Living with the Ilizarov frame was better than expected

Martin L, Farrell M, Lambrenos K, *et al.* Living with the Ilizarov frame: adolescent perceptions. *J Adv Nurs* 2003;**43**:478–87.

Q What are adolescents' anticipated and actual experiences of living with an Ilizarov frame?

DESIGN

Qualitative study with psychometric testing.

SETTING

A children's hospital and children's homes in Liverpool, UK.

PARTICIPANTS

15 adolescents (11–18 y, 60% boys) who were having planned application of an Ilizarov frame within 12 months. Adolescents being managed with the frame for acute traumatic injury and those with severe learning difficulties were excluded.

METHODS

Psychometric tests explored body image, depression, and coping responses. Semistructured interviews were administered preoperatively, 6 months postoperatively, and 1 month after frame removal. Interview questions, derived from a pre-study focus group, related to participants' perceptions of their daily experiences of living with the Ilizarov frame. Interviews were tape recorded, transcribed, and analysed using a thematic categorical approach. Themes were reviewed with participants for accuracy.

MAIN FINDINGS

3 main themes emerged from preoperative interviews, and 6 themes emerged postoperatively. Before application of the frame, participants anticipated an *all encompassing impact* that would affect their normal daily activities, social relationships, and future plans. Despite a feeling of putting one's life on hold, participants identified *coping resources and strategies* including assistance from family and peers. One of the main coping strategies was self resignation, which indicated acceptance of the frame to achieve a desired outcome and recognition of the need to get used to it. A third theme, *treatment expectations*, included feeling prepared for surgery, length of treatment, and pain.

6 themes were identified after application of the frame: *actuality of experience*; *coping and getting on*; *concerns, feelings, and reactions*; *support for coping*; *advice and recommendations*; and *treatment experiences*. The strongest theme, *actuality of experience*, showed that pain was manageable after the first month and adaptation to the frame occurred. *Coping and getting on* was more positive than anticipated, which promoted a sense of self confidence. *Advice and recommendations* had 2 dimensions: advice to other adolescents and advice to health professionals. Other adolescents were advised to proceed with the treatment and told that they would be OK. Professionals were advised of the importance of preoperative teaching and listening sensitively to patients.

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CONCLUSIONS

The main themes identified by adolescents before application of an Ilizarov frame were anticipation of an all encompassing impact, coping strategies including self resignation, and certain treatment expectations. Postoperatively, they indicated that the frame was not as unmanageable or painful as expected.

Commentary

The study by Martin *et al* highlights important considerations for nurses working with adolescents undergoing complex medical treatments. Practical implications for preoperative and postoperative care as well as home care are identified.

Preoperatively, nurses can conduct thorough psychosocial assessments to identify adolescents' desired outcomes of treatment, coping styles, and thoughts or concerns about how the proposed treatment might affect their daily lives. Although standardised psychometric measures may provide a consistent approach to assessing and understanding the effects of certain concepts such as body image, an interview is recommended because it provides opportunities for adolescents to reframe their expectations. Nurses might consider using former patient testimonials, story boards, or video clips to describe the general response and recovery experiences of other teens to engage patients in a dialogue about the potential effects of treatment on their lives.

Adolescents found the first postoperative month to be the most difficult time because of their dependence on others. Nurses can assist adolescents to cope by physically caring for them while respecting their need for independence and privacy. Structured telephone or internet interviews after discharge home can be used to monitor patients' transition and adaptation from the hospital environment. Nurses may also design creative mentoring, buddy, or peer networks to connect patients to others who have had similar experiences.

The findings are congruent with the "norms" of adolescence in which peer relationships and social networks are of critical importance. Adolescents undergoing complex and intensive treatments may feel similar to the teens in this study in that the medical care they require puts their "lives on hold." Anticipatory guidance and exploratory dialogue with teens and their parents to acknowledge these issues and to strategise how to best maintain social networks are important.

Use of both qualitative and quantitative approaches was beneficial in this study because the researchers were able to consider answers to their research question from different perspectives that were complementary to one another yet highlighted different interpretations of the data. The convergence of multiple data sources moves toward a more full and accurate representation of the teens' reality.

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