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## Koluchova's twins

Firstly in 1972<sup>1</sup> and again this year<sup>2</sup> Koluchova has described the progress of a pair of identical twins in Czechoslovakia who had been isolated and cruelly treated from the age of 18 months to 7 years by their stepmother. When discovered the twins could barely walk; they suffered from rickets and were terrified by people and normal objects; their speech, language, and play were rudimentary and primitive; and the results of their intelligence tests were in the range of severe subnormality. Nevertheless, they were in fact suffering from severe deprivation and rejection, and their progress after removal from their family was surprisingly good. There was no evidence of permanent cognitive damage: their speech and language developed normally; their school work caught up with their age group; and they appeared agile, gay, and popular. After a period of indiscriminate "touch-hungry" contact with adults characteristic of deprived children strong bonds developed with their foster mother, and they have now attained an IQ of 100 at 14 years of age. They retain an understandable degree of anxiety about their past, and it is not possible to predict their future mental health and adjustment as adults. They do seem substantially to have recovered from what would be expected to be an overwhelming traumatic experience.

This case has provoked much interest and speculation. Were the twins preserved from permanent damage by having 18 months of reasonable care in a children's home after their mother's death? Does the fact of their being twins mean that their "secret language,"<sup>3</sup> self-isolation, and attachment to each other preserved their potential for development?

Clarke and Clarke<sup>4</sup> have quoted Koluchova's work (together with a number of similar experiences<sup>5-7</sup>) to show that against expectation even severe deprivation such as that suffered by the twins can be reversed. Their thesis is that good early experience is not the most powerful factor in determining the child's future mental health. They are attempting to balance Bowlby's original influential propositions<sup>8</sup>—which were that for good mental health the earliest relationships between mother and baby should be experienced as warm, intimate, and continuous, and experienced by both with satisfaction and enjoyment. As a result of Bowlby's work there has been greater interest in and sensitivity to practices such as early separation of mothers and young children,<sup>9</sup> admission to hospital,<sup>10</sup> and care in institutions.<sup>11</sup> Attempts have been made to reverse the worst effects by making hospitals more human and to prevent separations by maintaining the integrity of the family; compensatory education in the form of "head-start" programmes<sup>12</sup> has been given as an attempt at immunisation.

Recently the influences in this early period of life have been examined more critically, and attempts made to evaluate assumptions that early parent-child relationships are paramount and should be preserved at all costs. Clearly, if the relationship is cruel and causing such harm as in the Koluchova twins and other examples of child abuse then separation may be necessary to preserve life. Furthermore, the assertion that antisocial behaviour by young people may be associated with separation from parents has to be modified to include the strain of the child having lived in a disturbed marital<sup>13</sup> setting or a distorted, rejecting family.<sup>14-16</sup> Institutional settings may paradoxically help children who are emotionally disturbed<sup>17</sup> and those who fail to grow because of deprivation.<sup>18</sup> Clearly the quality of the alternative care provided for children is important in modifying the intensity and form of distress that may follow separation.<sup>19</sup> Protest leading to despair and resignation may be prevented. Later adoptions may be effective, despite earlier relative privation,<sup>20</sup> and "growing up adopted"<sup>21</sup> has some advantages over being "born illegitimate."<sup>22</sup>

With such findings as Koluchova's and the Clarkes' it would be tempting to write-off the importance of the early years. But other research with a different theoretical basis<sup>23 24</sup> should maintain the balance. Such work regards the infant not as a passive receptacle but as an active partner<sup>25</sup> with the mother.<sup>26</sup> A recent Ciba symposium<sup>27</sup> has described work reasserting the sensitivity of parent and infant. Additional early contact of mothers and infants in the first days of life appears to have an important effect on whether the infant will be breast-fed, the "bonding" of mother and infant, and his later language development.<sup>28 29</sup> This early relationship is sensitive to interruptions, impingements,<sup>30 31</sup> and factors such as separations, prematurity,<sup>32</sup> and illness in the first days of life. These factors may be associated with later child abuse in families vulnerable through adverse social factors.<sup>33</sup> The effects of such early separations are probably as powerful on the mother as on her infant. They may affect her later ability to respond if she has missed the early opportunities of becoming preoccupied,<sup>34</sup> "falling in love" with her baby.

