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### THE USE OF SOCIAL MEDIA AS HOSPITAL MARKETING TOOL

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#### ABSTRACT

**Background:** The means of communication develop over time. Nowadays the internet has become the best means of communication including in modern hospital marketing. Social media connects individuals, businesses and organizations to interact and build relationships and communities online. This study aims to determine if social media is an effective tool for hospital marketing.

**Methods:** This study was conducted in a systematic review by searching for articles and journals related to social media and hospital marketing. Literature search through the online database from University of Indonesia online library such as Scopus, Jstor, Ebsco, Proquest and Wiley on January 3th, 2019. The criteria of references are the use of social media in hospitals published within the year of 2009 to 2018 and can be accessed openly.

**Results:** The search returned 21155 articles, of which only 4 studies were included in the systematic review. The results of the journals investigation showed that 51% - 99.41% of hospitals used social media. The average number of platforms used by a hospital in the sample was 3.3. About 71.8% updated their pages in the past 30 days, and 89.2% provided online interactions. There are significant correlations for hospitals' reputation score and total points with the number of social media followers.

**Conclusions:** Many hospitals now use multiple social media platforms. The use of social media is affecting hospital's reputation. And because there is a high level of trust and sharing in social media communities, social media can be used as an effective tool for hospital marketing. To which extent the social media is still effective for marketing needs future studies regarding each country health regulations.

**Keywords :** Social media, Hospital, Marketing, Communications

#### INTRODUCTION

The rapid development of the world of technology and information makes the internet a communication tool that is in great demand by the public. This is what lies behind the change in conventional communication into modern and all-digital. This development became increasingly rapid after the internet began to be accessible via cellular phones and the term of smart phone appeared. Smart phone provides a variety of facilities, ranging from SMS, MMS, Chat, Email, Brochures, and social media facilities [1].

The rise of the Internet and social media use has changed the way people communicate, maintain friendships, live and work [2]. According to Statista.com, number of internet users worldwide is increasing rapidly. In 2017, the number of internet users worldwide was 3.58 billion, and as of October 2018 increased up to 4.2 billion. Mobile internet users is 3.908 billion, active social media users 3,397 billion and active mobile social media users 3.179 billion [3].

Social networking is one of the most popular online activities and facebook is the most popular online network based on active usage. As of October 2018, market leader Facebook currently sits at 2.23 billion monthly active users, followed by youtube, whatsapp, facebook messenger, WeChat and Instagram. Connecting with family and friends, expressing opinions, entertainment and online shopping are amongst the most popular reasons for internet usage [3].

More and more hospitals and other healthcare organizations are figuring out ways to harness social media into a quality and safety tool, and marketing as well. It's a powerhouse that's here to stay and is increasingly the mode of communication that hospitals's clientele want to use to talk to and talk about the hospitals.

Mayo Clinic was one of the first in the U.S to fully embrace social media and still maintains a Health Care Social Media List that compiles health related organizations actively using social networking sites [4].

The Methodist saw social media as an opportunity to extend a conversation with their patients and with the community at large and share their culture with a larger base of like-minded people a virtual street corner where people could gather to talk about their interests [5].

This paper is intended to identify whether social media is an effective tool for hospital marketing.

## **METHODS**

This review was conducted based on PRISMA-Protocol (Preferred Reporting Items for Systematic Review and Meta-Analysis Protocol) in 2009.

### ***Search strategy and study selection***

Literature search through the online database from University of Indonesia online library such as Scopus, Jstor, Ebsco, Proquest and Wiley on January 3th, 2019. All references were evaluated to fit the topic of this article. The keywords used based on PICO-S (Population Intervention Compare Outcome-Study design) technique are: (1) "social media", (2) "usage", (3) "hospital marketing", (4) "quantitative study".

### ***Inclusion Criteria***

The eligibility criteria of the studies are: (1) targeted group: hospitals, (2) outcomes: usage of social media, (3) research method quantitative study, (4) written in English.

### ***Exclusion Criteria***

Author excluded non-full paper studies and those with irrelevant writing sketch of the title and abstract. Duplicates were also removed from selection and the year of publication were restricted to year 2009 to 2018.

