ABSTRACT

Objectives: The aim of this preliminary study was to investigate how commonly child-psychiatric inpatients have experienced and seen violence, and whether children with developmental disorders are at an increased risk for such traumatic events.

Methods: The sample consisted of 41 patients, 29 boys and 12 girls, with a mean (SD) age of 11.8 (3.2) years. Ten children had a developmental disorder, 19 an emotional disorder, 9 a behavioural disorder and 3 a psychotic disorder. The study was performed as part of the normal clinical examinations by paying special attention to violence in the lives of these patients.

Results: 88% of the patients had experienced some form of violence. 49% had experienced active physical violence and 49% active psychological violence. If suspected violence was also taken into account, active physical violence was more common among the patients with developmental disorders (90%) or behavioural disorders (78%) than among those with emotional disorders (37%) or psychotic disorders (67%). On the other hand, passive physical violence without active physical violence had been experienced by 37% of the patients with emotional disorders but not by the other patients.

Conclusions: Violence was common among all groups of child-psychiatric inpatients. These individuals may be vulnerable to violence, as interaction with them may be especially demanding for peers and adults.

Key words: Children, adolescents, developmental disorders, inpatients, violence

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Violence has several forms, including physical or sexual abuse, psychological maltreatment or contextual violence implicit in culture or social disadvantages. Physical violence may consist of hitting, kicking and other types of maltreatment. Psychological violence may include neglect, excessive criticism, intimidation, humiliation and mocking. Sexual abuse is a special form of both physical and psychological maltreatment, which has detrimental consequences for the child’s development. Maltreatment of children may also be chemical, such as giving medicine without medical reasons or giving drugs or alcohol. Studies have also paid attention to the harmful effects of domestic violence even in cases where the child is not personally abused (1-3).

According to a self-report study in the 1980’s, 72 % of Finnish children and adolescents had experienced mild physical violence by their parents and about 8 % serious violence before the age of 14 years (4). At the age of 20 years, 87 % of young adults (N=135) born in 1960 reported having been physically disciplined (5). It has been estimated that in Finland, a country with about 5 million inhabitants, 50.000 children and 20.000 adolescents are maltreated yearly (6). Exposure to violence, if witnessing violence is also taken into account, is even more common. According to Heiskanen and Piispa (7), in 1997, about 50 000 Finnish children aged under 7 years had witnessed violence in situations where the victim was female and the aggressor male. Respectively, about 70.000 children aged 7-14 years and 70.000 adolescents aged over 14 years had witnessed violence. Altogether 21.000 children and adolescents had themselves been victims of violence, and it can be estimated that at least 17% of the children and adolescents aged under 18 have seen or personally experienced domestic violence (7,8).

There are several risk factors for adults’ violent behaviour. Parental alcohol or drug abuse, mental health problems, the parent’s own experiences of maltreatment in childhood and spousal abuse entail risks for family violence and child abuse (9-12). Social and financial difficulties, such as unemployment, poor housing, repeated changes of residence, and overpowering stress in life may predispose adults to uncontrolled behaviour (9,13).

Abuse and neglect of children are associated with several psychiatric problems, such as anxiety and depression, aggression and conduct disorders, attention deficit disorders, symptoms of post-traumatic stress disorder (PTSD), regressive behaviour, developmental
arrest, substance abuse and subsequent suicidal behaviour (14-17). On the other hand, there is not much focused research on abuse of children with disabilities (18), although several factors may increase the risk of abuse of these children, as they often place greater emotional, physical, economic and social demands on their families.

This investigation is a preliminary study, and it aims to define and characterize the violence experienced by children and adolescents treated on child psychiatric wards, as assessed by the clinical staff. We also studied whether children with developmental disorders are at an increased risk for experiencing violence.

**MATERIAL AND METHODS**

The sample consisted of 41 inpatients, 29 boys and 12 girls, treated on a child-psychiatric ward in Oulu University Hospital in Finland. Their mean (SD) age was 11.8 (3.2) years (range 6.1-17.2 years). The boys were younger, their mean age being 10.5 (2.9) years, while the mean age of the girls was 14.9 (1.3) years (p<0.001). The study was performed as part of ordinary clinical work during six months in 1996-1997 by paying special attention to the violence experienced by the patients. Information of the demographic factors, symptoms and psychiatric treatments was gathered from their medical records, and information about violence was gathered from their medical records and by questionnaires filled in by the staff members of the child-psychiatric wards.