Given a good enough family setting and a responsive child many adverse conditions may be reversed, and therapeutic interventions may effect great changes. But prevention is far preferable: society should surely take account of the mounting body of research and observations and develop a social policy which neither idealises mothers and the family nor loses the unique possibilities for nurture and development of children families can provide.

One final thought: what might have happened if the Koluchova twins' father had been able to continue looking after them for the 18 months after his wife's death instead of placing them in care? He might have become more attached to them and more able to counter and not collude with the stepmother's abuse.

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## Shopping around

In 1974-5 the NHS spent £100m on medical supplies in England alone. The shopping was done by districts, areas, regions, retained boards of governors, and the DHSS with little or no co-ordination; so that while large numbers of, say, electrocardiographs might be supplied to the NHS no one purchasing organisation handled enough to be able to compare the many varieties available. Production of medical equipment is just as fragmented and disorganised. There are 2000 firms supplying health products in Britain. Some are small workshops employing a handful of people, some are large firms

with exclusively medical interests, some are subsidiaries of large corporations with interests well outside medicine, and some are foreign companies.

With this background it is reassuring that the DHSS recently set up a committee to "review existing policy for NHS procurement and to make recommendations as to the most cost-effective policy and its implementation, bearing in mind the need to strengthen the home market as a basis for exports." Most of its recommendations<sup>1</sup> should help to reduce the present chaos. The committee has recommended a reduction in the variety of essentially similar equipment. There are, for example, over 53 models of ECG monitors being supplied. Clearly someone should be evaluating these so that the least effective may be withdrawn. The evaluation system should, the report states, consider the safety, technical performance, performance in clinical use, reliability, and cost of equipment, and it should be carried out in hospitals and academic departments. Such a policy should result in an increase in orders for the better pieces of equipment, so that their manufacturers would be able to increase production and efficiency and reduce costs. Already Britain is a net exporter of medical equipment (in 1975 there were £126.5m exports against £70m imports). More critical assessment of equipment by the British consumer to exclude the least satisfactory should increase exports further.

Another defect of the present system is the buying bonanza that tends to occur at the end of each financial year. The committee believes that this could be avoided by the use of a three-year rolling programme, the first year being firm, the second year provisional, and the third year planned, with annual revision. Many hospitals already have this sort of system in use. It is clearly an improvement on the alternative and apparently still common practice of haphazard ordering described in the report. However, the three-year cycle is not without problems. It requires constant updating; there should never be simply a question of Buggins's turn, whereby an instrument is ordered because Buggins vaguely thought that it might be worth having three years ago. Revision of equipment lists should probably be undertaken by Cogwheel divisions and the combined list assembled on behalf of the medical committee by a consultant who is prepared to take on the considerable task of deciding whether, for example, the division of surgery's top priority should have precedence over the urgent request from the physicians.

Perhaps the most contentious recommendation is that authorities should be wary of the growth of district supplies organisations not directly accountable to the area supplies officer. This recommendation implies that the professional skill needed to evaluate equipment is to be found only among area staff, a belief for which there is no evidence. The area authorities need a monitoring and co-ordinating function, but the emphasis in the report on accountability seems wrong. Some current practices are exceptions to the criticisms in the report. The method used for purchasing disposable syringes is an example of what has already been achieved by central buying and storing against hospital orders, but such a system cannot be applied easily to nondisposable items bought in smaller numbers.

In many regions the regional scientific officer has become the officer concerned with the purchase of larger items of equipment, backed by a professional committee distributing a budget of perhaps £1.5m. Such a system may streamline purchasing but it has to be reconciled with financial control by the districts. While regions may be the best places for vetting larger items of equipment, areas and districts should