Chapter 4

Public Engagement and Policy Entrepreneurship on Social Media in the Time of Anti-Vaccination Movements

Melodie Yunju Song

https://orcid.org/0000-0002-3492-6835
Ted Rogers School of Management, Ryerson University, Canada

ABSTRACT

North America has experienced a resurgence of measles outbreak due to unprecedentedly low Mumps-Measles and Rubella vaccination coverage rates facilitated by the anti-vaccination movement. The objective of this chapter is to explore the new online public space and public discourse using Web 2.0 in the public health arena to answer the question, ‘What is driving public acceptance of or hesitancy towards the MMR vaccine?’ More specifically, typologies of online public engagement will be examined using MMR vaccine hesitancy as a case study to illustrate the different approaches used by pro- and anti-vaccine groups to inform, consult with, and engage the public on a public health issue that has been the subject of long-standing public debate and confusion. This chapter provides an overview of the cyclical discourse of anti-vaccination movements. The authors hypothesize that anti-vaccination, vaccine hesitant, and pro-vaccination representations on the online public sphere are reflective of competing values (e.g., modernism, post-modernism) in contemporary society.

INTRODUCTION

A highly contagious disease, measles deaths claimed 110,000 lives in 2017, with children under the age of 5 taking the hardest toll (World Health Organization, 2019c). In most Organization for Economic Co-operation and Development (OECD) countries, MMR vaccine is highly accessible, provided for free by the state or provincial government. Despite so, the rate of unvaccinated children are rising (Larson, Jarrett, Eckersberg, Smith, & Patterson, 2014). According to the World Health Organization (WHO),
reported cases of measles in 2019 increase by 300% (n=112,163) compared to 2018 in the first three months alone (World Health Organization, 2019b). Since reported cases makes up 10% of the actual cases, and global MMR immunization coverage is currently at merely 67%, it is projected that measles outbreaks will continue an upwards trajectory if immunization rates remain below the targeted global coverage rate of 95% (ibid).

WHO has declared vaccine hesitancy as one of the top 10 threats to global health in 2019 (World Health Organization, 2019a). Research shows that decreased immunization coverage rates due to vaccine hesitancy leads to periodic and sustained vaccine-preventable outbreaks in the US (Bolton, Memory, & McMillan, 2015), France (Ward, 2016), Croatia (Repalust, Šević, Rihtar, & Štulhofer, 2016), China (Wagner et al., 2017), Japan (Okuhara, Ishikawa, Okada, Kato, & Kiuchi, 2017), Malaysia (Mohd, Kew, & Moy, 2017), Italy (Aquino et al., 2017), Ukraine (The Lancet Editorial, 2018), and Brasil (Sato, 2018).

One of the most common reasons for vaccine hesitancy relates to the concern that MMR vaccines cause autism, an erroneous claim that first appeared in a false publication in a reputable journal - The Lancet – in 1998 (Wakefield et al., 1998). Wakefield’s fraudulent paper was the match that ignited the fiery skepticism to MMR vaccination. Powerful international and national advocacy groups such as the National Vaccine Information Center Advocacy Portal (NVICAC), the Californian Coalition for Vaccination Choice (CCVC) uses social media and websites to actively disseminate and sign petitions against all types of vaccines, calling for vaccine exemption for their children based on philosophical grounds (CCVC, 2015). Although the Lancet retracted the article in 2010, the damage was done. The paper was circulated for 12 years, the false results were reported by the media, discussed in press, and on the internet, and had been cited by thousands.

Researchers in medicine, public health, communication, mass media, computer science and informatics are boggled by the resistance to one of the safest medical interventions in humanity. These researchers ask the same question from various angles in hopes of finding out ‘What drives some segments of society to accept the MMR vaccine while others are reject the vaccine?’

We use the case of vaccine hesitancy to explore public health discourse using online media to answer our question of interest. Typologies of online public engagement will be examined to illustrate the different approaches used by pro- and anti-vaccine groups to inform, consult with and engage with the public on public health issues that has been the subject of long-standing debate and confusion. The parallel narratives of two existing paradigms (modernism and post-modernism) are used to explain how different perceptions of vaccination have been shaped by vaccination proponents and opponents. In the first section, we provide a brief account of anti-vaccination movements in the West starting with resistance of the smallpox vaccine in the UK in the 19th century. In the second section, we propose that an ideological clash between practitioners of modernism and the postmodernists is the overarching reason for anti-vaccination movements to persist. The third section touches on the typologies of public engagement online and compare and contrast the different methods of online engagement tactics employed by pro- and anti-vaccine agencies. Finally, we draw on the psychological and political frameworks on issue framing to discuss the plausible reasons for the persistence of anti-vaccination movements on a micro-level.