Physical, psychological, chemical violence and sexual abuse experienced by the children were assessed. By physical violence, we mean hitting, kicking and other maltreatment. By psychological violence, we mean excessive criticism, intimidation, humiliation and mocking of the child as well as domestic violence towards family members other than the child. Chemical violence means exposure of the child to alcohol, drugs or medicine not needed for medical reasons. Sexual abuse means direct sexual activities with the child, while passive sexual violence also includes exposure of the child to inappropriate sexual stimuli.

The baseline diagnoses were set according to ICD-10 (19) by a clinical child psychiatrist and verified consensually by the two investigators, and they were based on the information derived from the clinical interviews of the patient and the parent(s), on ward observations, and in 34 cases, also on psychological tests. We divided the diagnoses into four groups, and in the case of comorbidity, the main symptoms were used as the classificatory criteria: 1) emotional dis-
orders (N=19), 2) behavioural disorders (N=9), 3) developmental disorders (N=10) and 4) psychotic disorders (N=3).

Emotional disorders included depressive disorders (F32.0, F32.1, F32.2, F32.3), mixed anxiety and depressive disorder (F41.2), prolonged depressive reaction (F43.21) and unspecified childhood emotional disorder (F93.9). Behavioural disorders included conduct disorders (F91) and depressive conduct disorder (F92.0). Developmental disorders included specific developmental disorders of speech and language, unspecified developmental disorders of scholastic skills, specific developmental disorders of motor function, mixed specific developmental disorders, Asperger’s syndrome, unspecified pervasive developmental disorders and disturbance of activity and attention (F80, F81.9, F82, F83, F84.5, F84.9, F90.0). The children in this group had either a pervasive developmental disorder (n=4) or mixed or several developmental disorders (n=5) or a specific developmental disorder with other disorders complicating development, such as enuresis and disturbance of activity and attention (n=1). Psychotic disorders included schizotypal disorder and unspecified acute and transient psychotic disorder (F21, F23.9).

Twelve boys and 7 girls had an emotional disorder, 6 boys and 3 girls a conduct disorder, 10 boys a developmental disorder, and one boy and two girls a psychotic disorder. One boy was re-classified into another diagnostic group following a re-diagnostic assessment.

We present descriptive figures and percentages. The differences between the groups were tested using Fisher’s exact test and Mann-Whitney U-test.

RESULTS
Previously, 26 (90%) boys and 4 (33 %) (p=0.001) girls had been given psychiatric outpatient treatment either in a hospital or in a child guidance clinic, and the duration of outpatient treatment ranged from one month to over two years among the boys and from one month to one year among the girls. Thirteen boys had previously been in inpatient treatment, the length of which had ranged from one month to over six months. One girl had previously been on a psychiatric ward for two months. The mean (SD) length of the ongoing treatment on the ward was 2.5 (2.3) months (range 9 days to 9 months), being 3.0 (2.4) months (range 14 days to 9 months) among the boys and 1.4 (1.6) months (range 9 days to 4.4 months) among the girls (p=0.018).
The most common symptoms for which the children had been referred to treatment were difficulties at home and at school, and these were especially common among the children with behavioural disorders (Table I).

| Main symptoms motivating referral | Emotional disorders n=19 (%) | Behavioural disorders n=9 (%) | Developmental disorders n=10 (%) | Psychotic disorders n=3 (%) | p-value | Total n (%) |
|----------------------------------|-----------------------------|-------------------------------|----------------------------------|-----------------------------|---------|-------------|
| Behavioural problems            | 7 (37)                      | 4 (44)                        | 7 (70)                           |                             | 0.170   | 18 (44)     |
| Difficulties at home*           | 9 (47)                      | 8 (89)                        | 2 (20)                           | 2 (67)                      | 0.017   | 21 (51)     |
| Difficulties at school*         | 8 (42)                      | 8 (89)                        | 4 (40)                           | 1 (33)                      | 0.067   | 21 (51)     |
| Suicidal attempt/suicidal tendencies | 7 (37)                    | 2 (22)                        |                                  |                             | 0.106   | 9 (22)      |
| Difficulties in peer relations/end of courtship | 4 (21)                       | 1 (10)                        |                                  |                             | 0.589   | 5 (12)      |
| Psychotic symptoms              |                             | 2 (67)                        |                                  |                             | 0.004   | 2 (5)       |
| Depression/fears                | 1 (5)                       | 2 (20)                        |                                  |                             | 0.444   | 3 (7)       |

Fisher’s exact test was used in the analyses. The differences were tested within the distributions. * May also include behavioural problems.

