

Editorial

Leveraging Social Media Spaces for Dental Research – Visionary or Idealistic?

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The World Wide Web (WWW) by means of a global inter-connection of info-technological computer networks has revolutionized the way information is accessed and disseminated across billions of users worldwide. Since its inception, the form, function and capability of WWW has evolved tremendously and today, we are greeted by Web 2.0 which is likened to be an enhancement of its Web 1.0 predecessor [1]. Web 2.0 has become synonymous with “social media” and has been defined as “a group of Internet-based applications that is built on the ideological and theological foundations of Web 2.0 and that allows the creation and exchange of user generated content” [2]. A key characteristic of the social media space and possibly a distinctive difference from Web 1.0; is its ability to support interactions among multiple online users simultaneously. The social media space has established itself as a novel online space for individuals to share their insights and thoughts. Its capability and power to capture user-generated content can be appreciated on many popular social media platforms such as Facebook, Twitter, Wikis, and Blogs. Expectedly, healthcare, an issue close to everyone’s hearts, has also found its way into the social media. To date, the social media has been greatly leveraged for content creation and information dissemination to advance the health education agenda among the public [3].

Beyond this, can the social media space also lend itself as a boundary less platform for dental research?

We are familiar with the traditional methods of research and its complement of sampling, data collection and analysis. In recent years, healthcare researchers have attempted new and innovative research methodologies and protocols. *Im et al.* proposed that the Internet could lend itself as a new research setting and become a potential medium for data collection [4]. A review of the literature revealed that the Internet has indeed been used to recruit research participants to conduct surveys and focus group discussions [3]. In 2011, *Heavilin et al* conducted a surveillance of dental pain among Twitter users and found that Twitter users extensively shared their health information with regards to the prevalence and impact of their dental pain [5]. Additionally, the online exchange of information in the tweets contained useful narratives or descriptors which could be further

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analysed to distil valuable nuggets of data. Coupled with the ever increasing popularity of social media, this innovative study highlights the potential for social media to become a valuable tool for data collection and perhaps for routine use in dental research.

Utilization of the internet for research is beneficial for several reasons; relatively low cost of data collection and reduced time for gathering information [3]. These are important considerations when resources are stretched or when time is of essence and speed is paramount. Another advantage is the ability of the social media to elicit real-time user-generated content which will definitely allow dental research to become more dynamic and responsive. Supporters of this research methodology have also proposed that the online platform is a safe haven for participants to share their thoughts. As participants are able to assume pseudonyms, their responses are made with fewer inhibitions and therefore results obtained may be more accurate [3]. While, there are benefits in exploiting the online space for research, it is also important to recognise its limitations. The use of online research methodologies has faced criticisms with regard to the sampling method, response rate, validity and ethics – pivotal issues that need to be considered when utilizing the social media platform for research. The validity of results derived from social media research has been questioned because of sampling bias due to the unique profile of online users [3,4]. Another valid concern is the public-private dilemma of information exchanged online. Given that the Internet is a very public space, the ethics of using public-private domains of information for research purposes need to be consciously addressed [3].

Admittedly, there are limitations to the current use of the Internet for research, but this does not necessarily negate its use. In fact, with almost 40% of the world’s population or 2.7 billion people online currently [6], and considering Eric Schmidt, Google’s Executive Chairman’s vision that the entire world will be online by the year 2020 [7], it may be premature to discount the online space as a robust research field. We need to look beyond traditional research methodologies and explore the possibilities of harvesting the internet and social media space for their richness of data and expediency of data collection. Similar to how other industries utilise online trawls to conduct market

research to find out consumers' thoughts, needs and wants [8], dental research may tap on this valuable online data repository to solicit insights on what makes dentistry tick from the consumers' or patients' perspectives. This will help with development of research themes (especially in the area of behavioural science research) that will resonate with the "man on the street" and subsequently be translated into actionable measures or outcomes that best meet the oral health needs of these individuals.

The Internet will continue to develop and differentiate in the future. Regardless of the changes, it is likely that it will be well poised to offer new research insights, ideas and opportunities in dentistry.

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