

RESEARCH SUMMARY

Pain relief from out-of-hours dental services?

The effectiveness of out-of-hours dental services: I. pain relief and oral health outcome

R. Anderson, D. W. Thomas and C. J. Phillips *Br Dent J* 2005; 198: 91–97

Objective

To compare the effectiveness of four types of out-of-hours emergency dental service, including both 'walk-in' and telephone-access services.

Basic design

Questionnaire survey of patients attending weekend emergency dental services, with measurement of self-reported oral health status and dental pain (at attendance and follow-up) and retrospective judgements of change in oral health status.

Setting and subjects

Two health authorities in South Wales, UK. A total of 783 patients who completed questionnaires at attendance, and 423 who completed follow-up questionnaires.

Results

For patients who saw a dentist there were no consistent differences in the effectiveness of the four services, whether measured as pain relief, oral health gain or using patients' retrospective transition judgements about feeling better after their episode of emergency dental care. The proportion of patients reporting no improvement (transition judgements), either an hour after or the day after seeing the dentist, was surprisingly high (30–40% and 23–38% respectively). Although the 'rotas for all' – a telephone-access GDP-provided service for both registered and unregistered patients – achieved both the highest reductions in pain scores and the greatest improvements in dental health status between attendance and follow-up, this effect may reflect health gains due to care received after the episode of emergency dental care.

Conclusions

Neither the setting where emergency dental patients are seen, nor the type of dentist who sees them, appear to have any significant effect on patient-reported health outcomes. Although further exploration of the factors that predict poor pain relief or low oral health gain is required, future research on these services should focus on the process of care and accessibility.

IN BRIEF

- This is the first comparative study of pain relief and oral health gain experienced by dental patients attending different out-of-hours dental services.
- Despite the low response rates, the chances of receiving effective care for those who saw a dentist appears similar across services – whatever the treatment setting, contact arrangements or the type of dentist seen.
- An hour after seeing the emergency dentist, and even the day after, a considerable proportion of patients in all four services reported little or no relief from symptoms.
- Further research should focus on explaining who experiences these poor health outcomes, the possible effect of different service designs on access to care, and on other outcomes such as good advice and effective reassurance.

COMMENT

The problems of provision of emergency dental services out-of-hours service has always been a contentious issue within the dental profession. A variety of methods to provide this service have developed. This has led to considerable confusion in the minds of the public and health professionals about where, and how, patients with acute out-of-hours emergency dental problems should be treated. A large number of patients may be currently seeking emergency dental treatment often inappropriately from general medical practitioners. As the general problem of access to NHS dentistry increases, out-of-hours services are becoming more important in the overall provision of dental care.

There is an urgent need to review the current provision of how and where out-of-hours service are provided in the light of the *Health and Social Care Act 2003*. Primary care organisations are already arranging to commission general medical out-of-hours services and will from April 2005 be responsible for all NHS primary dental care services including out-of-hours care. Opportunities will exist for developing truly integrated services. There are currently no comparative studies that assess the effectiveness of emergency dental care provided in different ways. This paper is a welcome start in that process.

This paper is one of two that sets out to compare the effectiveness of four types of out-of-hours emergency dental services from a mixture of settings and differing access arrangements (walk-in or telephone access). However this survey demonstrates the difficulties and limitations of using such measurements in the situation of trying to measure relief from acute dental problems and more work is needed to develop these measures. However it was surprising that a high proportion of patients reported little or no improvement. This could possibly be due to the choice of outcome measures that did not account for the psychological benefits of advice and reassurance. This is an important factor as many patients contacting out-of-hours services seek reassurance and if appropriate can use self-medication until they are able to access care during normal surgery hours. In some areas of the country, NHS Direct is fulfilling this role as part of an integrated dental out-of-hours service.¹

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doi: 10.1038/sj.bdj.4811977

1. Evans D J, Smith M P, Grant S M B, Crawford M A, Bond J. Out-of-hours Emergency dental services-development of one possible local solution. *Br Dent J* 2001; 191: 550–554.