The staff reported that altogether 36 (88%) children had experienced violence in some form, and 27 of them (66%) had experienced active violence (Table 2, Figure 1). There was no difference in the forms of experienced violence between the genders. Seven children (5 boys and 2 girls) had experienced physical violence only, and seven children (5 boys and 2 girls) had experienced psychological violence only. Fifteen children (10 boys and 5 girls) had been exposed to both physical and psychological violence. Four boys had been exposed to physical, psychological and sexual violence, and one boy had experienced psychological, sexual and chemical violence. One girl had been exposed to psychological and sexual violence, and one girl to physical, psychological and chemical violence. The physical and psychological violence had been active in two thirds of the cases, whereas the sexual harassment had been passive in 80% of the reported cases. This means that the children had been exposed to different sexual stimuli, but had not been actively abused, or that possible active abuse had not been verified. If suspected violence was also taken into account, all except one child had experienced violence (Figure 1).
There was a trend towards active physical violence being less common among the children with emotional disorders, but these children had experienced passive physical violence more commonly than the other patients (Table 2). When suspected physical violence was also taken into account, physical violence had been most common among the children with developmental disorders and behavioural disorders. Chemical violence had been experienced by two of the psychotic patients. When all forms of violence were taken into account, 70% of the children with developmental disorders had experienced violence, whereas the respective proportion in the other diagnostic groups was 90-100%, and there was no statistical difference.

**DISCUSSION**

This is a preliminary study, where violence of different forms experienced by child-psychiatric inpatients was assessed by a clinical team. The number of patients is small, and most comparisons therefore fail to reach statistical power. We would also like to point out that we did not have a control group in our study. However, the total amount of violence experienced by the patients in all the diagnostic groups...
gives important information and indicates that more attention should be paid to these traumatic experiences of child-psychiatric patients.

Almost 90% of child-psychiatric inpatients had experienced some kind of violence. Active physical violence and active psychological violence were the most common forms, and half of the children had experienced each of these forms of violence. On the other hand, active chemical and active sexual violence were rare, but milder exposure to inadequate sexual stimuli was more common and present in 12% of the cases.

Children in all diagnostic groups had experienced violence. There was, however, a trend towards active physical violence being most common among the children with behavioural disorders. Violence generates violence, and children with conduct disorder are themselves often aggressive and violent (20,21). In a study by Song et al. (22), exposure to violence and symptoms of psychological trauma explained over 50% of the variance in both male and female adolescents’ self-reported violent behaviour. Abused children are likely to acquire deviant patterns of processing social information, which may mediate the development of aggressive behaviour (23). In an atmosphere of violence, it is hard for children to develop an ability to con-

| Violence                      | Emotional disorders n (%) | Behavioural disorders n (%) | Developmental disorders n (%) | Psychotic disorders n (%) | p-value | Total n (%) |
|-------------------------------|---------------------------|----------------------------|-------------------------------|--------------------------|---------|-------------|
| Active physical               | 6 (32)                    | 7 (78)                     | 6 (60)                        | 1 (33)                   | 0.096   | 20 (49)     |
| + suspected                   | 7 (37)                    | 7 (78)                     | 9 (90)                        | 2 (67)                   | 0.020   | 25 (61)     |
| Passive* physical             | 7 (37)                    | 7 (78)                     | 6 (60)                        | 1 (33)                   | 0.026   | 7 (17)      |
| Any physical                  | 13 (68)                   | 7 (78)                     | 6 (60)                        | 1 (33)                   | 0.373   | 27 (66)     |
| Active psychological          | 7 (37)                    | 5 (56)                     | 5 (50)                        | 3 (100)                  | 0.266   | 20 (49)     |
| Passive* psychological        | 7 (37)                    | 2 (22)                     | 5 (50)                        | 3 (100)                  | 0.106   | 9 (22)      |
| Any psychological             | 14 (74)                   | 7 (78)                     | 5 (50)                        | 3 (100)                  | 0.415   | 29 (71)     |
| Active chemical               | 1 (33)                    | 1 (33)                     | 1 (33)                        | 0.073                    | 1 (2)   |
| Passive* chemical             | 1 (33)                    | 1 (33)                     | 1 (33)                        | 0.073                    | 1 (2)   |
| Any chemical                  | 2 (67)                    | 2 (67)                     | 2 (67)                        | 0.004                    | 2 (5)   |
| Active sexual                 | 3 (16)                    | 3 (16)                     | 2 (20)                        | 0.647                    | 5 (12)  |
| Passive* sexual               | 3 (16)                    | 2 (20)                     | 2 (20)                        | 0.408                    | 6 (15)  |
| Any sexual                    | 7 (78)                    | 7 (78)                     | 7 (70)                        | 3 (100)                  | 0.372   | 27 (66)     |
| Any active                    | 10 (53)                   | 7 (78)                     | 7 (70)                        | 3 (100)                  | 0.106   | 9 (22)      |
| Any passive*                  | 7 (37)                    | 2 (22)                     | 2 (22)                        | 0.268                    | 36 (88) |