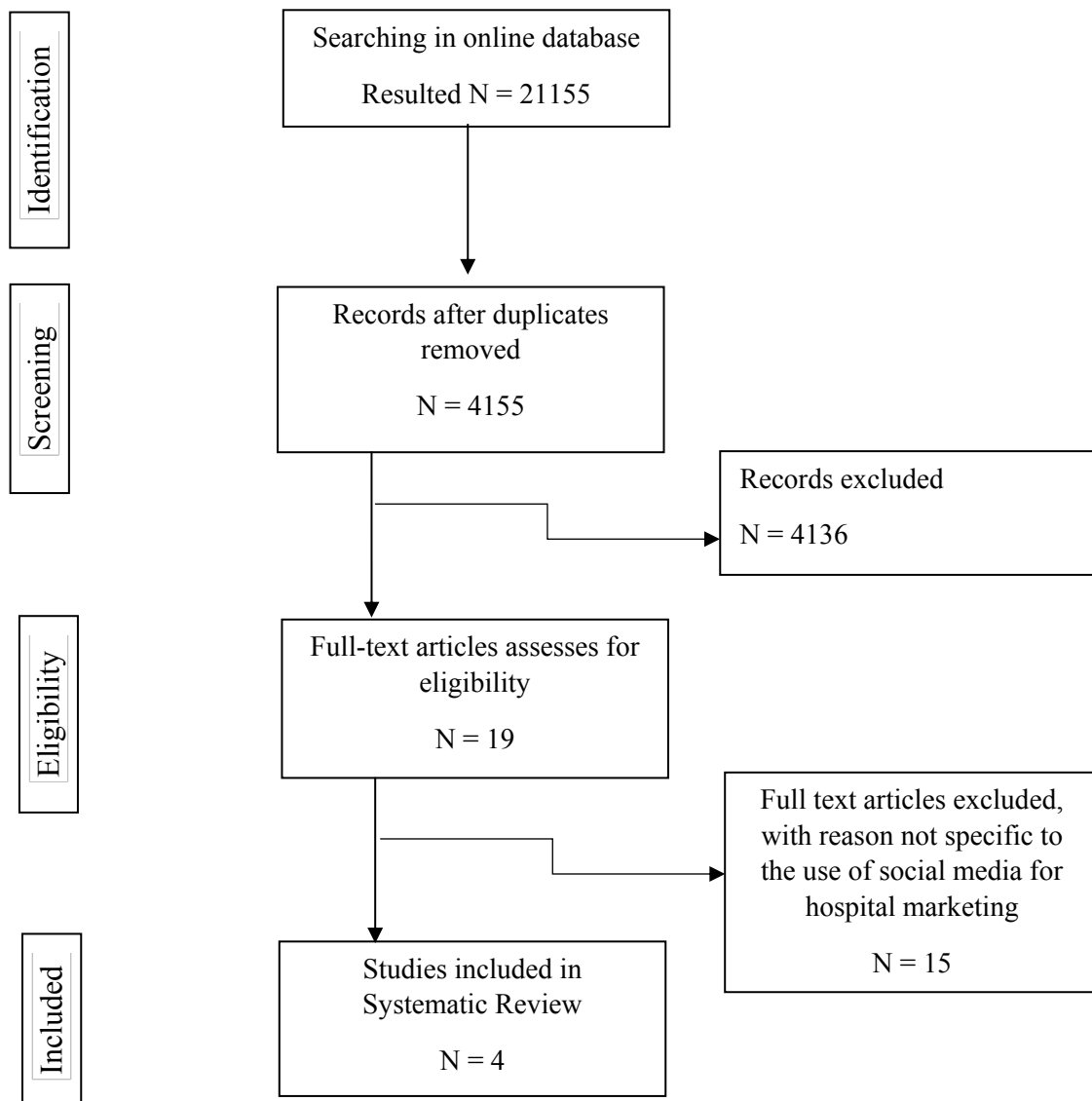


Figure 1. PRISMA – Protocol Search Result

## RESULTS

Total studies obtained using keywords “social media” and “hospital marketing” were 21,155. After removing duplicates and filtering out the remaining studies to fit the inclusion and exclusion criteria, 4 studies were selected for systematic review.

