How Adequate Social Media Management Supports the Viral Hepatitis Elimination Program
Mohammadreza Pourkarim,1 Lore Van Espen,2 Marijn Thijsen,2 Marc Van Ranst,2 and Mahmoud Reza Pourkarim2,3,*

1Management Department, Islamic Azad University of Marvdasht Branch, Shiraz, Iran
2Department of Microbiology and Immunology, Laboratory of Clinical and Epidemiological Virology, KU Leuven, Leuven, Belgium
3Blood Transfusion Research Centre, High Institute for Research and Education in Transfusion Medicine, Tehran, Iran

*Corresponding author: Mahmoud Reza Pourkarim, Laboratory of Clinical and Epidemiological Virology, Rega Institute for Medical Research, Department of Microbiology and Immunology, University of KU Leuven, Herestraat 49, P.O. Box: 1040, Leuven, Belgium. Tel: +32-16231153, Fax: +32-16321153, E-mail: mahmoudreza.pourkarim@kuleuven.be

Received 2018 April 14; Accepted 2018 April 20.

Keywords: Social Media, Viral Hepatitis, Elimination, Global, Hepatitis B Virus, Hepatitis C Virus, Infection, Program

1. Importance of Viral Hepatitis Elimination

Viral hepatitis is one of the deadliest diseases in human history. The mortality rate of viral hepatitis is majorly linked to the hepatitis B virus (HBV) and hepatitis C virus (HCV) infections, with an estimated number of 1.3 million deaths per year (1). Globally, there are almost half a billion people (1 out of 12 persons) living with chronic viral hepatitis, of which up to 40% will develop liver cirrhosis, hepatocellular carcinoma (HCC), or liver failure (2-4). Surprisingly, 40% to 80% of chronic carriers are not aware of their infection status (5).

After several decades of viral discovery, improvements in diagnostic tests, different lines of antiviral therapies, and vaccine trials, it is now time for eliminating viral hepatitis. Through an adopted program in 2016, the World Health Organization (WHO) intends to globally eliminate viral hepatitis by 2030 (6). Fostering the knowledge of the world population about hepatitis and a cohesive collaboration between public health experts are the keystones for success of this ambitious program (7).

2. Using Social Media to Spread Information

In parallel with the dramatic increase of the internet penetration rate (IPR), the use of social media has become a notable part of everyday life for many individuals. Social media platforms are dynamic Internet based websites and applications on which users can create, modify and share content, as well as debate with other users all over the world (8). These facilities offer an exclusive opportunity to engage a large audience of both professionals and consumers (9). Social media has been the ideal communication tool for users in the public health sectors to search, find, and broadcast information about disease-prevention, treatments, and other science-based knowledge (10). It has been shown that more than 75% of adults use different social media to gather knowledge and consult about their health (11). Recently, public health institutions are frequently using social media to propagate educational resources to inform the public. For instance, social media has efficiently been applied for reporting about epidemics, recalling blood donors to donate blood or plasma, promoting vaccination events, and other health-related campaigns (12, 13).

Undoubtedly, social media could play a key role in accomplishing the hepatitis elimination program. However, inadequate preliminary knowledge of how to use these platforms for public health purposes could lead to insufficient achievements. In this editorial, we try to inform people involved in the elimination of hepatitis to choose the most suitable social media platform in their area and manage their related activities in these platforms.

Facebook, Twitter, Telegram, WhatsApp, and Viber etc. are some well-known examples of social media. Each of these platforms has its own advantages and disadvantages of which users in public health sectors should be aware of. For example, although Twitter has a limit of 280 characters, it is more straightforward and easy to monitor. This limitation makes it more communicative-focused. By using the hashtags before keywords (e.g. #Nohep, #hepatitis, #hepatitisC and #globalhealth), your keyword will act as a link and can maximize the visibility of your post.

In contrast to Twitter, Facebook does not have a char-
acter restriction and users can post videos and make several albums of photos. Although, we cannot ignore the potential of Facebook marketing, this platform is much more adapted to private interactions among limited numbers of friends and family. Specific pages concerning hepatitis, such as Nohep, Hepatitis Monthly Journal, World Hepatitis Alliance, etc. can be found on Facebook.

Other types of social media are the instant message services like WhatsApp and Telegram. Both of these apps can share text and videos; however, Telegram is able to process long video messages while WhatsApp has a lower capacity. This makes Telegram more popular for sharing seminars, webinars, and other meetings. Moreover, WhatsApp only allows groups up to 256 users while Telegram supports groups up to 3000 members.

Although there are more applications with different features, managers of social media in the public health sectors should know in advance about restrictions for both audience as well as users in different countries. For instance, YouTube and Twitter are filtered in some countries. In addition, Facebook is not allowed in some parts of the world. Furthermore, awareness about policies, copyright, and ethical rules of the desired application is necessary in advance.

3. Best Practices of Social Media Towards Viral Hepatitis Elimination

Several organizations such as the Centers for Disease Control and Prevention (CDC) have provided a tool “SocialMediaWorks” to explain how to establish your own social media strategy in the medical field. An assessment of your target audience, goals, and objective(s) are the first crucial steps in tailoring your message.

