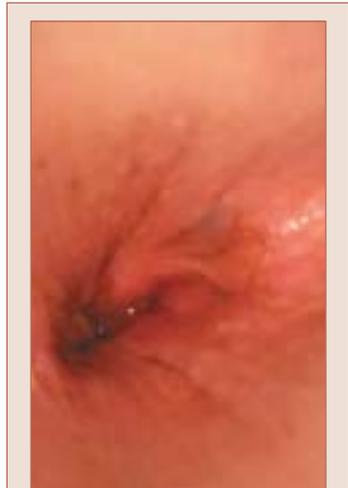


Plate 28

Eleven-year-old girl with lax, disrupted anus and prominent posterior fold / skin tag.

Fissures. Stretching of the anus causes fissures (by a large hard stool, implement, or penile penetration). The cause is not evident on examination. Constipation is a common cause of fissure, but most constipated children do not have fissures (Plates 29,30,31)



Plate 29

Dilated torn anus with bleeding and small skin excoriations. Musoca prolapsing. The anal signs would be consistent with recent traumatic penetration. There was no history of bowel disease or treatment for constipation etc.



Plate 30

Multiple fissures in a lax disruptive anus in a 12-year-old girl with multiple abusers. The examination was undertaken 3 weeks after she was taken in to protective care and after abuse was thought to have stopped.



Plate 31

The anal sphincter was lax with a halo of veins, prolapsing musoca with deficits in the anal margin at 10, 1, 2 and 7 o'clock; there was also uniform reddening perianally.

Fissures are caused by stretching and are not diagnostic of abuse, but particular note is taken:

- ♦ if there is no history of constipation and there is no evidence of such on examination.
- ♦ if there are multiple fissures. But a single fissure at 6 or 12 o'clock is highly significant especially when associated with pain and bleeding.
- ♦ if it is deep and extends to the perianal skin.

(Plate 32)

Anal laxity and reduced anal tone

Laxity and reduced tone may be due to repeated anal stretching (penetration).

Gross faecal loading may result in a visibly relaxed sphincter.

Gaping anus may be seen after acute sodomy. The anus is widely open 1-2 cm with other acute signs of trauma such as redness, swelling, fissures or occasionally bruising.

The sign may last from a few hours to days.

Anal verge haematoma are uncommon and painful and are associated with forcible anal penetration. (Plate 33)

Reflex Anal Dilatation

Reflex anal dilatation (RAD) is a sign associated with buggery but the diagnosis of child abuse is made up of the entire clinical jigsaw of history, examination, and investigations put in a wider context of the social service and police knowledge of the child and the family/environment.



Plate 32

Anterior scarring in anus of 4 year old



Plate 33

Gaping anus with some healing

The child lies in the left lateral position and the buttocks are gently separated. It is not necessary to use more pressure than needed to see the anus. In any case, it is not possible to dilate the internal sphincter by increased traction.

The anus is observed over a period of 30 seconds.

The external and internal sphincters relax and the anal canal opens like a tube and the examiner may see into the rectum. In younger children the view may be obscured by prolapsing rectal mucosa.

The opening may close/open repeatedly and the extent of dilatation may vary up to 25 mm.

Minor degrees of dilatation may occur with healing.

An unexplained aspect of RAD is the inconsistency in demonstration. The sign may persist or vary from examination to examination even over a time span of a few hours.

If the child wants to defecate, the examination should be delayed until the bowel is emptied and delay for a further 30 minutes.

RAD is commoner in anally-abused groups than others.

RAD is an uncommon physical sign (which even many paediatricians have not seen), and when seen in an otherwise normal child is a cause for concern and justifies follow-up.

When the anal abuse ceases, the sign disappears over weeks to months. During healing lesser degrees of dilatation are seen.

RAD is known to occur in inflammatory bowel disease and after anal manipulations.

RAD of >1cm is supportive evidence abuse: is more likely than not to be associated with abuse. (RCP 1991)

RAD of >1.5 cm which is reproducible is a supportive sign of child sexual abuse (RCP 1997) (Plate 34)



Plate 34

Male aged 5 years. Perianal reddening is seen with reflex anal dilatation. There are dilated veins posteriorly and deficits in the anal margin at 5 and 7 o'clock.

SHORT-TERM AND LONG-TERM EFFECTS OF CHILD ABUSE

The after-effects of abuse, whatever its form, cluster into several dimensions. These include:(Shekar Sheshadri 2002)

Role Task Performance	effects in the form of refusal to attend school or fall in grades.
Physiological Effects	such as bed-wetting, sleep and appetite disturbances.
Physical Symptoms	such as aches and pains, not feeling well
Emotional Reactions	such as fear, anxiety, depression, suicidal thoughts
Behavioural Manifestations	such as withdrawal, avoidance, sexualized behaviour or distinct psychiatric syndromes
Self Perceptions	like negative self-esteem, feeling dirty, different and damaged
Interpersonal Problems	like conflicts, lack of trust, being either people pleasing or hostile and socially withdrawn

Thus, a doctor needs to recognize that the overall impact of any form of abuse can affect the child physically, emotionally and in the way the child thinks and behaves. Particularly problematic after-effects are self-harm, substance abuse, serious psychiatric disorders and sexuality-related problems.

