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Dental Science

FINGERTIP DENTISTRY- CONFINING DENTISTRY TO THE WORLD OF APPS.

Anudeepika Kashyap*	Post Graduate Student, Department of Periodontics, Kothiwal Dental College and Research Centre, Moradabad. 244001 *Corresponding Author
Ellora Madan	Reader, Department of Periodontics, Kothiwal Dental College and Research Centre, Moradabad. 244001
Sakshi Malla	Post Graduate Student, Department of Periodontics, Kothiwal Dental College and Research Centre, Moradabad. 244001
Prashant Shahi	Post Graduate Student, Department Of Orthodontics And Dentofacial Orthopaedics, Kothiwal Dental College and Research Centre, Moradabad. 244001

ABSTRACT
Technological revolution has touched every field and society existing today. Dental profession is no exception which, too, is experiencing an enriching amount of technological growth. The dentistry today, often termed as "Digital dentistry" represents the high-tech and easy to implement solutions that were previously only imagined. Internet, a vast array of media is helping to expand this future. With the popularity of smartphones, the era of SmartApps marks the remodelling of dentistry. Smart phone apps related to oral health care are not just for the professionals, rather focus is laid upon to make them accessible to the patients as well. Providing patients with information which they can easily access with a click on their phone, goes a long way in retaining and developing habits necessary for good oral health. Perio specific apps like 'Brushy', '5 minutes brushing', 'Brush DJ' make the experience of oral hygiene practices more fun and enjoyable which help in disciplining the individuals regarding their periodontal or dental health care.
This review will reveal the whole new world of SmartApps redirecting the craze of using mobile applications for a more productive outcome.

KEYWORDS : applications, smartphone, dentistry, digitalisation.
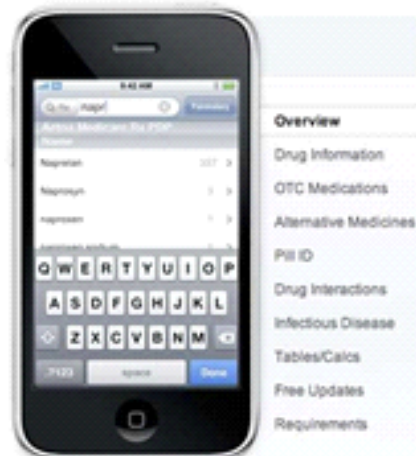
INTRODUCTION

The inventions of our past are now becoming our command, and to process this need the market is flooding with applications making dentistry easy and understood. The main motto behind digitalising dentistry is the need to be time and cost effective in every possible way we can. Delivering the best quality of knowledge to the patient, without any hustle is what every professional requires.

The top five applications

A harmonious relationship with the digital technical professionals and the dentists has always been beneficial and because of this we have digital applications which have made our day to day lives smooth and easy. The top five applications such as ePocrates Rx, Lexi dental complete, Medscape, DDS Gp, iRomexis are being used by the dentists and are proving beneficial.[1]

ePocrates Rx is a free mobile clinical reference library, which includes a drug guide, formulary information, and drug interaction checker. This product also includes free continual updates and medical news. It is simple to download and easy to use. The product is also available in versions that include information on disease diagnosis, including images, diagnostic tests, insurance codes, alternative medicines, and a medical dictionary for prices ranging from $99 to $199 per year. ePocrates Rx is a great clinical reference for quickly accessing information regarding drugs, adult and paediatric dosage information, interactions, and contraindications. The information is always current and accessible instantly.[1]

Lexi dental complete Lexi-Comp's Lexi-Dental Complete app is a full library of dental resources, which includes drug information and effects, color images of numerous dental procedures and conditions, patient resources, information on laboratory and diagnostic procedures, a dental office emergency handbook, natural product information, Stedman's Medical Dictionary, and numerous other resources. The application can be downloaded for free with a 30-day free trial. An annual subscription costs $285.[1]
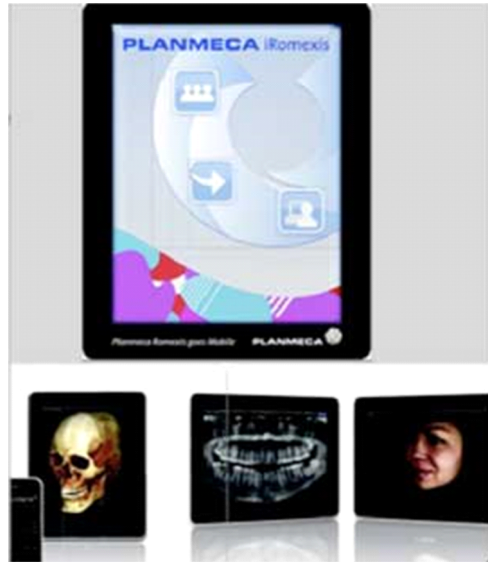
Medscape Medscape from WebMD is the No. 1 downloaded free medical app in 2010. The app includes information on drugs, OTCs, and herbals, drug interactions, diseases and conditions, procedures and protocols, along with expert panel tips. So this can be helpful to the dentist in understanding and remomrizing any systemic condition and corlating it with periodontal problems.[1]

