

## Child Maltreatment 2



# Recognising and responding to child maltreatment

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Professionals in child health, primary care, mental health, schools, social services, and law-enforcement services all contribute to the recognition of and response to child maltreatment. In all sectors, children suspected of being maltreated are under-reported to child-protection agencies. Lack of awareness of the signs of child maltreatment and processes for reporting to child-protection agencies, and a perception that reporting might do more harm than good, are among the reasons for not reporting. Strategies to improve recognition, mainly used in paediatric practice, include training, use of questionnaires for asking children and parents about maltreatment, and evidence-based guidelines for who should be assessed by child-protection specialists. Internationally, studies suggest that policies emphasising substantiation of maltreatment without concomitant attention to welfare needs lead to less service provision for maltreated children than do those in systems for which child maltreatment is part of a broad child and family welfare response.

### Introduction

In the first paper in this Series, we reported the substantial shortfall between the occurrence of maltreatment and reports to child-protection agencies.<sup>1</sup> For example, 1·5–5% of all children are reported to child-protection agencies every year for all types of child maltreatment in the UK, USA, Australia, and Canada. About 1% of children have maltreatment substantiated every year. By contrast, surveys of children, adolescents, or parents show that the annual frequency of maltreatment is much higher than is reported to child-protection agencies (physical abuse 4–16%; psychological abuse 10%; neglect 1–15%; and exposure to intimate-partner violence 10–20%).<sup>1</sup> These data provide strong evidence that most child maltreatment is not reported. When child maltreatment is reported, professionals from public services, and members of the community and family contribute equally (figure).

National data from the USA show that schools contribute most reports from professionals (16·5%), whereas law-enforcement agencies (15·8%) and social services (10%) report slightly more than do medical personnel (8%).<sup>2</sup> Patterns are similar in the UK and Spain.<sup>3,4</sup> These data suggest that, to understand the reasons for under-reporting, we need to know more about the patterns of presentation, recognition, reporting, and other responses to child maltreatment across different professions and within communities.<sup>5,6</sup> Here, we review patterns of recognition and response by professionals caring for children and their parents, and assess strategies to improve this process. We also discuss policies governing responses to child maltreatment in different countries and the extent to which they lead to service provision.

### Evidence for under-recognition and under-response

Officially recognised maltreatment statistics substantially underestimate the annual prevalence of maltreatment based on self-reports in community surveys. This discrepancy could indicate failures to recognise maltreatment,

failures to report, and failures of agencies to respond or substantiate maltreatment. Direct evidence that professionals in health and education under-report children they suspect of being maltreated comes from a growing number of studies.<sup>3,7–16</sup> In a prospective study of doctors dealing with injured children,<sup>8</sup> although the 434 clinicians surveyed had some suspicion (ranging from unlikely to very likely) that around 10% (n=1683) of 15 000 injury visits they attended were caused by child abuse, they reported only 6% (n=95) of children to child-protection services.

#### Key messages

- Recognition and reporting of child maltreatment is important to promote child safety, health, and welfare through the provision of preventive, supportive, protective, or therapeutic interventions
- Few maltreated children come to the attention of child-protection agencies, indicating failure of professionals to recognise maltreatment, failure to report, and failure of agencies to investigate or substantiate maltreatment. Child deaths related to maltreatment are under-recognised
- Screening and assessment questionnaires that directly question children and parents about maltreatment might improve recognition, but research is needed to quantify how much the benefits of recognition and subsequent interventions outweigh the harms of the process for children overall. It is uncertain whether child-protection services have the resources to respond to increased recognition of child maltreatment
- The developing evidence base for recognition of children at high risk of maltreatment should be expanded across all professions
- The continuity of contact provided by schools offers important opportunities to improve recognition of, response to, and support of maltreated children
- Alternatives to child-protection services to record maltreatment, assess need, and access therapeutic and supportive services should be considered

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This is the second in a Series of four papers about child maltreatment

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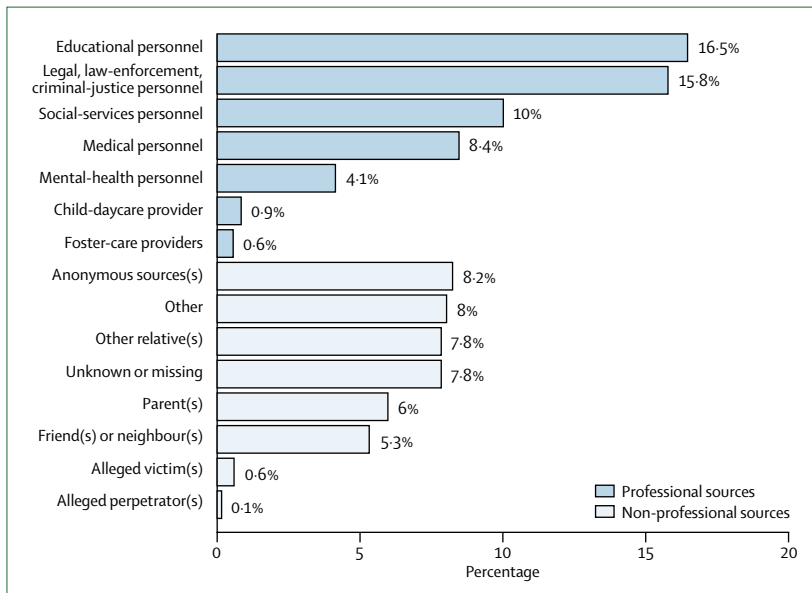


Figure: Sources of reports to child-protection services in the USA in 2006\*

However, clinicians reported 73% (n=54) of the small number of children (4% of suspicious injuries; 74 of 1683) they considered likely or very likely to be abused. Patients with a history inconsistent with the injury; multiple, previous, or more serious injuries; those exposed to intimate-partner violence, parental drug, or alcohol misuse, or previously reported to child-protection services; and children who were black, were more likely to be reported. This study confirmed previous findings that clinicians' thresholds for reasonable suspicion are variable.<sup>17-19</sup> Factors positively affecting clinical reporting included consultation with colleagues and other professionals.<sup>8</sup> Factors negatively affecting reporting in this and other studies included knowledge of the family, expected negative outcomes of reporting to child-protection services, lack of confidence that reporting would improve patient outcomes, the hope that working with the family to resolve the issue would be preferable, and concern that reporting would damage the clinician's relationship with the family.<sup>8,14,20</sup> The study<sup>8</sup> did not confirm earlier findings that training in child protection improves reporting.<sup>18,20</sup> In some countries, there are growing concerns that fear of litigation could reduce reporting.<sup>21,22</sup>