What remains over long term if not adequately understood and promptly handled are self-harm behaviours, reduced efficacy in caring for oneself with continued disruption in functioning and relationships. Such children fear

decisions, are emotionally isolated or have extreme mood swings. They develop mistrust of people and have stormy and abusive relationships. All this of course depends on the nature and severity of abuse and on the availability of trusting adult relationships.

This is where a doctor can play a very crucial role in early detection and alleviation of the after-effects of abuse. Particularly difficult to deal with is the issue of sexual abuse. This is because, in general, the medical system has not looked at the issue of sexuality in general medical enquiry. For a child who has been sexually abused, the handicap of a lack of language for disclosure plus the added shame that an experience which is sexual, makes the problem that much more acute. Thus, enquiry calls for a level of sensitivity on the part of the doctor who makes the consultation process child-sensitive and sexuality sensitive.

Tips for doctors are:

- ♦ Once you make it a routine to enquire about abuse as part of daily practice, the skills become better.
- ♦ Dealing with one's own belief systems about child abuse and comfort levels on areas like sexuality and sexual abuse makes work easier.
- ♦ Keeping contact with professionals of different disciplines (multi-disciplinary) and nongovernmental organizations (NGOs) who work on child abuse, sexuality etc. helps in being updated on information and intervention strategies.
- ♦ Remember that a child who found safety in your consultation chamber to speak and break the silence and was believed, supported and assured of help will heal better than the one who did not get this help.

Context of Abuse

Do children directly complain, report or disclose abuse to doctors? Usually, they are brought to the medical system with some ailment, injury, which may or may not be directly related to or the consequence of abuse. Often the complaint is of behavior problems, feeding difficulties, emotional problems, refusal to attend school and so on. Sometimes, children do disclose directly. Sometimes, the nature of injury leads one to surmise that abuse has taken place. To establish the context of abuse, doctors need to be alert to these and make it a practice to enquire about abuse as a routine whether the signs are obvious or not. For example, if a child has a clearly stress-related reaction, we enquire quite comfortably about many sources of stress that are easier to enquire into but routine enquiry into abuse is not built into the enquiry repertoire. All it needs is to say to the child, "I would like to ask you some more things". It may or may

not be relevant to you, but since we are concerned, we should ask these questions as a routine. "Is there anything else that is worrying or bothering you that you might like to share with me?" "Have you been upset and bothered by someone else's behavior towards you?" And, "Has anyone touched you in ways that you did not like?"

Interviewing Victims of Child Abuse

The Role of the Physician

(Kate Waldo & Nayomi Kannangara 2002) The roles of the physician in talking with child victims of abuse are numerous. Primarily the physician's role is to avoid further damage to the child's fragile psyche through thoughtful and careful management. In addition, any interventions should aim to have a positive effect on rebuilding and supporting the child's rehabilitation. The physician will need to assess the psychological, physical and medical impact of the abuse on the child and its family historically, currently and in to the future, and in addition consider the social impact of the disclosure to the child and its family. If the consequences of disclosing abuse, perceived or actual, from the state, parent or community, are severe, it may prevent the child from feeling safe enough to be honest and open to the interviewer. It is therefore important to a child that it knows what will happen if it tells. For instance, will it and its family be protected? A clear departmental policy needs to be agreed on and be in operation so that interviewers are able to give honest answers to children's concerns.

It is often only when these factors are taken into consideration that we are able to see the effort it takes for the child to disclose abuse.

The physician will need to consider the current and rehabilitation needs of the child; any action that is taken should bear this in mind. Thus when talking to children who have been victims of abuse or that you suspect may currently be experiencing abuse, sensitivity and an empathic approach is required from the physician.

The needs of the child are the first consideration.

The child may be feeling a myriad of emotions and is often vulnerable and fragile, psychologically. To disclose that abuse is happening or has happened is a brave and trusting action for a child to take. The consequences of disclosure to the child and its family are likely to be life-changing; it is the role of the helping professions to ensure this life-changing event is a positive one rather than a negative one. In addition, for the child to disclose the abuse can sometimes put them in a more dangerous situation physically. When a child

takes the risk of talking about abuse, adults and helping professionals, doctors, police etc, often put it in a vulnerable position where the child is no longer able to control the environment around him/her. Decisions are often taken out of its hands by well-meaning adults. However, decisions are not always made in the best interests of the child. In order to prevent this situation, it is best to listen to the child and consider its needs prior to taking any precipitate action. It is important therefore that doctors assess the risks a child faces by disclosing abuse with care, as unsafe management of the disclosure could bring life threatening consequences to the child.