Regardless of the chosen platform, it is recommended to systematically update your profile picture and cover photo with creative ideas and include logos of organizations that are involved in the program of eliminating viral hepatitis. Furthermore, in order to keep the audience updated on a regular basis, you can prepare a list of messages or posts and design a timetable for releasing in advance. However, the question remains how to make an effective and attractive post?

Keeping your posts or tweets short is important in designing an attractive post. This makes the content easy to read and more efficient. It has been shown that shorter posts could be distributed 60% more than longer ones (9). It is strongly advised to combine your messages with a video, picture, graph, figure, or statistic. These kinds of extra materials convert your text to a more attractive message, boost the amount of “likes” on your Facebook post (50% more likes compared to posts without a photo (14)) and increases the number of retweets (by 62% on average (15)). It has been indicated that starting your posts or messages by asking questions and replying with relevant answers makes it stand out and increases the attention to more than 70% (9, 14).

In addition, it is necessary to update your posts with the newest information. Moreover, be responsive when your posts and tweets are shared, forwarded or retweeted. Keep going on with retweeting and replying to questions and related comments promptly. Depending on your audience, it is worthy to post your greetings or congratulations with your organization’s logo during special national or international events like New Year.

In order to engage in a wider audience, try to like, comment, forward, and retweet the contents and motto of other organizations involved in the field of viral hepatitis elimination like WHO, CDC, EASL, Nohep etc.

In order to manage your performance in social media, self-evaluation is essential. Accordingly, different platforms of social media offer analytical data tools, in which you can assess the level of public interest in your posts and determine trends over time. The analytics.twitter.com/about for Twitter and Facebook Insights allows managers to evaluate their own activities and of their followers on both platforms.

4. Contents of Your Posts

Always bear in mind that the task of your posts is to assist the elimination of hepatitis globally. Therefore, regardless of which platform is used, your audience mainly consists of ordinary people who require basic awareness about hepatitis and liver cancer. Your duty is highlighted when you know that almost 50% of HCV carriers and almost 75% of HBV carriers are not aware of their infection (9). Knowing this should stimulate you to promote the public’s knowledge about viral hepatitis.

At first, it is important to highlight the burden of disease and emphasize the role of viral hepatitis in developing liver cancer (16). Providing the most recent numbers of hepatitis B, C, and D infection, and increasing liver cancer deaths globally or locally as well as referring to the percentage of viral hepatitis, as the major cause of liver cancer, is useful in spreading your message. In this case, drawing attention to the annual reports by WHO, CDC, NIH, or local hepatitis networks is recommended.

You can refer to the efficient treatment for hepatitis C and prophylactic vaccine against hepatitis B infections as two available measures in reducing the risk of liver cancer. In addition, describing the route of transmission of viral hepatitis and, subsequently, addressing the groups at high risk of infection, like hetero and homosexual individuals,
injecting drug users, babies born to mothers who are HBV carriers and health care providers, are some informative examples for the audience (17-20).

You may pin point the prevalence of hepatitis B and C infection together with their diagnostic and preventive methods in layman terms (21). Subsequently, you can refer to campaigns of screening and vaccination in the past or near future. In addition to your own - made posts, you can share webinars and links of training programs (National Hepatitis Training Institute or Know More Hepatitis) to urge the public awareness about risk factors of viral hepatitis.

5. Conclusion

Social media, by sharing content and increasing individual interactions, have changed the traditional ways of human communication and education. Through the abovementioned statements, we tried to list a few fundamental tips in using these applications for spreading “the elimination of viral hepatitis program”. Efficient management of these apps will be a powerful leverage towards a successful implementation of this ambitious program.

Footnotes

Funding/Support: Marijn Thijsen is a SB PhD fellow at “Fonds voor Wetenschappelijk Onderzoek (FWO) Vlaanderen” of Belgium. Mahmoud Reza Pourkarim (MRP) is supported by a postdoctoral grant from the “Fonds voor Wetenschappelijk Onderzoek (FWO) Vlaanderen” of Belgium.

Ethical Approval: It is not applicable.

Conflict of Interest: The authors declare that there is no conflict of interest.