### Benefits and harms of recognition of and response to child maltreatment

The rationale for any system that recognises and responds to child maltreatment is that overall, the harms of reporting to child-protection services are outweighed by the benefits of recognition, and therapeutic or protective responses. Concern that benefits might not outweigh harms, at least in some cases, inevitably reduces recognition and reporting. In health care, we endeavour to recognise asthma to treat children with bronchodilators

and steroids. If we did not know that these treatments are effective, we would not diagnose asthma as often as we do. For child maltreatment, we do not know whether the process from recognition to reporting and subsequent interventions by child-protection agencies improves lives of children overall. Partly, the issue is the scarce evidence for effective interventions, although it is improving. The third article in this Series reviews the available evidence for protective and therapeutic interventions to prevent recurrence of maltreatment.<sup>23</sup>

There are also potential harms and benefits at every step of the recognition and reporting process. First, in most settings reports to child-protection services need a high threshold of suspicion. As the study of 434 clinicians showed,<sup>8</sup> children in whom maltreatment is considered to be likely or very likely are a small minority (4%) of those in whom maltreatment is suspected. Therefore, many children in whom maltreatment is suspected are not reported and professional concerns are not recorded, thus reducing the scope to detect repeated or ongoing maltreatment.

Second, when mandatory reporting exists, the proportion of children investigated by child-protection services, who have maltreatment substantiated, is low (26% and 52% in US and Australian surveys, respectively; panel).<sup>2,24,25</sup> Cases not substantiated include a minority of children who were not maltreated (false positives), such as children with osteogenesis imperfecta or a blood-coagulation disorder, although research on the harms of referral for these children is scarce.<sup>35</sup> Those not substantiated also include children who have been maltreated or have other welfare problems but do not reach the threshold for substantiation, and may therefore not be offered services.<sup>36</sup>

Failure to substantiate maltreatment in these cases might indicate lack of sufficient evidence, failure of the family to cooperate, lack of commitment to comply with services, or inability of the agency to investigate because of personnel constraints.<sup>7</sup> Slep and Heyman<sup>36</sup> argued that substantiation conflates confirmation of maltreatment with agency decisions about future risk of harm and the need for intervention to prevent further maltreatment. To deal with this issue, these investigators have tested standardised recording of confirmatory assessments separate from actions taken. In the UK, substantiation of child maltreatment is recorded only for the minority of maltreated children deemed to be at future risk and in need of a child-protection plan.<sup>37</sup> Another issue is that, even when maltreatment is confirmed or substantiated, some children do not receive services or protective action, might be treated inappropriately,<sup>29,38</sup> or the benefits of any interventions might be uncertain.<sup>23,35</sup> At every step in this process, professionals make judgments that are affected by factors such as the effect on their relationship with the child and family, the time needed, and whether colleagues are likely to support their actions.<sup>8,14,20,38,39</sup>

How these perceived harms and benefits affect the overall recognition and response to child maltreatment still needs to be determined.

Other important considerations in balancing harms and benefits of current systems for recognition and response are their potential for deterring child maltreatment and for achieving justice for crimes committed against children. These issues are beyond the scope of this article, but are discussed from the US perspective elsewhere.<sup>7</sup>

### Health care for children

Although health-care professionals contribute to a small proportion of reports to child-protection agencies, they are most likely to be responsible for reporting the minority of children who have been severely physically abused, and have injuries or symptoms as a result. According to a Canadian study,<sup>40</sup> only 4% of 3780 children with substantiated child abuse had injuries needing medical attention. Recognition and response is especially urgent for these children to prevent further serious harm.<sup>41</sup> Medical assessment of an inflicted injury can also provide important evidence for statutory protective and judicial proceedings. Physical and sexual abuses occur more often in school-aged (5–16 years old) than in preschool (younger than 5 years old) children,<sup>1</sup> whereas infants and toddlers are at greatest risk of serious injury,<sup>41–43</sup> and are often the most difficult cases to recognise because of absence of available history from the victim.

Attempts have been made to improve identification of injuries due to child maltreatment by implementation of screening strategies.<sup>35,43–45</sup> Some emergency departments use screening methods, such as checklists or protocols, to identify children who need experienced paediatric assessment. These methods are based on markers, such as age and type of injury, repeated attendance, or a history inconsistent with the injury.<sup>43,46</sup> However, none of these methods substantially improve the detection rate, and they risk overwhelming paediatricians with false-positive referrals. The authors of a systematic review concluded that experienced clinical assessment is likely to be more accurate than screening tests.<sup>43</sup>

Another approach consists of a scoring system based on a combination of specific injuries and age.<sup>44</sup> Its utility over diagnostic assessment alone has not yet been tested in the clinical setting, but investigators caution that the current model accounts for only 30% of the variance between injuries due to physical abuse and non-inflicted injuries.<sup>44</sup> A key issue for these tests is that maltreatment is a cause of injury in an estimated 1% or less of injured children attending the emergency department.<sup>43</sup> Maltreatment is much more common in severely injured preschool children admitted to hospital, but these children warrant detailed paediatric assessment, and not screening tests.<sup>43</sup>

#### Panel: Arguments for and against mandatory reporting

Mandatory reporting laws have existed in the USA since 1967<sup>26</sup> and Australia since the late 1970s (with the exception of Western Australia). Considerable variations exist between jurisdictions. Overall, the laws require designated professionals to report actual and suspected cases of child abuse to the statutory child-protection agency, the police for investigation, or both. Penalties for failure to report are stipulated, although these are mainly intended to encourage reporting rather than police it.

