Hong Kong Medical Coordinators on Child Abuse

Management of child abuse in Hong Kong: results of a territory-wide inter-hospital prospective surveillance study

香港虐兒個案的處理：全港性跨院預期監察的研究結果

Objectives. To study suspected child abuse among children in hospital in terms of clinical characteristics and the outcome of multidisciplinary case conferences.
Design. Prospective observational study.
Setting. All public hospitals in Hong Kong with a paediatric department.
Methods. Anonymous data were prospectively collected from July 1997 to June 1999 using a standard report form for each case of suspected child abuse. The characteristics of the incidents and factors influencing the conclusion at the multidisciplinary case conference were studied.
Results. Data for 592 cases of suspected child abuse were evaluated. Two hundred and eighty-seven of the children were boys and 305 were girls. The mean age was 7.3 years (range, 0-16.7 years). Physical abuse, alone or in combination with other forms of maltreatment, accounted for 277 (86.6%) of the 320 substantiated cases. Either, or both, biological parents comprised 71.3% of the perpetrators. Seven (1.2%) children died. Of the 540 children about whom a multidisciplinary case conference was held, abuse was established for 281 (52.0%) children. Abuse was more likely to be established if the victim had been known to a childcare agency (odds ratio=2.2; 95% confidence interval, 1.4-3.5), the abuse was not sexual (odds ratio=2.7; 95% confidence interval, 1.4-5.0), or if the child was seen at a hospital that handled more than 100 cases of suspected abuse during the study period (odds ratio=3.6; 95% confidence interval, 2.4-5.4).
Conclusion. Child abuse identified in the hospital setting is predominantly physical in nature and death is not uncommon. Appraisal of suspected child abuse by multidisciplinary case conference appears to be influenced by the region of Hong Kong in which the case was handled.

目的：根據臨床特徵和跨專業個案研討會的結果，研究懷疑因受虐待而要住院的兒童的情況。
設計：預期觀察研究。
安排：香港所有設有兒科部門的公立醫院。
方法：從1997年7月至1999年6月期間，就每宗懷疑虐兒個案，使用標準彙報表預期收集匿名數據；並就每宗個案的特徵及影響跨專業個案研討會結論的因素進行研究。
結果：評估了592宗懷疑虐兒個案的資料。其中287名為男童，305名為女童。被虐者的平均年齡為7.3歲(範圍，0-16.7歲)。在合共320宗證實虐兒個案中，身體遭受虐待(無論是單獨或與其他形式結合的虐待)佔277宗(86.6%)。在71.3%個案中，施虐者為親生父親、親生母親，或兩人同時施虐。7名(1.2%)兒童死亡。540名曾於研討會內被討論的兒童中，有281名(52.0%)被確認為受到虐待。此外，本研究顯示，如果符合以下其中一項，虐待個案便有較大機會成立：受害人在幼兒中心內有紀錄(比數比=2.2; 95%置信區間，1.4-3.5)；受害人並非受到性虐待(比數比=2.7; 95%置信區間，1.4-5.0)；研究期間兒童曾到處理超過100宗懷疑虐兒個案的醫院求診(比數比 =3.6；95% 置信區間， 2.4-5.4)。
結論：在醫院內被發現的兒童虐待個案，其識別主要是身體方面，而死亡並非罕見。由跨專業個案研討會識別的懷疑虐兒個案，似乎受個案所屬的區域影響。

Key words:
Case management;
Child abuse;
Mongoloid race;
Hong Kong

關鍵詞：
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Introduction

Since 1979 when the local government focused attention on the issue of child abuse, successive official reports and recommendations on the management of child victimisation have been released.[1] When the 'Procedures for handling child sexual abuse cases' was released by the Social Welfare Department in 1996, Medical Coordinators on Sexual Abuse were designated in the 10 paediatric departments managed by the Hospital Authority of Hong Kong at that time.[2] This was gradually extended to the paediatric units of all public hospitals and the title was changed to Medical Coordinators on Child Abuse (MCCA) to reflect the full spectrum of work carried out by these designated paediatricians.[3] In January 1997, MCCA began meeting at regular intervals to share and review experience. It became apparent that cases of child abuse seen in public hospitals differed from those encountered by the Social Welfare Department. A prospective, voluntary reporting system for public hospitals was initiated in July 1997, with representatives from each hospital collecting data relating to each incident of suspected abuse and submitting the data in preformatted reports. This paper summarises the data collected in the first 2 years of the voluntary reporting system.