Another factor to consider is the view the child may have of the doctor; sometimes children view doctors as frightening due to past associations of feeling pain or being given unpleasant medication or treatment on visiting medical centres. Or they may view doctors as a sign of security and comfort and feel safe and protected. Positive though this is, it could lead to the children wishing to please the doctor and sometimes saying things they think the doctor may wish to hear but are not accurate. In addition, children can be frightened of a clinical environment; these feelings of fear are likely to trigger the child's usual behaviour responses to frightening situations, which may be maladaptive responses, learned in order to survive the abuse such as aggression, seductive behaviour, withdrawal etc. The physician must remain aware of this and reflect how these behaviours are symptoms of abuse and how the child should be treated in an understanding manner. Lastly, children often view doctors with awe and could feel intimidated and nervous in case they do something disrespectful.

Gathering Information to Aid Assessment.

In order to accurately assess the child's needs the physician will need to gather information from various sources, often this will be primarily the child. Before talking to the child about the abuse, it is best to pre-plan your interview. Decide what information it is necessary for you to know in order to plan future actions and the care of the child appropriately, try to stick to those topics only. Remember it is not helpful for a child to be pushed to talk in detail about abuse if it does not want to. If, however, the child wishes to talk to you intimately at this stage, it is advisable to simply listen and not prompt extraneous disclosures by asking invasive questions.

Children view the world from a different angle from adults and therefore should not be treated as mini adults. Often, adults who interview tend to ask complex questions which the child may not understand. This is not helpful to the child, both as an aid to helping them disclose now but also in the future when the case may be presented before the courts. It can lead to children making errors in their

statements, which ultimately leads to questions arising over their credibility as a witness. It is a particular challenge to interviewers to conduct interviews in such a way as to support children through the process of the judicial system; therefore, it is important that we support them to make accurate disclosures by the methods with which we talk to them. In order to achieve this, several factors need to be considered.

Be sensitive to the child's level of development: questions should be phrased to relate to the child's language maturation, developmental age, and emotional maturity.

Be non-judgmental. Take a neutral stance. Your tone of voice, facial expressions and style of questioning should not be accusatory or suggestive as it may lead the child to make statements to please you rather than accurately.

Be empathic. Convey a feeling of understanding and acceptance. This will help allay the child's feelings of anxiety and fear and allow them to focus on remembering the event/s accurately.

Developmental issues: Professionals who work with children should be aware of the common cognitive limitations of young and older children.

Young children have a complex understanding of truth and lying. Sometimes the "world of play" and make believe can become as much a part of real life for them that they are unaware they are not telling the truth.

Dependent on their age they may have a relatively short attention span. Do not push a young child to continue talking if his attention has clearly waned. It is better to talk again after a rest.

Stress decreases a person's attention span as can fear or trepidation; therefore it is important for the child to feel safe and relaxed during the interview as this will enable the child to talk about his experiences both accurately and comfortably.

Children also may have a more limited understanding of space, distance and time and so their answers to "how big/small was it?" may result in an inaccurate answer.

Children tend to believe adults "are all knowing". They may expect adults to understand their incomplete answers. Also, they might assume that the story is already known and omit the important details.

Young children have a limited vocabulary and they use words that adults use with them. A child may use euphemisms for sexual parts such as "privates" or "pee pee" depending on the country and the culture. The child may have been taught

adult words by the perpetrator that could sound shocking being spoken by a child. It is important that the interviewer remains calm and accepting of such speech. If the child senses disapproval they may feel ashamed or guilty, in addition they may feel reluctant to speak.

Children of all ages may have a "private" vocabulary for sexual body parts and sexual activities, which could vary from community to community. It is important that the interviewer clarifies what the child means by certain words and does not assume the meaning. For example, a child could say "He hurt my bottom" This could be taken to mean the child's anus, whereas the child may be referring to its vagina. A good interviewer may at this point say "I think I know what you mean by this word, but I want to make sure, what do you mean by bottom?"

The same care must be taken with the interpretation of all the child's descriptions of these events. Presumptions on the interviewer's part can lead to inaccurate and misleading statements being recorded; this can lead the child to feel that the interviewer is not really listening to him/her and feel undervalued because of this.

Listening

The ability to listen (not merely hear) is one of the key qualities of talking with and interviewing children. "Listening" involves concentration and comprehension of what is being communicated by the child. A good listener is patient enough to allow the full story to come out before interrupting.

Listening is also an effective non-verbal way of communicating the interviewer's interest in the child and what the child is saying. This interest can be conveyed through eye contact, hand gestures, body movements, facial expressions, and head nodding. Another effective method to ensure the quality of the communication during interview is to repeat or paraphrase the child. These verbal and non-verbal components of listening are critical to effective communication.