#### Benefits of mandatory reporting<sup>27</sup>

- Clearly states that governments take child abuse seriously
- Encourages early notification to protect children and prevent child deaths
- Leads to increased reporting to child-protection agencies
- Provides a standardised and uniform database on the nature and size of the problem
- Raises awareness about the importance of tackling child abuse and the appropriate processes for reporting
- Addresses legal (privacy) and ethical (confidentiality) obstacles to reporting without compromising integrity of professionals<sup>28</sup>

#### Disadvantages<sup>27,29–33</sup>

- Overloads child-protection services<sup>33</sup>
- Inhibits self-referrals by children and parents because they will lose control of what happens to them
- Discriminates towards vulnerable populations who are over-reported
- Reactive rather than proactive, which is against contemporary understanding of the need to develop supportive communities that care for children
- Resources are dominated by the need to investigate and little remains for intervention
- Encourages professionals to pass the buck rather than to share responsibility
- Mandate is open to interpretation, with respect to designated mandated reporters; types of abuse and neglect; degree of suspicion or suspected harm; or current or future risk that is needed to activate the reporting duty<sup>34</sup>

The difficulty for paediatricians and primary-care physicians is that, although about 10% of the children they see are likely to have been exposed to maltreatment in the past year, few will present with injuries or clinical symptoms directly caused by maltreatment.<sup>1</sup>

Maltreatment endangers development and emotional wellbeing more often than physical safety. To deal with the difficulty in recognition of emotional trauma related to child maltreatment and other causes, Cohen and colleagues<sup>45</sup> argued that children should be screened for trauma exposure and symptoms at all child-care visits by asking “since the last time I saw you, has anything really scary or upsetting happened to you or your family?”. Children who report trauma would undergo a

brief screen to detect symptoms of post-traumatic stress disorder and, if positive, would be referred for trauma-focused cognitive-behavioural therapy. The effectiveness of this screening, referral, and treatment strategy has not been assessed in the clinical setting. An additional issue is that such screening methods are unlikely to detect neglect or emotional abuse, because they are unlikely to be reported by a child as being scary or upsetting.

Numerous screening methods have been developed for use during antenatal and postnatal periods to identify parents at high risk of maltreating their children. Most are based on socioeconomic, demographic, and clinical criteria, and are subjective assessments of parental

attitudes towards the child. Their poor specificity and low positive predictive value, combined with the possible stigmatising effect of a false-positive result, restrict their application to clinical practice.<sup>47</sup>

An emerging strategy for improving recognition and response to child maltreatment in paediatric care is the production of guidelines based on systematic reviews of research evidence. Table 1 summarises the evidence for selected presentations of physical or sexual abuse that should prompt assessment by an experienced paediatrician for possible child maltreatment.

Specialist paediatric assessment to substantiate the likelihood of child maltreatment needs a forensic approach that uses various scientific and clinical methods

Characteristics	Evidence	Recommendation	
History	Suggests inadequate supervision; no explanation for injuries; explanation does not fit development of the child; explanation is not consistent with the injury sustained; explanation changes over time	Consensus opinion. No comparative studies <sup>48-50</sup>	Seek paediatric assessment if any of these elements in the history
Severe injury in infants and children aged 1-4 years	Percentage of severely injured children (eg, admitted for 3 days or to intensive treatment unit) with any mention of maltreatment in their hospital record: <sup>49</sup> 24% infants, and 5% of children aged 1-4 years	Evidence based on analysis of a national audit dataset in the UK (TARNlet) including 17 000 severely injured children admitted to hospital (about 0.4% of all injured children attending the emergency department). <sup>49</sup> Similar findings reported for children attending level-3 trauma services in the USA <sup>42</sup>	Assess all severe injuries in infants in the absence of an overt traumatic or medical cause
Unexplained subdural haemorrhage in children younger than 2 years	Two-thirds (64%) of subdural haemorrhage in children younger than 2 years is caused by physical abuse: <sup>51</sup> haemorrhagic retinopathy, <sup>51</sup> skeletal fractures (especially ribs), and apnoea are markers of abuse in these children; <sup>52</sup> incidence of abusive head trauma per 100 000 children: infants 21-24 <sup>53</sup> and younger than 6 months 35 <sup>54</sup>	Systematic review of cross-sectional comparative studies <sup>55,56</sup>	All children in whom abusive head injury is suspected should have neuroimaging, skeletal survey, and ophthalmic examination <sup>57</sup>
Fractures in children younger than 3 years	From systematic review, probability of abuse (varies with definition of abuse): <sup>58</sup> rib fractures 71% (42-91%); humeral fracture 48% (6-94%) to 54% (20-88%); femoral fractures 28% (15-44%) to 43% (32-54%); skull fractures 30% (19-46%). From single inpatient database study, <sup>59</sup> probability (and incidence per 100 000 children) of fractures: <12 months 24.9% (36.1); 12-23 months 7.2% (4.8); 24-35 months 2.9% (4.8)	Systematic review of 32 retrospective studies based in hospitals. <sup>58</sup> Subsequent study based on analyses of inpatient database for children admitted to hospital for fractures with routine codes for suspected abuse <sup>59</sup>	Physical abuse should be investigated if a child younger than 18 months presents with a fracture in the absence of an overt history of important trauma or a known medical condition that predisposes to bone fragility. <sup>58</sup> A skeletal survey should be part of the investigation for children younger than 2 years with suspected physical abuse: <sup>57</sup> around a third of these children are estimated to have occult fractures detected on skeletal survey <sup>60,61</sup>
Burns and scalds	10% of admissions to paediatric burns and plastic-surgery units are estimated to be related to maltreatment (1% due to abuse and 9% to neglect). <sup>62</sup> Intentional burns are unlikely if: <sup>63</sup> mechanisms are spill or water flow; agent is a hot drink; pattern has an irregular margin and burn depth, and no stocking or glove distribution; distribution is asymmetrical on lower limbs, or involving head, neck, face, and upper body	Evidence based on systematic review of 28 studies, of which only five were comparative, with exclusion of unintentional injury (neglect excluded). <sup>63</sup> Evidence for prevalence of burns due to any maltreatment (abuse or neglect) based on case series of children admitted to hospital <sup>62</sup>	A prototype triage algorithm is proposed <sup>63</sup>
Bruises	Frequency of bruises in the general population: babies who cannot move independently <1%; infants starting to move independently 17%; toddlers 53%; school-aged children 80%; bruising is common in abused children. Signs include bruises away from bony prominences: on the head, neck, face and buttocks, trunk, and arms; large bruises; clusters of bruises; and bruises that carry the imprint of an implement	Systematic review based on indirect comparisons of bruise profiles in separate case series of abused (14 studies) and non-abused (7 studies) children <sup>64</sup>	Unexplained bruises in babies who are not independently mobile and bruises that carry the imprint of an implement should raise suspicion of physical abuse
Child sexual abuse	Abnormal ano-genital signs are uncommon in children examined for suspected child sexual abuse; <sup>65-67</sup> normal findings in: 94% of girls assessed for suspected child sexual abuse; <sup>66</sup> 26% (8 of 31) of girls reporting penile-vaginal penetration; <sup>68</sup> 37% (6 of 16) of girls reporting digital-vaginal penetration <sup>68</sup>	Evidence based on a series of systematic reviews of cases <sup>65,66</sup>	Investigate: children who disclose physical sexual contact or exposure to sexual activities or materials; sexually transmitted infection. In the absence of a credible explanation investigate: ano-genital lacerations, scars, bruising, inflammation, anal fissures, scars, skin tags (other than middle-line), and reflex anal dilatation