Methods

A standard report form containing the child's sex, age, date of admission, and the suspected perpetrator's sex, age, and relation to the child was to be completed for each case of suspected child abuse. The type of maltreatment suspected and the childcare agency to which the child was known (if applicable) were also specified. The report also contained information about whether a case conference was held and if so, what conclusion was reached. The subsequent discharge and management for each case was also indicated. The identity of the child and the suspected perpetrator remained anonymous, however. All 13 paediatric departments in public hospitals participated in this study during the 2-year study period from July 1997 to June 1999. The sex and age of the children and the initial type of suspected maltreatment were described. The final diagnosis of abuse and the relationship of the perpetrators to the patients in substantiated cases were examined. The diagnosis of child abuse was based on the commonly accepted definition—any act of omission or commission by a person who was entrusted with the care and control of a child, which endangered or impaired the child's physical, psychological, or emotional health and development.[4] For cases in which a multidisciplinary case conference was held, the conclusion of whether or not child abuse had occurred was analysed with respect to the demographic characteristics of the child, the type of maltreatment, and the hospital caseload. Hospitals that handled more than 100 cases were arbitrarily designated 'busy' units whereas other hospitals were designated 'less busy' units. Comparison of non-parametric variables using the Chi squared test, parametric variables using the Student's *t* test, and multivariate analysis by logistic regression were performed using the Statistical Package for Social Science (Windows version 7.5; SPSS Inc., Chicago, United States).

Results

A total of 592 completed case reports were received during the 2-year study period. Among the children, there were 287 (48.5%) boys and 305 (51.5%) girls. The mean age of the children was 7.3 years (range, 0-16.7 years). One hundred and forty-three (24.2%) children had been known to a childcare agency before admission. After medical evaluation, 320 (54.1%) children were diagnosed as having been victims of abuse. The spectrum of the various forms of abuse reported is summarised in Table 1. Physical abuse, either alone or in combination with other kinds of maltreatment, accounted for 85.2% of children admitted for evaluation and 86.6% of confirmed abuse. Children suspected of having been sexually abused were more likely to be girls (72/79 versus 233/513; P<0.001) and younger in age (mean [SD], 5.6 [3.4] years versus 7.6 [4.3] years; P=0.001), compared with those for whom the abuse was non-sexual. The relationship of the perpetrators to the children in substantiated cases of abuse is listed in Table 2. Biological parents were the major group of perpetrators. Either parent or both parents were responsible for 73.5% of cases. A further 5% of perpetrators were foster parents or step-parents. Two of the 13 hospitals had seen more than 100 suspected cases of abuse, contributing 39.2% of cases seen during the study period.

A multidisciplinary case conference was held for 540 (91.2%) children, of which 281 (52.0%) were confirmed as child abuse. The reasons for not holding a case conference for the remaining children were not specified. The

Table 1. Types of maltreatment reported

Type	Patients No. (%)	
	Abuse suspected	Abuse established
Physical abuse	471 (79.6)	233 (39.4)
Neglect	10 (1.7)	10 (1.7)
Psychological abuse	2 (0.3)	5 (0.8)
Sexual abuse	73 (12.3)	26 (4.4)
Physical and other abuse*	33 (5.6)	44 (7.4)
Combination of other abuse*	3 (0.5)	2 (0.3)
No abuse	-	272 (45.9)
Total	592	

* Other abuse refers to neglect, psychological abuse, or sexual abuse

Table 2. Perpetrators of substantiated child abuse

Relation to child	No. (%)
Father	134 (41.9)
Mother	79 (24.7)
Both parents	15 (4.7)
Parent(s) and someone else	7 (2.2)
Step-parent/foster parent	16 (5.0)
Other relative	12 (3.8)
Maid	10 (3.1)
Childminder/babysitter	6 (1.9)
Others	11 (3.4)
Unknown	30 (9.4)
Total	320

Table 3. Factors associated with establishing abuse in the case conference at univariate analysis

Factors		Established case of child abuse No./Total	P value for comparison
Patient's sex	Male	142/262	
	Female	139/278	0.34
Known to childcare agency	Yes	96/132	
	No	185/408	<0.001
Suspected sexual abuse	Yes	22/66	
	No	259/474	0.001
Hospital	'Busy'	150/211	
	'Less busy'	131/329	<0.001
Mean age (SD) [years]	Established	7.8 (4.4)	
	Not established	7.1 (4.0)	0.04

following factors were analysed to determine whether there was any association with the outcome of the case conference: suspected type of abuse, victim's sex and age, whether the child was known to a childcare agency, and the type of hospital. In the univariate analysis, older age at admission to hospital, non-sexual abuse, the victim being known to a childcare agency, and involvement of a 'busy' hospital were identified as significant variables (Table 3). At multivariate analysis, factors significantly associated with confirmation of abuse were as follows: the child was known to a childcare agency, the suspected maltreatment did not involve sexual abuse, and the child was seen at a 'busy' hospital (Table 4). Approximately two thirds of the children were discharged home and the other children required special placement. The latter included foster care (n=32), small group home placement (n=44), care by relatives (n=39), and other institutional care (n=62). There were seven (1.2%) deaths in this series. All deaths were associated with inflicted head injuries.