The Setting of the Interview

Lack of privacy, inconvenience, and physical discomfort are some of the deterrent conditions to a child-centred and effective interview.

The primary focus of any interview with a child should be the child's needs. The physical conditions under which the interview takes place are crucial in aiding a child to feel relaxed and safe. Interviewing a child in a police cell could lead the child to feel frightened and therefore reluctant to engage with the adult. The

interview location needs to be quiet and private and comfortable. You do not have to interview the child in the clinic if it is inconvenient for the child and the family or time and resources do not allow. A quiet garden will work equally well. The usually overcrowded and busy clinic or ward would not be the most appropriate setting.

Creating an atmosphere conducive for the interview is a balancing act and many factors need to be considered, such as the culture, religion, gender, and age of the child and the interviewer. A teenage girl may feel unable to discuss some issues with a male doctor, whereas she may feel reassured by talking to a female doctor.

During the interview avoid interruptions and distractions. The interviewer needs to ensure that the private interview they are holding does not give the impression of secrecy to the child as this could lead the child to feel threatened.

Similarly important is the physical and emotional state of the child. Sleepy, hungry or physically discomforted (hurt, injured) children will not be able to concentrate. Therefore their physical comfort should be attended to prior to the interview.

When arranging the interview, care should be taken to ensure that the time and place of the interview are convenient to the child. All these factors together increase the quality of an interview for the child.

Interview Format

In any "complete" interview, there is a beginning or a warm up often called the rapport building stage, the middle or the main segment of the interview, and an ending.

All of these phases should be included irrespective of the length of the interview. Young children may only be able to undertake a short interview of 15-20 minutes, whereas an older child may be comfortable to talk for up to an hour. It is difficult to prescribe a definite ideal time length of an interview, as each child is individual and its needs must be evaluated individually, with reference to its maturation, development and emotional capability.

During the rapport building stage of the interview, the aim is to let the child relax and build a relationship, where it feels comfortable to talk to the interviewer.

Assess the level of development of the child in relation to other children in his or her age group. This information is essential to determine the nature of questioning of the child.

Assess the child's development level with regard to sexuality. This is to note whether the child is prematurely sexualised or the sexualization is age appropriate.

The child's ability to respond adequately to questions:

Long and complex questions should be avoided. Concise and organized questions should be asked one at a time.

The technique to support children when talking about difficult topics is to ask open-ended questions like "what happened next" "then what" and "tell me more about that." These questions encourage the child to elaborate on the issue instead of merely responding in a "yes" or a 'no' form. (Closed question)

In instances where the child might make an honest error or discrepancy in the narration of the incident the interviewer should assist the child to clarify the statement without being judgmental.

During the interview the interviewer's task is to direct the flow of the interview in a non-suggestive manner. Leading questions (questions that imply an answer, e.g. Did your father do it? should be avoided.

When the interviewer is satisfied that all the relevant information is gathered in accordance with the objectives of the interview, the interview can be terminated. At this stage the interviewer should thank the child, preferably with a short statement of appreciation.

Throughout the interview the physician should remain attentive.

Documenting the Interview

Video recording interviews allows children the opportunity of telling their story once. It also gives another expert the opportunity to re-evaluate the conclusions without subjecting the child to unnecessary re-examinations.

However, there are other ways of overcoming the challenges of documenting an interview. One effective way is to use an audiotape to record the interview. As in the previously mentioned method, the interviewer does not need to take vigorous notes of the interview and therefore is able to fully concentrate and actively listen by maintaining eye contact and positive body gestures.

The traditional method of recording an interview is to take notes during the course of the interview and to complete it with observations immediately after the interview. However, the interviewer should be aware that the child may be distracted by the note-taking as it might create an appearance of inattentiveness. While taking notes the interviewer might also miss non-verbal messages of the child. Care should be taken by the interviewer to overcome these difficulties.

In all the above-mentioned instances, the child should be informed of the method being used to document the interview and consent obtained. At the conclusion of the interview it is wise to review and evaluate the interview.

The Response of the Physician

It is unfortunate that a proper procedure for investigation and management of child abuse is not in place in most developing countries, due to "other priorities". In developed countries, such procedures are already in place with many resources at their disposal. Therefore it would not be practical to suggest the same management procedures as in the West. However, the principles of management procedures could be applied to suit the resources available in a medical setting, while constantly working towards better resources. The knowledge, skills and attitudes of medical professionals as well as available resources would vary in each country, and there is a need to evolve systems in developing countries that could vary depending on available resources, but still use the principles of set norms of investigation and management.

The usual partners in the West involved in the investigation and case conference would be multi-disciplinary, with paediatricians, social workers and police officer/s. In a developing country, there may not be social workers designated to work in this field, and it may be the "probation officer" (who is also the "child care officer") who is designated to followup. Unfortunately, their focus may be more on children in conflict with the law. However, it is critical to identify the relevant officers in the different countries, especially if such investigations have not been done previously in the particular hospital setting. It is also likely that the training and experience of the social/child care worker is limited in the field of child abuse, and they may need to be motivated and trained. In some developing countries there are Judicial Medical Officers (JMO) whose duty is to record and report injuries in patients where a legal process is likely. The level of training and experience of these officers could also be variable. The JMO is usually a person who appears in court with evidence when legal proceedings have been processed. In such situations it is best for both the paediatrician and the JMO to play equal roles, since antagonisms in professional "territory" ("turf") is not infrequent. Some hospitals in developing countries may have a "police post" in the hospital itself. However, they may be more involved in assaults of adults, rape of adults, murders etc and may not be trained and sensitised adequately to deal with cases of child abuse. Sometimes it is the police, from where the incident of abuse took place, often several miles away, who have to investigate. The doctors would have to learn to handle these children sensitively in their best interest while the police would need training

on the process of questioning children for the legal process. This would involve expertise to do so.

The other personnel who would also be useful in management are: the medical personnel who initially reported the incident, the regular practitioner - government or private - who looks after the child, a surgeon, obstetrician (if there is sexual abuse), as well as the psychologist who assessed the child. However, in most developing countries, there may not be psychologists, and psychiatrists may play their role, since even child psychiatrists may not be available. These specialists would often require further specific training on the subject, as well as sensitization in multi-disciplinary settings in order to work as a team. Nongovernmental organizations (NGO) could play a role in (temporary) care of the victim and even providing counselling services.

A case conference/s to discuss investigation, management and placement should consist of relevant members of the team. In the West, the social worker is often designated to coordinate the team. However, in a developing country the social/child care worker may not have the mandate, professional recognition or the resources to arrange such a meeting. Therefore, ideally the paediatrician and the JMO should take that responsibility. If such a procedure is not available, the medical professionals, together with the administration, should formulate such procedures and guidelines, that would often not be available in a developing country. The case conference should also focus on the "best interest of the child", especially in relation to where the child should go back (reintegration), as well as aspects of counselling and rehabilitation. In developed countries, there may be designated medical officers, e.g. CAN (child abuse and neglect) officers, who are specially trained to take history examination and management. However, this duty would have to be taken up by the paediatrician and the JMO in most developing countries where such resources are not available. It is important that they have specific knowledge and skills on child developmental aspects as well as forensic training, and these two officers could share their expertise. It is also important for the hospital administration to arrange multi-disciplinary training as a continuing process.

THE REHABILITATION PROCESS

Often the sincere efforts of professionals to rehabilitate children is forgotten in ensuring judicial procedures. Rehabilitation of children should underpin the interactions professionals engage in with children from the moment of their disclosure. Efforts must be made to ensure that none of the interventions from the helping professions encourages further psychological damage to the child. Insensitive questioning of children can result in the child feeling guilty and ashamed. Poor management of procedural matters in the case may result in a lack of confidentiality and a lack of privacy for the child.

Children will begin the healing process from the moment of their disclosure, if we allow them to. Talking about their experiences and allowing them to grieve and mourn for the events that happened to them is beneficial. However, this must be at the child's pace. If the child is reluctant to talk, it may be that despite your best efforts it is still too early and too painful for the child to explore those emotions. Sometimes, if the environment a child lives in is not safe enough to allow him to feel secure, he/she can wait until he/she becomes an adult to complete the healing process. It must be noted though that talking about traumatic events can sometimes make a child feel like they are reliving the incident. This is not beneficial to a child and attempts to minimise this effect should be made through supportive and gentle care of the child.

Following the interview of the child you will be in a position to make a more accurate assessment of their needs. If the child's personal safety appears to be compromised, efforts should be made to provide a secure environment for the child to dwell in. This may be achieved through liaison with the family or through legal support, if necessary.

Additionally, if the child is displaying symptoms of psychological distress, they should be referred for therapeutic intervention without delay. Therapists who



work directly with child victims of abuse have found that the use of art, play and music has been very beneficial in helping children explore emotions and traumatic memories. Older children may prefer talking therapy and wish to be referred to a counsellor. Another alternative is referral to a gender-specific group such as a 'Girls Group' where the child can explore his/her feelings with peers who have experienced similar trauma.

PROTECTION AND PREVENTION TRAINING

Child victims of abuse often wonder whether there was something they could have done to prevent the abuse occurring and what they should do if they find themselves in a similar situation in the future. Reassure children that it was not their fault that the abuse occurred; they are not responsible for the actions of adults. Despite consistent reassurance children do not always feel confident that they will be able to tackle unsafe situations in the future. This fear and worry can prevent them from healing completely. It is often helpful to teach them some ways to keep safer in the future. Protection and prevention work should include topics such as awareness of own bodies, understanding of the changes in our bodies, good touches and bad touches, assertiveness, how to tell, etc. In addition, children should practise these methods through the use of role-play and examples.