Table 1: Selected presentations of child physical and sexual abuse to child-health services that need assessment by an experienced paediatrician

	Age of victim	Perpetrator	Characteristics
Severe physical abuse*	All ages; highest in infancy and adolescence	Family members, mostly fathers	The largest and most well-recognised group. Severe physical violence, including non-accidental head injuries, multiple injuries, and abdominal injuries, beatings, stabbings, and strangulation. Related to impulsive outbursts, often with previous history of physical abuse, intimate-partner violence, or neglect
Deliberate or overt homicides*	During childhood	Usually male. Mostly known to the child, but might be from outside family or home	Physical assaults, often with implements, firearms, or arson. Impulsive or premeditated, with a presumed intent to kill. It can be sexual assault, a form of revenge, or involve multiple victims and suicides
Infanticide and covert homicide	Mostly young infants, but it can include older children	Typically the mother, but can be the father or other household members	Typically by non-violent means: smothering, drowning, poisoning, or abandonment. Subcategory of infanticide with specific legal definition. It includes cases within the spectrum of fabricated and induced illness. Mostly present as SUDI and can be difficult to detect
Extreme neglect or deprivational abuse	During childhood; high-risk groups are infants and disabled children	Both parents or carers	Up to 40% of maltreatment-related deaths can be the result of neglect or both abuse and neglect. Death might result from extreme malnutrition, electrolyte imbalance, hypothermia, or infection. Many fatal cases seem to have an element of intent to deprive the child of his or her needs. It can be combined with physical assaults
Deaths related to, but not directly caused by, maltreatment	During childhood; different patterns in different age groups	No obvious perpetrator	Various deaths in which maltreatment has a role, but is not directly causal. It includes SUDI with identified child-protection concerns; fatal accidents with inadequate parental supervision or care; children dying of natural causes, whose parents have not sought appropriate health care. Suicide or risk-taking behaviour in older children and teenagers with a previous history of abuse, including sexual abuse. The true numbers of such deaths are not known

SUDI=sudden unexpected death in infancy. \*WHO estimates that homicides in children younger than 15 years during 2000 varied from less than 0.1 to 17.9 per 100 000 children.<sup>83</sup> These numbers are underestimates and relate only to the first two categories.

**Table 2: Categories of fatal child maltreatment<sup>83</sup>**

to authenticate whether an injury is what it purports to be. Forensic guidelines have been developed for the assessment of child sexual abuse,<sup>65,66</sup> of fatally abused children, and for the sudden unexpected death of infants.<sup>69</sup> Forensic guidelines and training for child-health professionals is less formalised for non-fatal physical child abuse and neglect than for fatal abuse. Surveys of clinicians working in these areas suggest that training is insufficient.<sup>22,70</sup> Research in this area is slowly expanding. The long-standing debate surrounding the mechanisms behind inflicted head injury is being addressed in animal studies and computerised modelling in bioengineering.<sup>71</sup> This research, together with studies of biomedical markers related to neuropathological cascades of brain injury,<sup>72</sup> has the potential to greatly improve understanding of causal mechanisms.

A weakness of all paediatric assessments for suspected child maltreatment is the variability between individuals. Opinions vary on a suitable threshold for assessment of suspected physical abuse, but have not been assessed for other forms of maltreatment.<sup>73</sup> Variation in diagnostic opinion is common, although for child protection the consequences of incorrect diagnosis in either direction can be substantial. There are further implications for misinterpretation of medical opinion by social-work teams and lawyers working on a case. Therefore, clinical assessment should be regarded as just one part of an investigation to be interpreted in the full context of the case.

### Fatal maltreatment

Despite mandated systems needing multiagency investigation of unexpected child deaths in many countries,<sup>74-76</sup> deaths due to child maltreatment are underestimated.<sup>77-81</sup> WHO estimated that 0.6% of all deaths and 12.7% of deaths due to injury in children

younger than 15 years were caused by abuse or neglect.<sup>82</sup> Variations in mortality across different ages and countries are discussed in the first paper in this Series.<sup>1</sup> Sidebotham and Fleming<sup>77</sup> proposed five broad groups of deaths caused by child maltreatment, which differ in relation to the characteristics of the victims and perpetrators, the mode of death, and the intentions behind the death (table 2).

Deaths due to severe physical abuse are the largest and most easily recognised group of maltreatment-related deaths.<sup>84,85</sup> Violence might happen as an impulsive outburst, and death might not have been intended. Another category is deliberate or overt homicide where death is due to physical assault, often with a firearm or through arson, often premeditated with a presumed intent to kill. Much more difficult to detect are deaths—mostly infanticides—due to asphyxiation from smothering, poisoning, or drowning, which often present as sudden unexpected death in infancy.<sup>86</sup> Many investigators have suggested that up to 5–10% of sudden unexpected death in infancy could be infanticide, with abuse or neglect being a contributory, although not necessarily causal, factor in a similar proportion.<sup>87-89</sup> Extreme caregiver neglect could contribute to some non-intentional deaths, including drowning, house fires, and poisoning at all ages, although infants and disabled children are most affected.<sup>77</sup> Finally, some deaths in adolescents, through suicide, deliberate self-harm, or risk-taking behaviour, might be related to previous maltreatment, although not directly caused by it. The true number of such deaths is not known. A review of 106 maltreatment-related deaths<sup>90</sup> reported by all local authorities in England in 2003–05 showed that 28% of deaths occurred in young people older than 11 years and younger than 19 years, of which 47% (n=14) were from suicide.

## Neglect

Despite minor variations between international and state definitions of neglect,<sup>39</sup> there is agreement that neglect is a state of omission where, regardless of intention, carers fail to provide health, education, emotional development, nutrition, shelter, or safety for their child.<sup>1,83,91</sup> Signs include scarce parental support or engagement with the child, lack of supervision, frequent absence from school, a child's begging or stealing, insufficient clothing, or nobody at home to provide care. In the UK, the definition needs a persistent state of omission.<sup>37</sup>

Although omissions of care or lack of supervision are obvious, the decision about whether these constitute neglect and justify referral of a child to child-protection agencies requires difficult judgments about what is acceptable behaviour, whether the behaviour is ongoing, and the risk of harm to the child.<sup>92</sup> These judgments can be particularly challenging when a child lives in very deprived circumstances, comes from a refugee or asylum-seeking family,<sup>93</sup> or either the child or the parent has a disability, mental-health problems, or other chronic illness.<sup>94</sup> Although neglect is one of many causes of non-organic failure to thrive or obesity,<sup>95,96</sup> the evidence that it is the major cause of these conditions needs careful clinical assessment to ensure that the condition has arisen from a failure of carers to provide adequate nutrition.

A study of 390 professionals in Ireland<sup>39</sup> showed that professionals' judgments about child neglect were strongly influenced by their own perceptions as much as the evidence. Key factors determining reporting of past cases or of hypothetical cases to child-protection agencies were professionals' perceptions of what neglect is, their perceptions of children's needs and thresholds for substantial harm, and cultural values and beliefs. Not reporting by professionals was associated with a focus on current parental behaviour whilst ignoring frequency and chronicity of neglect, concerns about betrayal of their relationship with the family, and their level of training about neglect.<sup>39</sup>

Those professionals most closely connected with the community expressed a fear of being found out. For example, a nursery manager said "we also have to consider that our business could be affected and we would lose our livelihood". Colleagues' views strongly influenced interpretation of guidance and thresholds for action, and perceptions of social services. Perceived difficulties in communication with social services, insufficient continuity of social-service staff, inadequate feedback, and negative perceptions about the effectiveness of social services also discouraged referrals. To deal with these influences, many of which might not be recognised by practitioners, Horwath<sup>39</sup> proposed a checklist to assess factors affecting specialist practice as part of the routine assessment process.

## Maltreatment of children with mental-health problems

Various mental-health problems in children are associated with child maltreatment,<sup>1</sup> including anxiety, depression, post-traumatic stress, dissociation, oppositional behaviour, suicidal and self-injurious behaviour, substance misuse, anger and aggression, and sexual symptoms and age-inappropriate sexual behaviour.<sup>97</sup> The extent to which child maltreatment is recognised and addressed by clinicians seeing children for mental-health or behavioural problems is not well understood. Clinical studies that add direct inquiry with questionnaires to the clinical assessment have shown a pronounced increase in recording of maltreatment.<sup>97,98</sup> This suggests that maltreatment is under-recognised in children with mental-health problems.

Various generic and trauma-specific interview questionnaires have been developed to ascertain whether children and adolescents with mental-health problems are maltreated. To date, such questionnaires have been used mainly in research settings, but studies assessing applicability to the clinical setting are emerging.<sup>97-99</sup> Lanktree and colleagues<sup>97</sup> suggested that the appropriate instrument varies depending on the type of mental-health problem.

The trauma-symptom checklist for children,<sup>100</sup> the childhood trauma questionnaire,<sup>99</sup> and the children's impact of traumatic events scale-revised<sup>101</sup> are methods for assessing children with conditions such as post-traumatic stress, dissociation, and reactive sexual behaviour, which are closely linked to traumatic abuse.<sup>97</sup> Assessments of both the child and the parent can improve accuracy.<sup>97</sup> Others have developed assessment methods for specific patient groups. One example is the Colorado adolescent rearing inventory, a 20–45-min interview questionnaire designed for adolescents with problems of behaviour or substance misuse. This method detects high rates of neglect and abuse (68–80%), most of which (85%) warranted reporting to welfare agencies.<sup>98</sup>

The key issue is the preparedness of clinicians to contemplate the possibility that a child's presentation could, at least in part, be explained by maltreatment which, if still ongoing, needs to be reported to child-protection services before the mental-health disorder can be treated effectively. Perception that reporting to child-protection services interferes with clinical work with the child and family could contribute to under-recognition and under-response to maltreatment by some mental-health professionals.

The most common form of maltreatment seen by child and adolescent mental-health services is emotional abuse and emotional neglect (or psychological maltreatment). Different categories of emotional abuse and relevant therapeutic approaches have been operationally defined on the basis of parent–child interactions that clinicians can observe as part of the assessment of the child's mental-health problem.<sup>102</sup> There are no specific

mental-health effects of emotional abuse.<sup>7</sup> Recognition of this form of abuse by mental-health professionals is important clinically, because protective interventions lie equally in therapeutic work and within child-protection services and social care.

### Schools

Of all the professions, teachers and school counsellors have the most interaction with children.<sup>3,10</sup> They are well placed to observe changes in behaviour and distress, to make comparisons with peer norms, and to be available for children who want to disclose maltreatment. However, although school professionals contribute most reports to child-protection agencies (figure), they are also responsible for failing to report most cases.<sup>3,10,103–105</sup> One study of referrals in nursery schools in Sweden<sup>106</sup> and a study of teachers' self-reported practice in the USA<sup>103</sup> showed that only 30–37% of cases of child maltreatment known to school personnel were formally reported, although reports were often made within the school to principals, counsellors, and nurses.

