Students' Section

Open Access: Full Text Article

Social Media: Opportunity or threat to public health in context of Nepal

Dip Narayan Thakur^{1*}

¹Maharajgunj Medical Campus, Institute of Medicine, Tribhuvan University, Kathmandu, Nepal

Abstract

Received: 12 June 2016 Revised:

09 August 2016

Accepted: 20 September 2016

*Correspondence: dipnarayan1990@ gmail.com, Maharajgunj Medical Campus, Institute of Medicine, Tribhuvan University.

Kathmandu, Nepal

Social media, one of the greatest tools for sharing information, are used for various purposes in health like educational and promotional activities, communication - of research findings and during crisis readiness. In addition, online conference and webinar for health purpose, e-procurement of health commodities and telemedicine are some domains where we use social media. In contrast to these, it brings out various ill impacts on health directly or indirectly, such as cyberbullying, depression, anxiety, sleep disorders, physical inactivity- a boost factor for non-communicable diseases and internet addiction. As this field is new in health and being used innovatively, issues of their effectiveness, privacy and confidentiality begin to rise. Moreover, authenticity of the health information available on social media is another issue, all of which need guidance by evidence based acts and regulations. Else, it may harm the belief of users on the platform, which is the future for health information sharing. With very few researches done regarding the use of internet and social media, and increasing addiction towards them possesses an extra threat to health in Nepal. Hence, research regarding possible hazards of social media use and relative effectiveness of social media over other communication channel is needed, to develop necessary strategies to overcome possible threats to health and utilize social media for health to its optimum potential.

Keywords: Social media, public health, opportunity, threat, health communication

Introduction

Social media, as defined by Investopedia, are "internet based software or interfaces that allow an individual to interact with one another, exchanging details about their lives, such as biographical data, professional information, personal photos and up to the minute thoughts". Their rapid advancement and increased uses have taken over our lifestyle even in a low income country like Nepal. Furthermore, with the increase in smartphone use, social media users have also increased in accordance. In Nepal, the most used social media are Facebook, Twitter, Google Plus, Pinterest, YouTube, Viber, Instagram, LinkedIn and blogs (1). Besides, there are some native social media, but unfortunately lack of originality and advancement, they are not popular even among Nepalese (2). While talking about health related social media, above mentioned social media are also used for health purpose. There are many health related groups/community and pages, owned by an individual or organization, on Facebook, Google plus, etc. Besides, there are few health news portals like Swasthya Khabar Patrika, Nepali health, Hamro health, Hamro doctor, etc., discussion forums like Springboard and some health related blogs offering people to interact on health topics.

The use of social media is skyrocketing, not only in high-income countries, but also in low and middle-income countries. General people, health professionals and health organization at various level uses them for mass communication. How we take control over our health, now differs due to rise of technology. Hence, public health 2.0 including e-health and m-health, where social media are essential components, are becoming a matter of greater concern from both provider and consumer perspectives. Health as well as social media, both deals with some components of societies, and highly influence the social interaction. Intersection of health care and social media provides various sub-fields like eHealth, telemedicine, patient tracking and their behavior change. e-Health promotion seems to take attention of public health activists as it deals with all strategies (advocate, enable and mediate) and action areas (building healthy public policy, creating supportive environment, strengthening community action, developing personal skills and reorienting health services) of health promotion as defined by Ottawa charter.

In various attempts towards social change in the world and even in Nepal, social media have played and is playing an immense role in achieving their goal. To name a few, some recent online petitions where social media has supported are 'Petition to Nepal Government to End the Digital Divide' and 'Petition demanding the government to ensure the people's right to live in a healthy and clean environment in Kathmandu'. During earthquake disaster of 2015, tweet for Nepal with catchy hashtags like #EarthquakeNepal #RebuildNepal #NepalEarthquakeRelief #ICanYouCanWeCan #HelpNepal, has drawn attention of stakeholders and kept general people updated. Beside these, social media also played an important role during drafting of constitution of Nepal in 2015. Nepal's health sector has attempted for very few changes and even those are mostly from non-state actors. State still faces obstacles in utilizing the social media to its optimum potential.

Social Media as opportunity

Social media came into light as a potentially powerful medium for health communication, particularly with adolescents and young

Thakur Students' Section

adults. The key areas of social media in public health are healthy choices, health information, health research, identification of behaviors, career advancement (3), public health surveillance (4), appropriate intervention, strategies and health policy (3, 5), where they are being used innovatively. In urban Nepal, where there is higher social media user, it can be used as landscape for health research. Rare disease specific groups on social media and patients' forum can be used for patient tracking, also for research purpose. Health information disseminated via social media circulate at greater speed. This information can help general people to know about healthy choices and make informed decisions. Further, it can also help in career advancement including job and education, and professional network building. As mentioned above, online petitions offer the potential to influence health policies and strategies.