Discussion

Child abuse was not a major issue of public or medical concern in Hong Kong until 1979, when the government commissioned the first survey on child maltreatment.[1] In 1983, the Child Protective Services Unit (CPSU) was formed under the Social Welfare Department to handle statutory cases of child abuse and cases referred from other government units and non-governmental organisations. At the same time, a working group was formed to review statistics and the handling of child abuse.[1]

The management of child abuse in Hong Kong follows the British model.[5] There is no mandatory reporting, but the Social Welfare Department issues general guidelines on the handling of child abuse, and specific guidelines on the management of suspected child sexual abuse.[1-4] Children may present to hospitals, government units, or non-governmental organisations due to suspected abuse. If it is deemed necessary, the officer in charge of the respective unit will report to the CPSU and an ad hoc multidisciplinary team consisting of social workers and other childcare workers will be formed. Paediatricians and nurses are involved if the child presents for medical treatment or if a caseworker refers the child to hospital. A case conference will be convened at which the ad hoc team will discuss the nature of the case and determine the subsequent management of the child and the affected family. Participating professionals have to decide whether the alleged abuse has occurred in order to register the child on the Child Protection Registry (CPR) and to determine appropriate follow-up.[3] However, not every case seen by public hospitals results in a case conference. For cases in which conferences are held, differences in opinion among the participating professionals are not uncommon.[6] In keeping with experience in Britain,[7] the dynamics and effectiveness of ad hoc case conferences in the management of child abuse have been controversial in Hong Kong. The CPR was set up in 1986 as a central record office.[1] Children who are considered to be at risk for child abuse are registered for a period of 2 years. The children's names are deleted at the end of the second year, unless caseworkers involved send in a notification for deregistration before this time, or alternatively, send in a request for continuation of registration.[8] The CPR began publishing annual statistical reports in 1996 and data on new cases thus became available for research use.[9] The report for 1998[10] has been used for comparison with the findings in this study. Children admitted to hospital due to suspected child abuse appear to represent a special subset of cases[11,12] whose general characteristics may differ from information available from the CPR. For instance, physical abuse and sexual abuse represented 47% and 40% of new cases reported to the CPR, respectively, compared with 80% and 12%, respectively, for the caseload seen in public hospitals. The MCCA believes that the predominance of physical abuse seen in the hospital setting represents referral bias, with children with identifiable injuries more frequently brought for medical attention. Other aspects of apparent referral bias warrant further consideration. Children admitted to hospital due to suspected sexual abuse were found to have a mean age of 5.6 years. However, more than 68% of sexually abused children reported to the CPR are aged 9 years or older. Thus, public hospitals appear more likely to encounter younger, more dependent victims of suspected sexual abuse—a subgroup for whom interview is difficult and spontaneous

Table 4. Factors associated with establishing abuse in the case conference at multivariate analysis

Factors	Odds ratio (95% CI)	P value
Abuse other than sexual abuse	2.7 (1.4-5.0)	0.002
Female child	1.0 (0.6-1.4)	0.8
Child's age	1.0 (0.9-1.0)	0.2
Child known to agency	2.2 (1.4-3.5)	0.001
Seen at a 'busy' hospital	3.6 (2.4-5.4)	<0.001

disclosure uncommon.[13] Indeed, only 22 of 66 cases of suspected sexual abuse in this series were confirmed by case conference, compared with 259 of 474 cases of confirmed non-sexual abuse (P=0.001). The CPR, the only official statistical report available, should not be regarded as a complete registry of child abuse in Hong Kong. For example, only children considered to be at risk for further abuse are eligible for registration, thus children who have died of maltreatment (and were therefore not at further risk) would not be included. Indeed, the CPR does not record any information on the severity of abuse, thus the data presented in this paper may be considered complementary to the official figures. In keeping with reports elsewhere,[14] inflicted head injury was the leading cause of death in this series. A mortality rate of 30% has been reported among cases of shaken baby syndrome in Hong Kong.[15] This study also identifies other issues in the management of child abuse that may not be apparent from the CPR reports. While the generally accepted definition of child abuse has been published as a guideline,[4] the decision making of case conferences appears to be influenced by other factors. For instance, cases involving children already known to a childcare agency were more likely to be confirmed as victims of abuse. This is probably not surprising since victims often come from families that are socially deficient.[8] The fact that 'busy' hospitals confirmed more cases of abuse compared with 'less busy' units is an intriguing finding. As both public health service and child protection programmes are organised by individual regions in Hong Kong, this observation suggests that local variations may exist that support the positive identification of cases in areas where child abuse is particularly prevalent. These may relate to the nature and severity of the abuse, the dynamics of how abused children are handled, the development of particular expertise in some areas, and the manner in which case conferences are conducted. These factors warrant further study.

This report represents the third and largest clinical series on child abuse in Hong Kong, and provides an indication of the number of cases and the proportion of deaths related to child abuse seen in Hong Kong public hospitals. Compared with the two previous studies conducted in Hong Kong,[16,17] this study suggests an increasing proportion of child sexual abuse cases are presenting to public hospitals. The proportion of perpetrators who are biological parents was high, as these earlier studies have also reported. This may be related to traditional attitudes towards child discipline,[18] and heightened stress levels among local parents.[19] This study also serves to highlight the deficiency of local statistics on the morbidity and mortality associated with child abuse. Without these figures, the full impact of child abuse on child health and society at large may be underestimated. Since the number of deaths recorded in public hospitals only includes cases in which there is a brief period of survival necessitating health care, the death toll associated with child abuse must be higher than the figure presented in this report. The implementation of a child death review programme should be seriously considered to better our understanding of preventable child deaths in Hong Kong.

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