Reasons for under-reporting by school professionals include inadequate training and limited awareness of signs of child maltreatment or of reporting procedures, uncertainty about what constitutes reasonable grounds for suspicion, concerns that certain indicators—particularly for psychological abuse and neglect—are also characteristic of other childhood dysfunctions, fears about damaging teacher–child and teacher–parent relationships, and lack of support from others for making allegations.<sup>9,105–107</sup> Judgments about whether reporting is likely to benefit the child or family also affect reporting.<sup>108,109</sup>

In addition to these issues, research based on interviews with staff in 43 schools in the UK showed that restricted access to qualified social workers to discuss cases, insufficient feedback, and concern that the degree of children's needs identified by schools often exceeded the ability of social-service departments to meet the demand for support, all contributed to under-reporting.<sup>109</sup>

In the USA, reports from school professionals are the least likely to be substantiated of any professional group.<sup>5</sup> The reasons are not well understood,<sup>110</sup> although evidence from case-vignette studies suggests that over-reporting is rare.<sup>9</sup> An analysis of a longitudinal study of 1263 low-income families in Chicago<sup>5</sup> showed that different people reported different families. Individuals working in the law, social services, and health sectors were more likely to report families who present at times of distress, for instance associated with homelessness, injury, or intimate-partner violence. These incidents could readily fit the criteria for substantiation, whereas people working in schools tended to report more chronic issues. Many studies have shown that failure to substantiate maltreatment does not indicate lack of welfare need or diminished risk of future maltreatment compared with substantiated cases.<sup>36</sup>

How much child maltreatment is recognised and responded to within the resources of the school but not reported to child-protection agencies is not known. School professionals have a pivotal role in raising awareness about abuse, which could itself generate disclosures of maltreatment. Additionally, schools provide psychological support.<sup>10,111</sup> Up to 80% of children receiving mental-health services in the USA have been estimated to be seen by providers outside the health-care sector affiliated with schools—mostly counsellors and psychologists.<sup>7</sup> Such services create an important opportunity to detect and respond to child maltreatment. However, some counsellors do not have the knowledge and skills to recognise maltreatment and to respond appropriately,<sup>112</sup> and might perceive that statutory requirements to report child maltreatment conflict with their obligation to maintain confidentiality for the child.<sup>113</sup>

The extent to which child maltreatment can be recognised and appropriately managed within the school rather than referred to child-protection agencies needs to be further investigated.

### Training

The need for training of professionals to recognise and respond to child maltreatment is widely acknowledged. Within health care, primary-care or family doctors are of particular concern because they make few referrals to child-protection services despite their ongoing contact with families.<sup>38,43,114</sup>

A systematic review<sup>115</sup> of training and procedural interventions for improving the management of child maltreatment by health professionals identified 22 studies, most being of poor quality and none were randomised controlled trials. The use of checklists and structured forms improved recording of information, but there was no assessment of the effect on professional judgment or actions. In Spain, a comparison of reports to child-protection agencies before and after introduction of a phased-training programme of health, social services, and school professionals showed that training increased reporting in all sectors, but schools made the largest contribution.<sup>3,116</sup>

### Young offenders

Progression from maltreatment during childhood to antisocial and violent behaviour and criminality in childhood, adolescence, and adulthood has been defined by a growing body of research.<sup>117</sup> Although early intervention to prevent these cycles of violence is likely to be most cost effective, young offenders need protection from maltreatment by caregivers and interventions to ameliorate the consequences. A review<sup>118</sup> suggested that between a third and 90% of children in custody had some form of past or current maltreatment, and sexual abuse was particularly common in girls in custody.

	Child and family welfare	Child safety
Countries	New Zealand, UK, and most western European countries	USA, some Australian states, Canada, and France
Terms used	Referral, assessment, and inquiry	Notification, report, and investigation
Separate referrals for child protection and social welfare	Referrals usually mixed and difficult to distinguish. Maltreated children can be regarded as in need of additional services or referred for a formal child-protection investigation	Separate referrals for child protection. Welfare referrals are often to voluntary agencies
Mandatory reporting of child maltreatment	Sometimes (eg, Sweden, New Zealand)	Usually, although much variation exists on who is mandated and types of maltreatment
Data issues	Data for referrals to services not easily separated from those for referrals of suspected maltreatment. Incomplete or no data for substantiated cases	Clear data for reports, investigations, and substantiation of child maltreatment
Assessment for services	Multidisciplinary assessment in child-protection conferences <sup>37</sup>	Increased use of actuarial risk-assessment methods by para-professionals to predict future risk of harm <sup>143</sup>
Statutory requirement for service provision	In some countries (eg, New Zealand, Sweden, and the UK), courts use a needs-based approach to service provision, and evidence that services have been offered or are inappropriate before the court can make a child-protection order	Services usually targeted at prevention of recurrence of maltreatment, with not much emphasis on meeting other needs. Legislation for service provision varies but tends to be permissive rather than mandatory. Differential response models now operate in some countries
Service provision	High in New Zealand and Sweden	Low in the USA and Canada, especially when related to the rate of notifications
Voluntary self-referrals and participation in programmes	Some evidence that family members self-refer and are likely to comply with interventions	Self-referral uncommon
Prevention of recurrence of maltreatment	Risk of inadequate recording of maltreatment and insufficient focus on harmful behaviour. Chronic or repeated maltreatment can be missed	Focus on reducing harmful behaviour. Recurrences well documented

\*Some overlap exists between these approaches. In federal systems, there are differences between states. In several jurisdictions (eg, France, some states in the USA, Canada, and Australia), a differential response exists, resulting in some children being referred to preventive and family-support agencies.

**Table 3: International differences in policies relating with child maltreatment\***

Scant research exists on how often current maltreatment of children and young people is identified and responded to.<sup>118</sup> The emphasis on control, restraint, and punishment, combined with the variable and often scarce training of key workers in young-offender institutions in child development or safeguarding, make it difficult to adequately address maltreatment and its consequences.<sup>118</sup> Research on therapeutic support to young offenders has shown a gap between service provision and need.<sup>118–120</sup>

### Adult offenders and intimate-partner violence

When an adult is identified as a violent offender—whether as a result of violence or substance misuse—an opportunity exists to also identify a maltreated child.<sup>121–123</sup> One manifestation of violent offending is intimate-partner violence. Although highly prevalent and strongly associated with other types of child maltreatment, intimate-partner violence might not be disclosed unless

the victim is asked directly.<sup>123</sup> General practitioners are in a key position to recognise and respond to intimate-partner violence because they are often the only professionals who see not only the person who is abused, but also the perpetrator and associated children.

