

# Utilizing YouTube as Platform for Psychiatric Emergency Patient Outreach in Chinese Americans

Julia Z. Guo<sup>1</sup>, Kimberly P.L. Chong<sup>2</sup>, Benjamin K.P. Woo M.D.<sup>2</sup>

<sup>1</sup>David Geffen School of Medicine at UCLA, <sup>2</sup>Olive View – UCLA Medical Center

## Objective

- The goal of this study is to understand the role of using YouTube as a platform for psychiatric emergency outreach among Chinese Americans.

## Background

- Approximately 4.3 million psychiatric-related emergency department (ED) visits occurred in the US in 2000, and these visits accounted for 5.4% of all ED visits, and substance abuse, neuroses, and psychoses were the most common conditions.<sup>4</sup> Studies show that decline in mental health resources have burdened EDs with increasing numbers of patients with mental health issues.<sup>8</sup> Management of acutely agitated patients in the ED remains a critical issue.<sup>6</sup> In particular, Chinese Americans significantly underutilize mental health resources, which leads to delayed diagnosis, suboptimal management,<sup>9</sup> and can be contributing to the number of psychiatric emergencies seen in the ED.
- One major barrier that is preventing the early diagnosis of mental illness among Chinese Americans is the lack of mental health knowledge.<sup>2</sup> Mental health conditions have severely negative stigma in the Chinese communities. In fact, studies have shown that Chinese families tend to perceive schizophrenic patients as threats for their safety and would feel ashamed if they have family members with schizophrenia.<sup>3</sup> Internet based psychiatric emergency outreach can potentially be a transformative tool that can deliver psychiatric emergency education to the Chinese speaking community in the US.
- It is estimated that 61% of adults in the US searched online for health-related information in 2010, and 39% of them did so via social media.<sup>1</sup> Among social media platforms, YouTube is one of the most popular, attracting over one billion unique users with over 6 billion hours of viewing time every month.<sup>5</sup> YouTube can be utilized to provide valuable information to ethnic communities that have been harder to reach via traditional methods.<sup>7</sup> Through this study, we explored utilizing YouTube for psychiatric emergency outreach among Chinese Americans.

## Methods

- A board-certified psychiatrist posted three approximately 45-minute videos about psychiatric emergencies in Cantonese on YouTube in 2014. The sample of this study includes viewing data from these three videos during a five-year period, between 4/1/2014 and 3/31/2019. The recorded parameters include total watch time, number of views, average view duration, traffic source, search terms, watch device type, and watch device operating system. Institutional Review Board approval was not required for this study.

## Results

	Watch Time (minutes)	Views	Average View Duration
<b>Traffic Source</b>			
Suggested Videos	23,700	3103	7.64
YouTube Search	3384	1277	2.65
Browse Features	6750	821	8.22
<b>Device Type</b>			
Mobile phones	25,068	3491	7.18
Computer/TV	9222	1717	5.37
Tablets	6318	768	8.23
<b>Operating System</b>			
Android	22,080	3083	7.16
iOS	9300	1163	8.00
Windows	8226	1566	5.25
Overall	40,608	5976	6.80

Table 1: Watch time, views, and average view duration of three YouTube videos from 4/1/2014 to 3/31/2019.

## Discussion

- Our data showed that the majority of the views came through YouTube suggested videos, which YouTube generates based on the viewers' previous search contents. This implies that the viewers are actively seeking medical information online through social media. Additionally, majority of our viewers used mobile phones, and mobile phones and tablets had significantly longer average view durations as compared to computer/TV. This shows that coupling YouTube and wireless devices may have huge potential as internet based psychiatric emergency outreach platform.
- Our study assumes that the viewers are Chinese speaking individuals residing in the US based on the fact that they were viewing from within the United States, and most viewers must be fluent in Chinese to hold an average view duration of 6.80 minutes. The study was limited by the fact that we did not record the participants knowledge on psychiatric emergencies before and after the videos.
- Nonetheless, this study calls for further research to explore the effectiveness of using social media and wireless devices for psychiatric emergency education prior to ED arrival, particularly in minority populations with cultural barriers to health care. This platform can be designed to teach the causes and early symptoms of psychiatric emergencies, thus encouraging viewers to seek timely care. This may help to reduce the amount of time psychiatric conditions remain untreated, reduce the ED burden, decrease the number of emergency related negative outcomes, as well as help to reduce the stigma of mental illness in ethnic minority communities. YouTube and other social media are readily accessible and cost effective, and digital

## Discussion (C'ed)

- data is growing exponentially in the current era of technology. They have huge potential in helping healthcare providers delivering quality health information to patients. Therefore, understanding their roles in psychiatric emergency patient outreach is necessary.

## Conclusions

- Majority of the viewers used mobile phones, and mobile phones and tablets had significantly longer average view durations as compared to computer/TV. YouTube and wireless devices may have potential as internet based psychiatric emergency outreach platform. This study calls for further research to explore the effectiveness of using social media and wireless devices for psychiatric emergency education prior to ED arrival, particularly in minority populations with cultural barriers to health care.

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