

IN BRIEF

- In 2005 more patients presenting to dental practice were taking medications compared to 1984.
- There is an increasing trend toward polypharmacy.
- Patients receiving multiple medications have been reported to suffer more adverse effects of dental local anaesthesia.
- An increase in the number and range of medications taken by patients increases the risk of drug interactions with medication that dentists may prescribe.
- Maintaining a contemporaneous knowledge of pharmacology and drug interaction ensures the provision of safe dental care.

Patients' prescribed drugs: 20 years of changes

Prescribed medication taken by patients attending general dental practice: changes over 20 years

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ABSTRACT

Introduction

Drug therapy can influence treatment planning and provision of dental care by general dental practitioners. There is little published information regarding the types of drug therapy taken by patients presenting for dental treatment in the United Kingdom.

Objective

To record the drug therapy taken by patients presenting to general dental practice in 1995 and 2005 and compare to data reported in 1984.

Setting

General dental practice.

Study design

Prospective cross-sectional study.

Method

Patients presenting to general dental practices in 1995 and 2005 were questioned regarding their current drug therapy. Patients' general medical practitioners were contacted if their drug history was unclear.

Results

35%, 21.1% and 43.8% of patients were taking medications in 1984, 1995 and 2005 respectively. Statistically significant increases in the proportion taking three or more medications were evident in both 1995 and 2005.

Discussion

In 2005 more patients presenting to dental practice were taking medications compared to 1984. There is an increasing trend toward polypharmacy. Therefore it is important to maintain a contemporaneous knowledge of pharmacology and drug interactions to ensure the provision of safe dental care.

EDITOR'S SUMMARY

Ask a patient if they are 'on drugs' and you may well get a rather shocked look and a flat denial. Drugs are something illegal and quite outside their experience. Ask if they are taking any medicines and the reaction will be quite different. The fact that so many more of our patients are now receiving prescription medicines has a series of consequences.

This paper tracks the growth in prescribed medicine in patients attending general dental practice across a twenty year period to a quite surprising 43% in 2005. Although conducted in a specific area of the UK, from personal experience and anecdote, the trend if not the exact percentage probably applies across the country. As well as there being more drugs from which to prescribe than in 1984, and for more conditions, the trend must also be influenced by the greater, ageing population who require not only more drugs but also a greater mixture of them. This inevitably means that the possibilities of interactions with, and contra-indications to, drugs used in dental practice increases, as well as side effects from the drugs themselves.

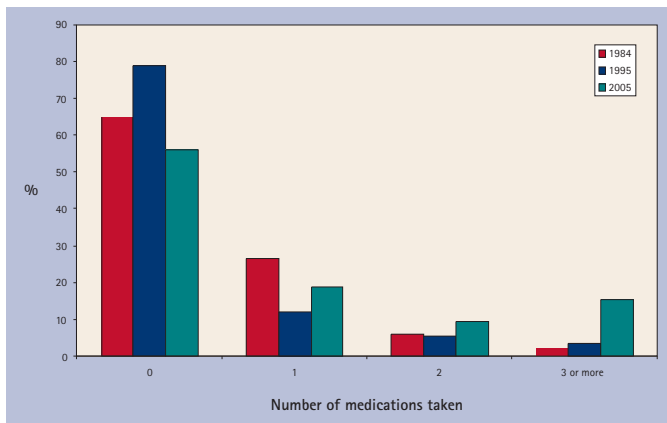
Many patients experiencing xerostomia, for example, will be taking medication which causes or at least exacerbates this condition and effective relief may only be brought about by a combination of action by the dental practitioner and the patient's medical practitioner.

The main message to be taken from this work must surely be that as practitioners we need to continue our vigilance on the changing medical histories of our patients as well as ensuring we have access to up-to-date sources of information on pharmaceuticals and therapeutics. One can perhaps foresee a time when in the refinement of continuing professional development this could become one of the core subjects.

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 203 issue 4.

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Distribution of the number of medications taken (percentage)

FULL PAPER DETAILS

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AUTHOR QUESTIONS AND ANSWERS

1. Why did you undertake this research?

Drug therapy can influence treatment planning and the provision of dental care by general dental practitioners. There is a paucity of information regarding the types of prescribed medication taken by patients presenting to general dental practices for treatment in the United Kingdom. This study was undertaken to identify changes in the types of prescribed medication taken by patients attending general dental practice over the last two decades. This information can be used to plan undergraduate and postgraduate teaching in clinical pharmacology and drug interaction.

2. What would you like to do next in this area to follow on from this work?

The prescribed medication taken by patients attending general dental practice changes with time as new drugs are developed and introduced into clinical practice. The authors propose to monitor these changes with future studies, with the aim of updating clinical pharmacology teaching of dental students. In the future, a multiregional study would reduce the inaccuracy from comparing geographically disparate areas.

COMMENT

This is a fascinating piece of work. Healthcare is becoming increasingly complex across the world. The UK NHS is the biggest public sector organisation in the UK and the third biggest employer in the world. It attempts to look after the health of the 60 million people living in the UK. The complexity should not therefore come as any surprise.

This study examines one particular aspect of this story: prescription drug use. The authors surveyed patients in general dental practice in 1995 and 2005 regarding their prescription drug use. They further compared this data to previously published work from 1984. There are two principle conclusions in patients attending general dental practices today:

- increased prescription drug use
- increased polypharmacy.

15.4% of patients were taking three or more drugs in 2005, up from 2.2% in 1984. This has significant implications for the dental profession and the safety of our patients.

The data on which drugs these patients were taking is also interesting. They give an insight into trends in healthcare over the last twenty years – the increased use of calcium channel blockers for hypertension, increased prescription of anti-platelet drugs and more inhaled steroids. The new family of lipid regulators (the so-called statins) account for the significant increase in use of cardiovascular drugs.

Interestingly, there appears to be a decrease in the number of patients taking antibiotics, perhaps an encouraging result of the recent evidence of the link between over-use and resistance.

The authors rightly point out some limitations in their study including geographic differences and sample size issues. However, the study does give us all much to consider. Implications for the general dental practitioner are clear. Dentists must have an understanding of modern therapeutics, they must keep up to date with the oral side effects of systemic drugs and they must keep an up to date copy of the British National Formulary to hand.

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