Fisher’s exact test was used in the analyses. The differences were tested within the distributions. *Passive violence only, not active.
trol their impulses and they are more likely to learn violent solutions and to identify with the aggressive aspects of their care-givers.

The overall incidence of violence was slightly, but non-significantly lower in the group of developmental disorders. Genetic factors and evident difficulties in somatic development and well-being play a major part in the etiology of these disorders. However, we should note that most children with developmental disorders had also experienced violence in their lives. It has been previously reported that children with developmental disorders may well be at risk of being abused (24). It has been suggested that the disappointment and frustration associated with the care of these children and the loss of the possibility to raise a totally healthy child may predispose parents and professionals to negative feelings that are hard to contain. This may lead to abuse and punishment of the child (25). Difficulties in social relationships may also evoke irritation in peers and lead to violence in peer relationships.

It may be difficult to assess the impact of abuse on children with autism or other PDD, because they frequently show unusual or inconsistent emotional responses and also have difficulties in expressing their feelings. However, abuse at school has been shown to be associated with increased mood disturbances, tantrums, over-activity, over-clingy or rejecting behaviour, fears and anxieties, self-injurious behaviour, sleeping problems, eating problems and aggressive and destructive behaviour in children with PDD (24,25). In our sample, it is hard to say, whether some of the symptoms were post-traumatic. All of the children with a developmental disorder had been referred to treatment at least partly because of behavioural problems. Behavioural problems, such as aggressive and destructive behaviour, have been previously connected to post-traumatic symptoms in children with PDD (24,25).

Violence towards children with developmental disabilities is an important issue also because abuse has been documented to delay cognitive development and to hamper physiological responsiveness, and it has also been suggested to hamper verbally mediated cognitive responses to the environment (26). Glaser (27) pointed out in his review that it is possible that maltreatment and neglect cause changes in brain function that result in a delay or absence of the development of some skills.

The group with emotional disorders consisted mostly of depressive patients, and the risk of depression among children and adoles-
cent is increased by losses, other stressful events, parental depression, social disadvantages, family violence and physical maltreatment (21,28-30). It has been noted that passively depressed children are prone not to evoke positive feeling in staff members while in psychiatric treatment, and it also seems hard to find a positive way to support these children at home (31). In harmony with these results, we found passive violence to be especially common among the patients with emotional disorders.

There were only three psychotic patients in our sample. Thus, we cannot make any generalizations about the results concerning them. However, all of these patients had been exposed to active psychological violence and commonly also to chemical violence. Psychotic symptoms have previously been connected to experienced maltreatment (32). Part of the chemical maltreatment may consist of misuse of the medical drugs prescribed to these children.

Violence is common in the lives of children and adolescents treated on psychiatric wards. We suggest that more attention should be paid to facing these problems in psychiatric treatment, and our young patients and their families need help to deal with these traumatic experiences. We must also remember that individuals experience the same events differently, depending on their level of functioning across the domains of psychological and biological development. Thus, violence may be especially harmful for children who have developmental delays and obstacles, as they have difficulties to comprehensively process the surrounding events and to deal with their emotions.

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