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## Preparing Children to Be Bone Marrow Donors

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**Purpose/Objectives:** To review literature regarding children as bone marrow donors and describe the evaluation of an individualized intervention to support children who will be donors for parents or siblings.

**Data Source:** Research studies, abstracts, and clinical reports describing interventions or psychosocial issues related to child donors, parent interviews, and clinical experiences.

**Data Synthesis:** Child marrow donors and caregivers benefit from interventions that illuminate the process and provide psychosocial support. Use of a teaching book enhances intervention and provides a tool for parents to use after transplantation.

**Conclusions:** Psychosocial distress in child marrow donors and parents can be minimized through education and therapeutic interventions. Research is needed to validate the efficacy of interventions and determine whether psychosocial complications are decreased.

**Implications for Nursing:** Child donors, especially those for parents, should receive support and attention for their unique psychosocial needs.

one marrow graft collected from child donors has been used to treat patients in need of transplantation for three decades. However, the preparation and psychosocial care of child donors are not well documented. This article summarizes the psychosocial literature related to child donors; describes an intervention that provides support to them, including the use of a teaching book; and discusses the clinical evaluation of the intervention.

## Literature Review

In the past, literature on marrow donors has focused on adults (Andrykowski, 1994b; Hill, Chapman, Jackson, & Sullivan, 1989; Patenaude & Rappeport, 1984; Stroneck et al., 1989; Wolcott, Wellisch, Fawzy, & Landsverk, 1986). Adult donors experienced pain, mild psychological distress, and positive emotions associated with altruism. Adult donors who were related to the recipients had significantly more psychosocial problems when compared to donors who were not related to the recipients. Related donors described greater pain and more negative emotions (Hill et al.), suggesting that related donors are more vulnerable to psychological sequelae than unrelated donors.

Psychosocial issues related to child marrow donors have been addressed minimally. Pediatric donors often were discussed in the context of the family rather than the psychological impact on the individual child (Packman, Crittenden,

## **Key Points...**

- Child donors coped successfully with physical and psychological tasks when provided with developmentally appropriate information.
- Coping improved when interventions included opportunities to ask questions, express feelings, and anticipate difficulties.
- ➤ Parents were positive about participation in a structured program to support child donors.

Fischer, et al., 1997; Packman, Crittenden, Schaeffer, et al., 1997). Pediatric donors experienced pain, guilt, psychological distress, and threats to self-esteem. Specific problems included sleep difficulties, behavior problems, refusal to discuss the process, and problems in school performance (Kinrade, 1987; Weisz & Robbennolt, 1996). Other issues were conflicts about choice of donor, resentment about being chosen, and feelings of responsibility for the outcome of transplantation (Packman, Crittenden, Fischer, et al., 1997). Psychological distress may be exacerbated when patients who receive grafts die as a result of the transplant process (Weisz & Robbennolt). Packman Crittenden, Schaeffer, and colleagues (1997) found that sibling donors had higher anxiety and lower self-esteem when compared to sibling nondonors. Their findings suggested that siblings need follow-up beyond the transplant period.

Three approaches to the psychosocial care of child donors have been described (Dannie, 1991; Kinrade, 1987; Shama, 1998), but none discussed the use of children as marrow donors for their parents. Early work by Gardner, August, and

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