In some cases it may be that the child and the family require less invasive support and intervention. They may simply require information, advice and intermittent support. The doctor should ensure that he passes on information about where this can be accessed.

In summary, interviewing children is a complex and sensitive process. It involves much thought and pre-planning by the professional in order to make it as comfortable an experience for the child as is possible in such circumstances.

A training programme for psychiatrists, psychologists and counsellors is available for developing countries in South East-Asia through UN-ESCAP, Bangkok, including a manual and CD. (<http://www.unescap.org/esid/hds/training/module2.htm>)

FORENSIC EXAMINATION

Sampling in suspected child sexual abuse

Adapted from: Guidelines for Medico-Legal Care for Victims of Sexual Abuse (WHO 2004) and Clinical Management of Survivors of Rape, a guide to the development of protocols for use in refugee and internally displaced person situations (WHO 2002). WHO/RHR/02.08. & Hobbs, Hanks, & Wynne 1999.

General principles

The primary aim of a forensic examination is to collect evidence that may help prove or disprove a link between victims and alleged perpetrators/s, object/s or place/s.

The following principles should be strictly adhered to:

- Collect carefully, avoiding contamination
- Collect specimens as early as possible. Seventy-two hours after the assault the value of evidentiary material deteriorates dramatically
- Label all specimens accurately
- Dry all wet specimens
- Ensure all specimens are secure and tamper-proof
- Maintain continuity of evidence
- Document all collection and handling procedures
- The investigators must be aware of the facilities available in their respective laboratories and also the available legislation in the particular country to make such evidence valid in courts. It would be a waste of resources if the specimens collected could not be made use of.

Forensic tests are based on Locard's principle that every contact leaves a trace on one another. Biological evidential trace material may be stains of blood, semen, vaginal fluid, faeces, hair including pubic hair and saliva. Lubricant jellies, fibres, debris, including vegetation and mud are important specimens to collect. Mud or vegetation could link the suspect and or the victim to a particular location and this location may have traces of biological or other evidence in the scene.

Forensic examination

Informed/consent may be required, especially from the guardian (unless he/she is the suspect) or in cases where parents are not available, the legal custodian at the time, which could be the social services/probations or police. Valuable time may be lost in examination and collecting specimens when looking for parents, especially children in care institutions or in instances of abuse of child domestic aides when the whereabouts of their parents may be unknown. In instances where the mother is in another country or is dead or missing, it has often posed problems when the accused is the father.

The examination would usually take time, and a head-to-toe examination should be done, including the skin, and genito-anal examination.

Detailed documentation that could be used in a criminal prosecution in a court of law should be done.

Special care has to be taken in examination of areas that are of no clinical interest routinely such as axilla, back of ears, mouth and soles of feet.

Unusual specimens such as clothing, drop sheets, bed linen, towels and hair, combs are important forensic specimens.

The chain of custody of specimens must be carefully documented.

Make full use of this (first) examination since it may be difficult to have access to the victims again.

Collecting techniques

Avoid contamination: Use uncontaminated gloves at all times. Modern DNA techniques are very sensitive and even a minute amount of extraneous DNA would give erroneous results.

Collect early in the 1st 24 hours: After 72 hours the yields are reduced considerably.

Handle appropriately: Ensure packing, storage and transport correctly. The laboratories could provide details. In general, fluids should be refrigerated and the others kept dry.

Ensure security: The specimens should be secure and tamper-proof. Only authorized people should be entrusted with specimens.

Maintain chain of continuity: The collection, packing, transport and taking over of specimens should be accurately documented. There should not be any break in the chain of evidence.

A document of the examiner, list of specimens, and the details of above should be separately maintained.

Detailed reference for collection of specimens refer:

WHO Guidelines for Medico-Legal Care for Victims of Sexual abuse 2004.

Bathing, urination, defecation all eliminate or dilute material. (*Note: drainage varies with age and mobility*)

Collect alien hairs

Pulled hairs are needed for DNA and not done routinely.

Lubricant should be revealed on routine testing.

Adolescents and rape allegations - all the investigations listed are indicated and usually a screen for STD. Consider HIV testing. Requires follow-up medically.

Is emergency contraception needed?

Reference: WHO/RHR/02.08. 2002. Clinical Management of Survivors of Rape.