Table 1. Review of Articles Selected by PRISMA

No	Title, Country, Year	Author	Method	Results	Conclusion
1	Use of Facebook Hospitals in Taiwan: A Nationwide Survey, Taiwan, 2018	<u>Po-Chin, Yang;</u> <u>Wui-Chiang,</u> <u>Lee; Hao-Yen,</u> <u>Liu; Mei-Ju</u> <u>Shih; Tzeng-Ji,</u> <u>Chen;</u> et al.	417 hospitals were surveyed about their use of Facebook fan pages in December 2017. The last update time, posts in the past 30 days, number of “Likes”, and other features were analyzed and stratified according to the accreditation statuses of the hospitals.	Only 51.1% ( $n = 213$ ) of the hospitals had an official Facebook fan page. 71.8% ( $n = 153$ ) had updated their pages in the past 30 days, 89.2% ( $n = 190$ ) provided online interactions. Academic medical centers tended to have more “Likes” than regional and local community hospitals (on average 5947.4, 2644.8, and 1548.0, respectively).	In spite of the popularity of Facebook among the general population, most hospitals in Taiwan do not seem to make good use of this kind of social media.
2	Correlations Between Hospitals' Social Media Presence and Reputation Score and Ranking: Cross-Sectional Analysis, USA, 2018	Triemstra JD, Poepelman RS, Arora VM,	A cross-sectional analysis of the reputation score, total score, and social media metrics (Twitter, Facebook, and Instagram) of hospitals who received at least one subspecialty ranking in the 2017-2018 US News publicly available annual rankings. Regression analysis was employed to analyze the partial correlation coefficients between social media metrics and a hospital's total points (i.e. rank) and reputation score for both adult and children's hospitals while controlling for the bed size and time on Twitter.	There were significant correlations for children's hospitals' reputation score and total points with the number of Twitter followers (total points: $r=.465$ , $P<.001$ ; reputation: $r=.524$ , $P<.001$ ) and Facebook followers (total points: $r=.392$ , $P=.002$ ; reputation: $r=.518$ , $P<.001$ ). Significant correlations for the adult hospitals reputation score were found with the number of Twitter followers ( $r=.848$ , $P<.001$ ), number of tweets ( $r=.535$ , $P<.001$ ), Klout score ( $r=.242$ , $P=.02$ ), and Facebook followers ( $r=.743$ , $P<.001$ ). In addition, significant correlations for adult hospitals total points were found with Twitter followers ( $r=.548$ , $P<.001$ ), number of tweets ( $r=.358$ , $P<.001$ ), Klout score ( $r=.203$ , $P=.05$ ), Facebook followers ( $r=.500$ , $P<.001$ ), and Instagram	A statistically significant correlation exists between multiple social media metrics and both a hospital's reputation score and total points (i.e., overall rank). This indicate that a hospital's reputation may be influenced by its social media presence or that the reputation or rank of a hospital drives social media followers.

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| 3 | Use of Social Media Across US Hospitals: Descriptive Analysis of Adoption and Utilization, USA, 2014 | Griffis HM, Kilaru AS, Werner RM, Asch DA, Hershey JC, Hill S, Ha YP, Sellers A, Mahoney K, Merchant RM | A cross-sectional review of hospital-related activity on 4 social media platforms: Facebook, Twitter, Yelp, and Foursquare. Hospital social media webpages were observed to determine the extent of adoption relative to hospital characteristics, including geographic region, urban designation, bed size, ownership type, and teaching status. Utilization was estimated from number of Facebook likes, Twitter followers, Foursquare check-ins, and Yelp reviews | followers (r=.692, P<.001). Adoption of social media varied across hospitals with 94.41% (3351/3371) having a Facebook page and 50.82% (1713/3371) having a Twitter account. A majority of hospitals had a Yelp page (99.14%, 3342/3371) and almost all hospitals had check-ins on Foursquare (99.41%, 3351/3371). Large, urban, private nonprofit, and teaching hospitals were more likely to have higher utilization of these accounts.   | Most hospitals adopted at least one social media platform, and the utilization varied according to hospital characteristics. This provides the framework for future studies investigating the effect of social media on patient outcomes, including links between social media use and the quality of hospital care and services. |
| 4 | Hospital Marketing and Communications Via Social Media, USA, 2017                                    | Katherine Taken Smith   | A review of 100 Top Hospitals in America which were distinguished as Truven Health Analytics' 100 Top Hospitals in 2015. The company website was examined for links to social media. All social media platforms, including company blogs, were documented.   | The analysis in the study consisted of 34 hospital service categories and seven social media platforms. Of the 100 hospitals in this study, 95% use social media. Regression analysis indicates that the number of hospital beds is positively related to the number of social media platforms used by the hospital. Regression analysis also showed the number of services a hospital offers to be positively related to the number of social media platforms. The average number of platforms used by a hospital in the sample was 3.3. | 95% of the top-ranked hospitals are using multiple social media platforms. The use of social media is to promote healthy habits and share health-related information. Social media can be used for standard marketing messages such as a mission statement, stating credentials, or a description of services provided.           |