References

1. Sharma S, Carballo M, Feld J, Janssen HL. Immigration and viral hepatitis. J Hepatol. 2015;63(2):378–2. doi: 10.1016/j.jhep.2014.04.026. [PubMed: 25976282].
2. Perez JT, Armstrong GI, Farrington LA, Hutin YJ, Bell BP. The contributions of hepatitis B virus and hepatitis C virus infections to cirrhosis and primary liver cancer worldwide. J Hepatol. 2006;45(4):529–38. doi: 10.1016/j.jhep.2006.05.013. [PubMed: 16879891].
3. Mina T, Amini-Bavil-Olyaee S, Tacke F, Maes P, Van Ranst M, Pourkarim MR. Genomic Diversity of Hepatitis B Virus Infection Associated With Fulminant Hepatitis B Development. Hepat Mon. 2015;15(6):e29477. doi: 10.5812/hepatmon.29477v2. [PubMed: 26288637]. [PubMed Central: PMC4533181].
4. Mina T, Amini-Bavil-Olyaee S, Shirvani-Dastgerdi E, Trovao NS, Van Ranst M, Pourkarim MR. l5eYuruan Yulanin fulminant hepatitis B follow-up in Belgium: Viral evolution and signature of demographic change. Infect Genet Evol. 2017;49:221-5. doi: 10.1016/j.meegid.2017.01.020. [PubMed: 28189028].
5. Hahne SJ, Veldhuijzen IK, Wissing L, Lim TA, Salminen M, Laar M. Infection with hepatitis B and C virus in Europe: a systematic review of prevalence and cost-effectiveness of screening. BMC Infect Dis. 2013;13:381. doi: 10.1186/1471-2334-13-381. [PubMed: 23597411]. [PubMed Central: PMC3768922].
6. Mozalevskis A, Ermona I, Saufred-Harmon K, Lazarus JV. Hepatitis B and C surveillance and screening programmes in the non-EU/EAA Member States of the WHO European Region: survey findings from 10 countries, 2012. Euro Surveill. 2016;21(22). doi: 10.2807/1560-7977.ES.2016.21.22.30245. [PubMed: 22777421].
7. Lernout T, Hendrickx G, Vorsters A, Emiroglu N, Van Damme P. A cohesive European policy for hepatitis B vaccination, are we there yet? Clin Microbiol Infect. 2014;20 Suppl 5:3–9. 24. [PubMed: 24829386].
8. Gagnon K, Sabus C. Professionalism in a digital age: opportunities and considerations for using social media in healthcare. Phys Ther. 2015;95(3):406–14. doi: 10.2522/ptj.20140237. [PubMed: 24908131].
9. The George Washington University. Viral Hepatitis and Liver Cancer Social Media Toolkit 2017, 2017.
10. Zhang C, Gotsis M, Jordan-Mitch M. Social media microblogs as an HPV vaccination forum. Hum Vacc Immunother. 2013;9(11):2483–9. [PubMed: 23842072]. [PubMed Central: PMC3981860].
11. Fox S. The social life of health information. 2014.
12. Grajales FJ 3rd, Sherris S, Ho K, Novak-Lausher H, Eysenbach G. Social media: a review and tutorial of applications in medicine and health care. J Med Internet Res. 2014;16(2):e12. doi: 10.2196/jmir.2902. [PubMed: 24581545]. [PubMed Central: PMC4196280].
13. Akkoç KA, The Oslo Blood Bank, 22 July 2011. Tidsskr Nor Laegeforen. 2011;131(24):2460–1. doi: 10.4045/tidsskr.11.253. [PubMed: 2270127].
14. Hershkovitz S, Lavrusk V. 12 best practices for media companies using Facebook pages. 2013.
15. Twitter Government and Elections Team. Twitter Government and Elections Team, 2014.
16. Ryerson AB, Eheman CR, Altekruse SF, Ward JW, Jemal A, Sherman RL, et al. Annual Report to the Nation on the Status of Cancer, 1975-2012, featuring the increasing incidence of liver cancer. Cancer. 2016;122(9):1312–37. doi: 10.1002/cncr.29936. [PubMed: 26959385]. [PubMed Central: PMC4840031].
17. Nyamathi A, Salem B, Reback CJ, Shohtaw S, Branson CM, Idemundia FE, et al. Correlates of hepatitis B virus and HIV knowledge among gay and bisexual homeless young adults in Hollywood. Am J Mens Health. 2013;7(3):18–26. doi: 10.1177/1557988312456068. [PubMed: 22879650]. [PubMed Central: PMC3618445].
18. Amini-Bavil-Olyaee S, Maes P, Van Ranst M, Pourkarim MR. Providing strong evidence of nosocomial outbreak of hepatitis B virus infection. J Hosp Infect. 2012;80(3):269–70. author reply 270-2. doi: 10.1016/j.jhin.2011.10.017. [PubMed: 2224518].
19. Amini-Bavil-Olyaee S, Pourkarim MR, Schaef er S, Mahboudi F, Van Ranst M, Adeli A, et al. Single-step real-time PCR to quantify hepatitis B virus and distinguish genotype D from non-D genotypes. J Viral Hepat. 2011;18(4):300–4. doi: 10.1111/j.1365-2893.2010.01308.x. [PubMed: 20357802].
20. Poukarim MR, Zandi K, Davani NA, Poukarim HR, Amini-Bavil-Olyaee S. An aberrant high prevalence of hepatitis B infection among Afghans residing in one of the Bushehr refugee camps (Dalaki camp) in the southwest of Iran. Int J Infect Dis. 2008;12(1):101-2. doi: 10.1016/j.ijid.2007.03.008. [PubMed: 17540600].
21. Elsadek Fakhr A, Poukarim MR, Maes P, Atta AH, Marei A, Azab M, et al. Hepatitis C Virus NS5B Sequence-Based Genotyping Analysis of Patients From the Sharkia Governorate, Egypt. Hepat Mon. 2013;13(42). e12706. doi: 10.5812/hepatmon.12706. [PubMed: 24358038]. [PubMed Central: PMC3687025].