CONSCRIPTION OF CHILDREN

Conscripting children is abuse. Given the public's tendency to view child soldiers as "heroes" and "martyrs", it may be difficult for many to recognize the abusive effects of conscription. However, considering the different aspects of emotional abuse, a conscripted child would face the following: conscription corrupts a child by making him engage in violent, destructive, and anti-social behaviour, such as killing and destruction of property, thus making him unfit for normal social experience. Conscription "terrorizes" a child with verbal assaults, bullying, blackmail and death threats, all in the name of discipline. Conscription isolates a child from the normal social experience, and ignores his emotional and developmental needs by removing him from normal family life and schooling. Any of these circumstances would adversely affect the child's right to unhindered growth and identity as a child. Every child has a right to his or her identity; not only his or her birth, gender identity or name, but also an identity as a child. Conscription removes that identity, the right to play and recreation, right to associate with friends and siblings, the right to education and the right to live with parents. Apart from having a name, a child has to have an identity as an independent person when you become a 'personalized entity', with self-esteem. The process of militarization with regimentation and indoctrination removes this element in a child as a person with an individual identity, "who am I?" Another aspect is the loss of identity of time with conscription. "How old am I? Am I still a child?" are questions they are at a loss to find an answer to.

Moreover, conscription may lead children to commit suicide, an act of self-destruction that cannot be fully comprehended. In some conflicts, conscripts, irrespective of age wear cyanide capsules at all times, which they are trained to bite on during "suicide missions" or if they are captured or may be human bombs targeting either military or civilians. What makes them bite on the cyanide capsule or blow themselves up? The prominent place given to martyrs

and the oath taken by the child soldier in which he vows to sacrifice his life, are likely contributory factors to this phenomenon. These findings led to a proposal of a new definition of child abuse. "When an adult persuades a child to commit suicide - an act the child cannot comprehend - for personal, social, economic or political reasons that the child cannot understand, that persuasion constitutes a form of child abuse that may be called 'suicide by proxy' ". (de Silva, Hobbs & Hanks.2001).

What other aspects of abuse would a conscripted child face? The fact that many children volunteer is not relevant. Children's involvement in war, whatever the justifications may be, should always be considered as forced, as they cannot truly comprehend their action in war. The adult care-givers must take the responsibility. In suicidal attacks we often see adolescents. Why is this so? Indoctrination is simple since adolescents' emotions are vulnerable and they have their "blinkers" on with no experience of lateral thinking, while an older person would think twice before deciding upon blowing him/her self up. Moreover, we propose that conscription itself - "the involvement of dependent, developmentally immature children and adolescents in an armed conflict that they do not truly comprehend, to which they are unable to give consent, and which adversely affects the child's right to unhindered growth and identity as a child" - as a form of child abuse (de Silva & Hobbs, 2001). Defining conscription as a form of child abuse does not require a great leap of imagination as many of the traditional elements of child abuse are already contained within it. Severe physical punishment in the name of discipline clearly constitutes physical abuse. Getting a child to perform guard duty, involving the child in military operations, making the child manufacture bombs and set sea mines increases the likelihood of the child suffering serious injury or death, and subjects the child to intense psychological and emotional pressure. The exploitation of child labour is yet another form of abuse.

Disallowing access to neutral information and dialogue with the outside world, which itself is a fundamental violation of the child rights (article 17 of the UN Convention of the Rights of the Child - CRC).

In a world where male rape of adults and sexual harassment of females are well described entities amongst new conscripts of regular armies, the likelihood of sexual abuse of child conscripts within one's own ranks as well as when captured should be considered seriously. In African and some other country conflicts, sexual exploitation of girls is well known. Sexual abuse of captured child soldiers has been documented.

REFERENCES

1. Alles, A.C. (1962). *The Kadugannawa Postal Bomb Murder Case*. In: Famous Criminal Cases of Sri Lanka. Colombo: Mervyn Mendis, the Colombo Apothecaries Co. Ltd., pp. 89-116.
2. Chandrasiri N, Lamabadusuriya SP, De Silva DG. 1988. *Non-accidental injuries to children in Sri Lanka*. *Medicine Science and the Law* 1988 Apr; 28(2): 123-126.
3. da Silva, Lippi JR 2000. *Windows of Hope: A Reflection about Violence in Childhood*. Virginia: Christian Children's Fund; 2000.
4. de Silva DG, Harendra and Hobbs CJ 2000. *Child Abuse: A Manual for Medical Officers in Sri Lanka*. Colombo: The National Child Protection Authority of Sri Lanka. ISBN 955-599-215-0.
5. de Silva DG. Sri Lanka. In: Schwartz-Kenney BM, McCauley M, Epstein MA, eds. *Child Abuse: a Global View*. Oxford: Greenwood, 2000.
6. De Silva DG 2001. Conscription of Children in Armed Conflict: Clarification. *British Medical Journal* 2001 Sep1; 323(7311): 517.
7. De Silva DGH, Hobbs C, Hanks H. 2001 *Conscription of Children in Armed Conflict- A form of Child Abuse*. A study of 19 former child soldiers. *Child Abuse Review* 2001; 10:125-134.
8. De Mause L 1980, *The History of Childhood*. London: Souvenir Press, 1980.
9. Frederick J and Kelley TL 2000. *Fallen Angels: Sex workers of South Asia*. New Delhi: Roli Books, 2000.
10. *Ganadevi hella*: An 18th century verse. A translation publication from Sinhala language, Sri Lanka.