Based on analysis of the collected studies, it was found that hospital social media use varied across hospital characteristics. Large, urban, private, non-profit and teaching hospitals tend to have more likes, followers, check-ins and review. As for the content of posts, 80,8% featuring activity photos, 66,7% health educations, 64,7% upcoming events and 63,8% related news links.

## **DISCUSSION**

All the collected studies demonstrated dramatic growth of presence of social media among hospitals. This may show the increasing value of social media to hospitals to potentially improve market share, engage with patients, increase profitability, advance their mission in health and healthcare [4, 8].

The hospitals are using different social media platforms to connect with patients depending on the type of information they want to post [4, 8]. But most hospitals use more than one social media platform. Large, urban, private, nonprofit and teaching hospitals tend to use multiple platforms and return to gain more likes, followers, check-ins, and reviews [8]. The use of multiple platforms is aimed at people with specific demography, or with specific needs and interests. In fact, some social media features in general have integrated systems, so that social media with each other are connected. In these studies showed Facebook and Twitter are the preferred platforms, followed by YouTube.

Certain hospitals actively manage their social media and put extra efforts by providing additional staff to update the contents and respond to comments on the pages [8]. This can attract more attentions from social media users, increase the quality of information and strengthen relationship with patients, providers, policy makers, and their online community.

The information shared in hospitals social media including announcements or recorded events in order to attract more participants and patients, health information, news and hospitals contributions or achievements. As for the content of posts, 80,8% featuring activity photos, 66,7% health educations, 64,7% upcoming events and 63,8% related news links. The most discussed category of health information is allergy, asthma, and immunology [4, 9].

The use of social media as marketing tool can be explained as follows: As a role of Integrated Marketing Communication (IMC), social media is able to perform promotional mix functions in an integrated manner, even until the transaction process takes place. Where when the customer has become a user who is a member of a social media account owned by the hospital, then the company will automatically be able to establish continuous communication. [1,6]. It can successfully approaches lead to the development and maintenance of good company-customer relationships. They promote a company's brands to potential clients, convincing those people that it is in their best interest to try the products or services. Social media is also often used as barometer of popularity, because it can contain the most talked about topics on social media (trending topics) using the hashtag (#) facility and supported by retweeting and conversion facilities openly. The more members who use the hashtag that is created, the more likely for it to become a trend. So often, this social media has become a reference for patients. [7]

Other supporting factors such as the ease of accessing, interacting, and the popularity of social media that are used, are the reasons behind the choice of effective social media for marketing products. Most hospitals choose Facebook and Twitter to attract consumers and direct them to other social media, such as blogs, forums or websites. Besides because Facebook and Twitter are more popular and can interact directly, also because these social media have become mandatory applications available on cellular telephones and easy to operate [1][4][8][9].

Social media allows patients to contribute to knowledge, personal experiences, and feedback on hospital operations. This can lead to more patient-centered health care, which in turn leads to increased patient's happiness. Those happy feelings can transfer into a sense of loyalty for the hospital. Loyal customers are more likely to be brand advocates [4]. Social media can be a useful tool to extend a conversation with patients and the community at large and share the hospital's culture with a larger base of like-



mindful people. With this new power comes a heightened responsibility platform that can potentially reach millions of viewers and readers also provide a potential for misuse that can jeopardize patient privacy and place hospitals at risk. This is a condition that needs to be handled with extra caution because some countries regulate the way hospitals or health services advertise medical content, but some have not specifically regulated how social media is used in the medical field. [1].

## CONCLUSION

Many hospitals now don't only use one, but multiple social media platforms. The use of social media is affecting hospital's reputation. And because there is a high level of trust and sharing in social media communities, social media can be used for hospital marketing.

With constant monitoring and stewardship and commitment for quality improvements, hospitals can effectively use social media tools for marketing and education. But to investigate to which extent the social media is still effective for marketing needs future studies regarding each country health regulations.

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