Despite some ambiguity, dramatic growth of online social networks and web 2.0 offers immense potential for delivery of health behavior change encompassing, but not limited to, alcohol and tobacco consumption, dietary intake and physical activity (6). For this, patients/clients can be empowered through e-counseling and webinar as they are available at lower cost and reduce geographical barrier. Telemedicine in Nepal is one good attempt at this.

Moreover, live tweeting can be used to provide current patient and possible patient with how medical procedures work (7). Culture of such practices has developed in various parts of the world, mostly targeting HIV patients and drug addicts including sensitive health topics. In Nepal, still many people are not well acquainted with the health system and medical procedures. Use of social media for live tweeting can be a good move to health service management at service sites.

Further, a heady alteration of communication landscape by development in social media presents new tools for engaging youth in sexual health promotion and risk reduction (8). In addition, social media can be quick, low cost and direct way for nutrition education to expand the scope of their targeted program. However, there are limited studies done to resolve their cost effectiveness issues. Considering, increasing risks of non-communicable disease in Nepal, health promotion activities via social media can play a great role.

Moreover, inter and intra-organizational communications, including personal and professional communication, is now easier than ever, providing opportunities for interaction and discussion, build and sustain networks, build trust, mobilize community and support engagement without any boundary barrier. Healthcare organizations can use social media for community engagement activities such as fundraising, consumer service and support, news and information sharing, education to patients, and advertising new services in form of social media marketing (9).

A study among baby boomers and older adults suggests, higher e-health literacy is associated with social media users (10). Individuals use the internet for actively seeking and passively receiving health information, which can be readily accessed in a variety of different formats. The rise of public health 2.0 enables rapid horizontal information sharing (3) and supplementary outlet for health related information as social media.

Information Communication Technology (ICT) policy of 2015 provides various opportunities like increasing coverage of broadband to every health institution (80% by 2020) (11), investing in eHealth for quality services and transparency and developing capacity of human resource for health through e-trainings where social media can play a role (12). Along, National health policy 2014 also opens the way for maximum utilization of social media, a component of ICT (13). For example, developing e-schools in Nepal with interactive digital health notice-board or I-display linked to social networking sites form authentic health organization will be a great move for providing health information and responding to related queries of students. Nevertheless, universal access to broadband and other internet services to reduce the digital divide among Nepalese is foremost to be able to utilize the abovementioned opportunities (11).

Social Media as threat

In a study, 53 percent of government officials in Nepal spent three or more hours per day on social media. Though 89 percent of them believe social media to have positive impact, it brings some serious health problems directly or indirectly (14). According to Pew Research Centre, four in ten internet users in US experience online harassment (15). Data related to Nepal is lacking, though a study done among school students in Kathmandu valley points out 66% experienced at least one form of cyber bullying, while 34% received hateful messages (16). Cyber victims and cyberbullies face more emotional and psychosomatic problems, which further leads to social difficulties and feeling of being unsafe. Cyberbullying is often associated with severe depressive symptoms, ideation and substance use and even suicide attempts (17). These problems lead to poor psychosocial health and reduce productivity of the individual. Further, there are other offline consequences of online victimization. On the long run, it changes the concept of friendship and can affect culture, a determinant of health. Reduction in face-to-face communication due to increased use of social media, affects social relationships in daily life. Social media not only affects social dimension of health, but also largely interact with other dimensions like physical and mental.

The possible physical manifestation in the long term are obesity and diabetes influenced by the slowdown of metabolism and sedentary lifestyle associated with increased social media use. Further, big demons of the over use of social media are depression, mania, anxiety, sleep deprivation, eating disorder and internet addiction (probably epidemic of this century), insecurity and FEMO (Fear of Missing Out), and a degree of anti-social behaviors. They are growing silently in Nepal too, which is evidenced in fragmented researches done in different pockets so far in the country. A study shows, greater distractions and low grade among strict Facebook users among students (18). Vulnerable or troubled teenagers are at greater risks of those effects. Moreover, with possibility of wrong health information pandemics, it can mislead certain groups of people in Nepal, especially whose health literacy is not good enough. Along with it, there is threat of catchy Ads, which can be detrimental to health sometimes as they can influence health habits and health choices.

Nepal also faces digital divide across geographical region, social class and urban vs. rural context, that may lead to disparity in access of e-health services including health information available via social media.

Conclusion

Information exchanged over social media needs monitoring, with potent mechanism, for quality, reliability and user's confidentiality and privacy. There are large numbers of social media, which might create dilemma that, which media will be the vehicle to reach the targets. On the other hand, many users, including health institutions and professionals use more than one social media, which are often interlinked with one another, enabling one-point multiplatform sharing. However, the relative effectiveness of the different types of social media for health communication and social media based different intervention models should be determined using randomized control trial. Research in the field of social media and health are still in infancy and in case of Nepal it seems to be in the prenatal stage. Very modest evidence that interventions incorporating online social networks may be effective, with the problem of retention of health information and sustainability of behavior change. Hence, research in this field should be in priority of the scientific community and public health establishment in Nepal, for which Nepal Health Research Council (NHRC) should play the leading role.