DDS GP is an app that was developed to assist dental professionals in presenting diagnoses and treatment plans to patients to help them gain a complete understanding of required and proposed treatment. The application's library contains a series of presentations that span all topics in dentistry. The app allows for drawing, as well as customizing plans for individual patients.[1]

iRomexis is a comprehensive 2-D and 3-D image viewer application for the iPad. It can display all image types acquired from Planmeca X-ray units, including Planmeca ProMax 3-D and ProFace 3-D photos. The resolution is excellent, and images can easily be used for patient education and communication as well as for consultation with colleagues. Images acquired with Romexis desktop software can be shared with mobile devices anywhere, allowing for zoom and measurement of images, viewing of ProFace 3-D photos and surface renderings, adjustment of image brightness and contrast, snapshot capture and image transfer, and a capability of searching and listing all patients and images on the Planmeca Romexis server.[1]

Fun applications

Now, the technical portion was boosting up but a need was felt to incorporate the fun factor. With patients increasing awareness and knowledge there lied a need for development of applications which could be helpful for the patient in understanding the treatment being rendered to them. Then came in to existence applications such as mad dentist, my dental hub mobile, dentistry terms e.t.c. Mad Dentist is the best dentist game ever made. In this dentist game your mission is to solve patient's teeth problem. In this game the patient is a dentist. He has to Strap the patients in dental chair, grab the drill and start the treatment. The main focus was to eliminate the fear from patient's mind, and understand that the treatment is not so dreadful as they think.[3]

This not only benefited the clinician but also helped in developing better doctor- patient understanding.

The patients can now, learn and understand better through these applications and they even value on time dental check-ups.

Periodontolgy also upgraded itself in the field of digitalisation by making use of applications such as, The Perio app, Cosmetic Dentistry calculator, Tooth Protection tips, Brushy, Brush DJ, e.t.c.

The golden app

The Perio app is like a boon for periodontists. It helps the clinician in charting the various indices, calculating the clinical attachment loss, and tracking a general patients prognosis. This application not only

saves the ample amount of time invested in the charting process, but also monitors the progress regularly. The Perio App introduces you to the Modified Plaque Score and the Modified Bleeding score. Developed as a part of the Healthy Gums DO Matter project in Greater Manchester, this is a quick new way to working out plaque and bleeding scores. It is based on a partial mouth recording system that represents the full mouth using the well documented Ramfjord's teeth. Plaque and bleeding scores will no longer take more than 2 minutes to do.

The new Advanced Periodontal Exam (APE) is a quick and simple way to carry out 6point pocket examination. The clinician has to only enter the diseased pockets of 4mm pocket depth and greater and then can see them clearly highlighted red on the chart so that the clinician can target the treatment. The new user friendly APE input screen has made it even easier, with just a few taps to enter the tooth, site and pocket depth, and then the Perio App does all the work and inputs it automatically into the pocket chart. No longer there will be any mistakes in the charting with this fool proof method.[2]
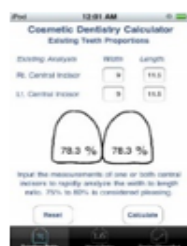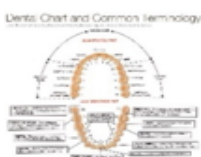

The cosmetic dentistry application is like a stent which guides the clinician in better smile designing by imputing the various data obtained through clinical measurements. The application can exactly tell the amount of tissue to excise or to keep and gives the diagrammatic representation of the after-treatment procedure.

Applications like Tooth protection tips and brushy can help the clinician in motivating the patient towards brushing and maintain the oral health on a regular basis in a more elaborative and fun way.

The other applications available in the market are Dental expert, Dental phobia, Braces help, Teeth whitener, Kids dental, My smile, Monster mouth DDS, Tooth fairy.[5]

More applications available:

CONCLUSION

The applications have made our lives easier in lots of terms. Various drawbacks which were faced by Clinicians in older days have been corrected to an extent. For example, the usage of paper, and the huge piles of data which had to be stored and required a lot of space have been reduced down in the clinician's hands. All of the data is safely secured in the computer's memory, thus also contributing the nature in saving resources. The other various advantages are educating patients have become fun, quick, handy and easy. The patients now learn and retain better through the usage of these applications.

Basically, upgrading and innovating was the need of the hour and still lies the continuous need for digitalising dentistry in a way, so that the dentists can reach the common man without the barrier of unawareness.

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