Lifetime exposure to intimate-partner violence in women seen in general practice ranges from 23% to 41%, with exposure in the past year ranging from 5% to 17%.<sup>123</sup> Screening tests for detection of intimate-partner violence have been assessed within paediatric and emergency departments, general practice, outpatient clinics, and antenatal clinics.<sup>35,123–126</sup> Similar approaches have been used for social workers.<sup>127</sup> Systematic reviews have concluded that there is insufficient evidence for a policy of screening in clinical settings, but clinicians should be alert to the signs and symptoms associated with intimate-partner violence.<sup>123</sup>

Unfortunately, efforts to increase recognition and reporting of intimate-partner violence might exceed the capacity of child-protection and other services to respond. In Minneapolis in 1999,<sup>128</sup> a statute that categorised child exposure to intimate-partner violence as child maltreatment had to be repealed because child-protection services became overwhelmed with police referrals. Similar issues have been reported in Australia and the UK.<sup>121,129</sup> In the USA, the Federal Government funded the Greenbook initiative in six court areas to address the need for better coordination in the way services respond to intimate-partner violence. After 5 years, an assessment of the programme showed that initial improvements in identification and referral of children were not sustained.<sup>130</sup>

### Family courts

Within the family-court system the no-fault, future-focused approach to divorce and separation, which operates in many high-income countries, discourages the investigation of allegations of child maltreatment. Professionals might be unaware of documented maltreatment or intimate-partner violence because of the lack of information sharing across child-protection public-law and private-law family cases.

Different approaches to tackle this issue have developed under different systems of family law.<sup>131</sup> Family courts in England and Wales in 2005 introduced a new approach to inquiring about intimate-partner violence and child maltreatment in cases in which courts are asked to make decisions about where a child will live and contact with the non-resident parent. Subsequent investigation showed that only a few cases had adequate assessment of child safety when decisions were made about their contact after separation with allegedly abusive parents.<sup>132–134</sup>

### Parents with mental-health problems

Strong associations between child maltreatment and parental mental-health conditions or substance misuse<sup>135</sup> emphasise the need for professionals to

consider the welfare of children when dealing with these problems in adults.<sup>1,136–139</sup> One study<sup>140</sup> investigated characteristics of mothers in a substance-misuse treatment programme according to whether their children were involved with child-welfare services (n=1939; 47% of all women with children admitted to the programme) or not (n=2217). Mothers involved with the child-welfare system had an overall lower grade of addiction severity, but they were younger, had more children, more issues related to economic stability, and were more likely to have been physically abused as a child than mothers not involved with the child-welfare system. Few differences existed between the groups in criminal behaviour history or psychiatric severity. We did not find any study that investigated recognition of child maltreatment as part of the care of adults using mental-health services.

### Policies governing responses to child maltreatment

Comparisons between countries and jurisdictions within countries suggest that rates of officially recognised maltreatment and provision of services are partly affected by policies governing recognition and response to child maltreatment.<sup>141,142</sup> Two broad, although overlapping, approaches for responding to child maltreatment can be discerned. We have defined these as a child and family welfare approach and a child-safety approach.<sup>30,141</sup> Table 3 lists examples of countries where these policies apply and summarises some of their characteristics.

One key difference between these two approaches is the separation of child-protection referrals from other child-welfare concerns. Where a child and family welfare policy operates—for example in most European countries and New Zealand—child-welfare agencies respond to allegations of child maltreatment alongside other referrals of vulnerable children for various practical and therapeutic services in home and out-of-home care. By contrast, where a child-safety policy operates, as in the USA, Canada, and some Australian states, state agencies charged with responding to vulnerable families focus almost entirely on children reported for an investigation of child maltreatment and, if no maltreatment is found, can refer children to other services, often in the voluntary sector.

Both policies allow some degree of professional discretion about which cases of child maltreatment are classified as child protection. This is especially the case with child and family welfare policies, and in some states that operate a differential response model, where considerable flexibility exists about whether a referred child is responded to as in need of an additional service or as needing a formal child-protection investigation. Cases of neglect, psychological maltreatment, and some cases of over-chastisement and exposure to intimate-partner violence are likely to be regarded as in need of services.

A second difference is that countries with a child-safety policy operate a system of mandatory reporting of child maltreatment (panel), whereas in countries with a child and family policy, the picture is mixed. In Sweden, the system amounts to mandatory referral for services on the basis of a broad definition of child maltreatment. Investigation of an allegation of maltreatment is incorporated into an assessment of the full range of needs and the services to meet them. No substantiation element exists with this process, and therefore there are no reliable national data for the extent of maltreatment in Sweden.<sup>30</sup>

New Zealand also has a family-service orientation combined with mandated reporting. Historically, Belgium, the Netherlands, and parts of Germany, although having a broadly child and family welfare approach overall, have a specialist referral system for concerns about possible maltreatment (including a confidential doctor system). In Belgium, reporting is not mandatory, there are no substantiation data for the country as a whole, and the response involves multiagency assistance provided, if at all possible, on a voluntary and confidential basis.<sup>144</sup> Mandatory reporting is one element of the recognition–response pathway that continues to cause controversy.<sup>28</sup> The panel summarises advantages and disadvantages.

A third difference relates to the way assessments of risk and need are undertaken. Broadly, and with some overlap, the child and family welfare approach is based on pooling of professional assessments and opinion to identify need and future risk of maltreatment. Assessments are based

	Policy	Referrals	CPS reports or investigations	Substantiations	Services provided*		Children entering out-of-home care†
					Via CPS	All services	
Australia <sup>152,‡</sup>	CS	..	551	118	..	..	26
Queensland <sup>129</sup>	CS	..	264	104	..	..	33
Canada <sup>25</sup>	CS	..	383	218	97	139	..
USA <sup>24,52</sup>	CS	810	486	146	113	225§	42
England	CFW	499	62¶	28¶	28¶	262¶	23
Sweden <sup>153</sup>	CFW	424	177	..	..	294	32
New Zealand <sup>154</sup>	CFW	..	469	..	..	347	24

Rates are per 10 000 children aged 0–17 years estimated from annual data, mainly reported between 2004 and 2006. CPS=child-protection service. CS=child safety. CFW=child and family welfare. \*Data need cautious interpretation because of different quality, criteria for provision, and definitions of services. †In the USA, Canada, and Australia, out-of-home care is usually decided by a court order. In European countries, most children enter care through voluntary arrangements (rate entering care on a court order for England was 7 per 10 000). ‡Data for Australia are not reliable because of differences in legislation between states. §Differences exist between service-delivery policies in different states, especially with respect to whether unsubstantiated cases receive a service. Data from the National Survey of Child and Adolescent Welfare showed that 77% of substantiated and 33% of unsubstantiated cases received a service from the child-protection agency or were referred elsewhere for service (47% of all investigated cases).<sup>152</sup> Applying these percentages to the national data of 3 600 000 investigated cases,<sup>2</sup> an estimated rate of 227 per 10 000 children are investigated and receive a service. ¶England: 62 refers to section-47 inquiry; 28 to a child-protection plan; and 262 to an initial assessment (26% of these undergo core assessment). ||Qualitative studies indicate that some services are usually provided alongside an initial assessment.