In the context of Nepal, the public health establishment, particularly governmental health organizations, seems skeptical towards this landscape, which is evolving at a blistering pace or are unclear about how it could be used. Authenticity of online health information poses another question towards the roles of health service providers to mitigate concern about misinformation without breaking user's trust, as there is greater risk of fabrication.

Integrated national e-strategy development and implementation as aimed in broadband policy 2014 should incorporate comprehensive public health communication strategy to address these issues. Furthermore, digital divide among elderly, minority and poor population is social injustice, which may bring disparity in health information access. Nepal still ranked 136th with ICT development index of 2.59 (19). Hence, the Ministry of Health and the Ministry of Information and Communication should work in collaboration to reduce the digital divide, address social media security paradox, create opportunities and utilize them for the promotion of better health.

References

- 1. Statsmonkey.com. Mobile Facebook, Twitter, Social Media Usage Statistics in Nepal 2015 [cited 2016 Jan 10]. Available from: https://www.statsmonkey.com/table/21425-nepal-mobile-social-media-usage-statistics-2015.php.
- 2. Techsansar. Nepalese Social Networking Websites review [updated] 2012 [Available from: http://techsansar.com/nepali-it/nepalese-social-networking-websites-review/.
- 3. Keller B, Labrique A, Jain KM, Pekosz A, Levine O. Mind the gap: social media engagement by public health researchers. Journal of medical Internet research. 2014;16(1):e8.
- 4. Moorhead SA, Hazlett DE, Harrison L, Carroll JK, Irwin A, Hoving C. A new dimension of health care: systematic review of the uses, benefits, and limitations of social media for health communication. Journal of medical Internet research. 2013;15(4):e85.
- 5. Yonker LM, Zan S. "Friending" teens: systematic review of social media in adolescent and young adult health care. 2015;17(1):e4.
- 6. Maher CA, Lewis LK, Ferrar K, Marshall S, De Bourdeaudhuij I, Vandelanotte C. Are health behavior change interventions that use online social networks effective? A systematic review. Journal of medical Internet research. 2014;16(2):e40.
- 7. Weintraub L. 5 Ways Pinterest Can Be Used for Patient Education in Healthcare: Parker White; 2012 [Available from: https://www.parkerwhite.com/insights/5-ways-pinterest-can-be-used-for-patient-education-in-healthcare/.
- 8. Guse K, Levine D, Martins S, Lira A, Gaarde J, Westmorland W, et al. Interventions using new digital media to improve adolescent sexual health: a systematic review. The Journal of adolescent health: official publication of the Society for Adolescent Medicine. 2012;51(6):535-43.
- 9. Househ M. The use of social media in healthcare: organizational, clinical, and patient perspectives. Studies in health technology and informatics. 2013;183:244-8.
- $10.\ Tennant\ B,\ Stellefson\ M.\ eHealth\ literacy\ and\ Web\ 2.0\ health\ information\ seeking\ behaviors\ among\ baby\ boomers\ and\ older\ adults.\ 2015;17(3):e70.$
- $11.\ Ministry\ of\ Information\ and\ Communication.\ National\ Broadband\ Policy\ 2014.\ Kathmandu,\ Nepal; 2014.$
- 12. Ministry of Information and Communication. National Information and Communication Technology Policy 2015. Kathmandu; 2015. p. 19-20.
- 13. Ministry of Health. National Health Policy 2014. Kathmandu, Nepal;2014.
- 14. Rai SK, Moktan S. Use of social media in the central administrative wing of the Government of Nepal. Nepal Administrative Staff College. 2014.
- 15. Centre PR. Online Harassment 2014 [Available from: http://www.pewinternet.org/2014/10/22/online-harassment/.
- 16. Dhungana RK. Cyberbullying: An emerging challange for Nepal PABSON Review. 2014;7.
- 17. Bottino SM, Bottino CM, Regina CG, Correia AV, Ribeiro WS. Cyberbullying and adolescent mental health: systematic review. Cadernos de saude publica. 2015;31(3):463-75.
- 18. Jeffrey Mingle DMA. Social Media Network Participation and Academic Performance in Senior High Schools in Ghana Library Philosophy and Practice (e-Journal). 2015.
- $19. \ International\ Telecommunication\ Union.\ ICT\ development\ index\ 2015\ [cited\ 2016\ Apr\ 25].\ Available\ from:\ http://www.itu.int/net4/ITU-D/idi/2015/.$