11. Hobbs CJ, Wynne JM 1996. *Physical Signs of Child Abuse: A Colour Atlas*. London: WB Saunders, 1996.
12. Hobbs CJ, Hanks GI, Wynne JM 1999. *Child Abuse and neglect: A Clinician's Handbook. 2nd Edition*. London: Churchill Livingstone, 1999.
13. Jones D and Byrne G 1996. *Management of factitious illness by proxy*. Dublin: BASCPAN Conference on Child Abuse and Neglect, 1996.
14. Kempe H, Silverman FN, Steele BF, Droegmueller W, Silver HK 1962. The Battered Child Syndrome. *Journal of the American Medical Association* 1962 Jul 7: 181: 17-24.
15. Kempe H and Helfer R 1980. *The Battered Child Syndrome*. 5th. Ed. Chicago: University of Chicago, 1980.
16. Khan Tufail M 2000. *Sexual Exploitation and Abuse of Children in Pakistan: a Situation Analysis*. Confronting Reality Perceptions and Incidence of Child Sexual Abuse in Pakistan. Child Rights and Abuse Committee of Pakistan Paediatric Association, 2000. Full text <http://www.ppa-childrightsgroup.org.pk/public003.htm>
17. Lynch MA, 1985. Child Abuse before Kempe: a historical literature review. *Child Abuse and Neglect* 1985; 9: 7-15.
18. McCann JJ and Kerns DL 1999. *The anatomy of child and adolescent sexual abuse: a CD ROM atlas/reference*. Missouri, Intercorp Inc., 1999.
19. Radbill SX 1987. Children in a World of Violence: a History of Child Abuse. In: Helfer RE and Kempe RS (eds). *The Battered Child*. 4th ed. Chicago: University of Chicago Press, pp3-22.
20. UNESCAP 2001. *Sexually Abused and Sexually Exploited Children and Youth in Pakistan: A qualitative assessment of their health needs and available services in selected provinces* 2001. Bangkok: ESCAP, 2001. Document no. ST/ESCAP/2123.
21. Schreir HA and Libow JA 1993. *Hurting for love: Munchausen by Proxy Syndrome*. New York: Guildford Press, 1993.
22. Shekar Sheshadri 2002. NIMHANS India, Bangalore, 2002. <http://www.nimhans.kar.nic.in/>
23. Southall DP, Plunkett MC, Banks MW, Falkov AF, Samuels MP 1997. Covert video recordings of life-threatening child abuse: lesson for child protection. *Paediatrics* 1997 Nov; 100(5): 735-60.

24. Tardieu A 1880. *Ann. Hyg. Pub. Med. Leg.* 13: 361-398.
25. UNESCAP. *Sexual exploitation of children and youth training. HRD Training Series for Human Security.* Full text modules <http://www.unescap.org/esid/hds/training/module2.htm>
26. World Health Organization 1999 *Report of the Consultation on Child Abuse prevention, 29-31 March 1999.* Geneva: WHO, 1999. Document number WHO/HSC/PVI/99.1. Full text access: http://whqlibdoc.who.int/hq/1999/WHO_HSC_PVI_99.1.pdf
27. World Health Organization 1994. *Protocol for the Study of Interpersonal Physical Abuse of Children.* Geneva: WHO, 1994. Document no. WHO/FHE/CHD/94.1. Full text access http://whqlibdoc.who.int/hq/1994/WHO_FHE_CHD_94.1.pdf
28. Waldo K and Kannangara N 2002. *National Child Protection Authority, Sri Lanka.* Colombo, 2002.
29. World Health Organization 2004. *Guidelines for Medico-Legal Care for Victims of Sexual violence.* Geneva: WHO, 2004. Full text access <http://whqlibdoc.who.int/publications/2004/924154628X.pdf>
30. World Health Organization 2002. *Clinical Management of Survivors of Rape: a guide to the development of protocols for use in refugee and internally displaced person situations.* Geneva: WHO, 2002. Document number WHO/RHR/02.08. Full text Access http://whqlibdoc.who.int/hq/2002/WHO_RHR_02.08.pdf
31. Winnicott DW 1982. *The maturational process and the facilitating environment.* London: Hogarth Press, 1982.
32. Wissow LS 1990. Munchausen by proxy. In: *Child Advocacy for the Clinician: An approach to child abuse and neglect.* Baltimore: Williams and Wilkins, 1990.



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