**Table 4: Rates of referrals, investigations, and service provision per year**

on guidance documents (eg, Working Together)<sup>37</sup> and multidisciplinary child-protection conferences. Jurisdictions that operate a child-safety policy often take an actuarial or risk-assessment approach, using risk-assessment methods to predict the likelihood of future harm.<sup>143</sup>

A fourth difference relates to service provision. In states operating a child and family welfare policy, there is a focus on a needs-based approach to service provision as part of the initial response to suspected child maltreatment. In some countries, this focus is enshrined in legislation that requires evidence that services have been offered or are inappropriate before the court can make a child-protection order.<sup>145</sup> Where a needs-based approach exists, as in most countries in Europe, continuity of services is likely to exist, often with several different services and interventions provided concurrently or sequentially. In the UK, legislation laid down in the Children Act 2004 locates child maltreatment on a spectrum of universal and additional needs of children that should be addressed by integrated health, education, and social-care services, and assessed with a standardised approach through the common assessment framework.<sup>146,147</sup>

By contrast, the child-safety approach tends to concentrate on investigation of maltreatment and assessment of future risk of maltreatment rather than on broad welfare needs. When services are provided, they are likely to be short term and to focus specifically on prevention of further maltreatment of the type reported rather than on the broader needs of the family and child.<sup>30,141,142</sup> This approach is gradually changing, however, with several jurisdictions in the USA, Canada, and Australia operating differential response models.<sup>55,56</sup> Most differential response models retain an investigative track for high-risk cases (all reports of sexual abuse, serious physical or emotional harm, chronic neglect, and cases in which criminal charges may be laid). Less-urgent cases are shifted to an alternative assessment or community track, where the focus is on provision of services. In some jurisdictions (eg, Florida), workers in the assessment track do not have the authority to apprehend children, and services are provided voluntarily, with responsibility shared between the assessment service and community services.

A fifth difference is that the child and family welfare policy encourages self-referral by family members. Services are likely to be provided on a voluntary basis, which is associated with an increased number of families continuing in intervention programmes until positive results are achieved.<sup>148–150</sup>

Differences between these two systems make it difficult to compare routine statistics on recognition and response rates. Rates in table 4 should therefore be interpreted with caution. Data for England underestimate the child-protection case load for social services because, even when maltreatment is substantiated by a

multiagency conference, not all children receiving a service are registered with a protection plan.<sup>37,74</sup> Reports from most other countries giving information about recognised maltreatment are more reliable because all substantiations are recorded, even if no service is provided. However, statistics are also affected by different reporting criteria.

Statistics for service provision in cases of maltreatment are similarly hard to compare. Data for service provision in England (table 4) assume that services are provided whilst assessments are being undertaken as requested by Department of Health guidance. Actual service provision is not routinely documented and the nature of the service can differ substantially.<sup>155</sup>

Taking into account these caveats, table 4 gives weak evidence for higher rates of service provision in countries with a child and family welfare policy (New Zealand, Sweden, and the UK) than in countries with a child-safety policy (Canada and parts of Australia). The crude differences shown in table 4 are supported by findings from longitudinal studies and annual reports in some countries (USA, Canada, and the UK).<sup>4,25, 148,149,156,157</sup>

Finally, one disadvantage of the child and family welfare approach is that, in some settings, recording of episodes of maltreatment is inadequate, and insufficient attention is given to the harmful aspects of parents' behaviour. Assistance might therefore not be focused sufficiently on what needs to be done to prevent future harm, and repeated incidents or chronic neglect can be missed.

## Conclusion

The professional practices and policies discussed here are elements of a much broader agenda to tackle child maltreatment. We did not include important factors, such as the contribution of community support and development initiatives to the prevention, recognition, and support for children exposed to maltreatment and their families,<sup>158,159</sup> and strategies to empower children to address maltreatment for themselves. Confidential child helplines, which offer a worldwide service for children to discuss their experiences and access child-protection services, are discussed in the webappendix. Interventions to prevent and reduce the consequences of child maltreatment are discussed in the third paper in this Series,<sup>23</sup> and the contribution of a child's rights and public-health approach to policy are discussed in the fourth paper.<sup>160</sup>

We suggest that all professionals dealing with children have complementary roles in the recognition and response to child maltreatment. Serious shortfalls exist at every step of the process in all sectors, but much more research has addressed these issues within paediatric services than elsewhere. Professionals who have continuous contact with children, such as people working in schools and community health services, can have a leading role in recognising, responding to, and supporting maltreated children. Their scarce reporting to

See Online for webappendix

child-protection agencies is a cause for concern, and we need to find out whether maltreatment is being recognised and dealt with in other ways. Doubts are widespread that the benefits of reporting suspected cases of maltreatment to child-protection services outweigh the harms. Also, evidence exists that these services have limited capacity to respond adequately to increased recognition of maltreatment. These findings raise questions about the pre-eminence of formal, targeted child-protection services as the common pathway for recording maltreatment, assessing need, and accessing therapeutic and supportive services.

Finally, the emphasis of a child-safety policy on substantiation is linked with blame, punishment, and criminalisation of child maltreatment.<sup>27</sup> This association creates potentially damaging stigma and, at times, the need for evidence before protective or therapeutic intervention can be offered. It can also limit provision of services. International comparisons emphasise the need for an approach that combines a focus on child safety with the broader benefits of a focus on child and family welfare.

#### Conflict of interest statement

We declare that we have no conflict of interest.

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