Dental fear with and without blood-injection fear: implications for dental health and clinical practice

Richie Poulton\textsuperscript{a, *}, W. Murray Thomson\textsuperscript{b}, R. Harvey Brown\textsuperscript{b}, P.A. Silva\textsuperscript{a}

\textsuperscript{a}Dunedin Multidisciplinary Health and Development Research Unit, Preventive and Social Medicine, Dunedin School of Medicine, University of Otago, P.O. Box 913, Dunedin, New Zealand
\textsuperscript{b}School of Dentistry, University of Otago, Dunedin, New Zealand

Accepted 11 December 1997

Abstract

The relation between dental, blood and injection fear and oral health was examined in 936 New Zealand 18-year-olds. Of the approximately ten percent ($n = 96$) of the sample who reported a dental fear, 1 in 10 also reported a fear of blood and 53% a co-morbid fear of injections. Study members with dental fear alone or co-morbid dental and blood or injection fear had significantly worse oral health (i.e. greater caries experience) than a no-fear comparison group or individuals with blood-injection fear only. Further, individuals with dental and blood or injection fear had a significantly higher level of recent tooth decay than individuals with dental fear alone. Time since last dental treatment also tended to be highest in this group. Implications for dental health and practice were discussed. © 1998 Elsevier Science Ltd. All rights reserved.

1. Introduction

Despite continued interest in the relation between dental fear and blood-injury-injection (BII) fears, their combined impact on dental health is not well understood. Past research has examined overlap among these fears in an attempt to explain fear of the dentist (e.g. Fiset et al., 1989). That is, does dental anxiety result from specific learning experiences (e.g. dental trauma) or is it part of a more generalized anxiety syndrome (e.g. Fiset et al., 1989; Roy-Byrne et al., 1994; Weiner and Sheehan, 1990)? More recently, the nature and extent of this co-morbidity has been examined in the hope of improving clinical practice. Locker et al. (1997) hypothesized that patients with dental anxiety and blood-injury (BI) fears may be more difficult

* Corresponding author.
to treat than those with dental fear alone due to the potential for more extreme fear reactions in those with multiple fears. This was expected due to the characteristic fainting response seen in most individuals with BII fears (Kleinknecht et al., 1990).

The Locker et al. (1997) study investigated the relation between dental anxiety (defined by Corah’s Dental Anxiety Scale scores >13, 8 or above on the Gatchel Fear Scale or self-reported high fear or terror of dental treatment) and blood-injury fears in a large epidemiological sample over the age of 18 years. Results showed very few differences between dental anxiety Ss with and without BI fears with respect to fear-evoking stimuli or fear reactions. Based on their findings, they concluded that ‘BI fears do not complicate dental anxiety to any great degree in the sense that they do not appear to give rise to more extreme or unique [anxiety] response patterns’ (Locker et al., 1997, p. 589). However, because their survey was based on self-report measures, clinical assessment of dental health was not conducted. Hence the relation between dental fear, BII fears and clinically assessed dental health remains unknown.

Understanding this relationship is important for several reasons. First, co-morbid dental and blood-injection fear (vs dental fear only) may be related to particularly poor oral health (i.e. greater caries experience). If this were so, provision of appropriate support/intervention would be required to minimize adverse dental outcomes in this group. Second, identification of a ‘high-risk’ dentally fearful group may help target public health messages more effectively. Further, this information may enable dental practitioners to accurately screen patients in need of treatment to reduce fear and avoidance of dental treatment. To address these issues the present study explored the relation between dental fear, with and without blood-injection fear, and dental health (i.e. caries experience, treatment behavior) in a large sample of New Zealand 18-year-olds.

2. Method

2.1. Participants

The sample consisted of members of the Dunedin Multidisciplinary Health and Development Study, a longitudinal investigation of young people’s health, development and behavior from birth to adulthood. The study and sample members have been described in detail elsewhere (Silva and Stanton, 1996). Briefly, 1,037 members of a cohort born in Dunedin between 1st April, 1972 and 30th March, 1973 have been assessed with a diverse array of psychological, medical and sociological measures. Participation rates have been high at age 3 (n = 1037), 5 (96%, n = 991), 7 (92%, n = 954), 9 (92%, n = 955), 11 (90%, n = 925), 13 (82%, n = 850), 15 (95%, n = 976), 18 (97%, n = 1008), and most recently 21 (97%, n = 992). The present data were from the assessment conducted at age 18.

2.2. Dental Health (DMFS scores)

Dental caries is a chronic, progressive disease which may ultimately result in loss of teeth if allowed to progress unchecked. Teeth which have been irreversibly affected by caries can either
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات