Microblogging violent attacks on medical staff in China: a case study of the Longmen County People’s Hospital incident

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Abstract

Background: A violent attack on medical staff in Guangdong Province, in which a female doctor at Longmen County People’s Hospital (LCPH) was severely injured by a knife-wielding patient, has drawn significant public attention to the phenomenon of hospital violence and initiated discussions on how to resolve violence in hospitals. Social networking sites, such as Sina Weibo, a Chinese version of Twitter, have played a role in this public debate. The incident at LCPH provides an opportunity to examine how Weibo has been used in the debate about violence against medical staff in China.

Methods: Using the Sina Weibo’s built-in search tool, we established a dataset of 661 Chinese-language micro-blogs containing the search terms: Longmen (“龙门”), doctor (“医生”), and slash (“砍”) that were posted between July 15, 2015, the date of the violent incident at LCPH, and August 15, 2015. We performed a content analysis of the micro-blogs to examine: users’ demographics, attitudes toward the injured doctor and the attacker, possible reasons for the hospital violence, and proposed measures for preventing doctors from violent incidents.

Results: 73.2% of the micro-blogs were sent by individual Weibo users, and 26.8% were posted by organizations. For individual users, around 10.0% described themselves as either doctors or healthcare providers, but users from the legal profession were rarely identified. Moreover, only 3 micro-blogs proposed concrete strategies for preventing hospital violence, and nearly 10.0% of micro-blogs expressed regrets about entering a medical career and attempts to quit medical positions. In general 56.3% of micro-blogs showed sympathy for the injured doctor, while less than 25.0% of micro-blogs explicitly condemned the attacker’s behavior.

Conclusions: Weibo users played a role in distributing news information about the violent incident at LCPH; however, the legal perspective is inadequately discussed in the debate, and discussion of constructive measures for protecting doctors and preventing hospital violence was rare. Our research suggests that critical challenges for the Chinese health care system will remain or become worse if no effective measures are implemented to prevent hospital violence.

Keywords: Social network, Hospital violence, Weibo, Healthcare crisis

Background

On July 15, 2015, a collection of photos of a bloody human hand and sliced shoulders made headlines throughout Chinese news media websites. The victim is Dr. Ou Lizhi, a female physician at Longmen County People’s Hospital (LCPH) in Guangdong Province. On July 15, she was making the morning rounds while a man named Liao approached her. The man said he was her patient a year ago and was not feeling good. He asked Dr. Ou for medical attention, but she told him that he had to wait until she finished checking the wards. Liao suddenly pulled out a kitchen knife from his bag and swung it at the doctor. Dr. Ou dodged the knife but, sadly, did not escape injury. The bones in her right hand were fractured and she received deep cuts in her shoulders [1]. Due to her critical condition, she was transferred to a higher-level hospital for treatment and the operation alone took more than 10 hours [1]. According to her surgeon’s preliminary
We also relate the findings about Weibo users’ perspectives to the impact of the endless hospital violence in the Chinese healthcare system.

Methods
We used the Sina Weibo’s built-in search tool to collect data and develop a data set. To ensure that micro-blogs relating to Longmen hospital violence can be fully extracted, we conducted an exploratory search on the Sina Weibo to determine a list of relevant search terms. As a result of the exploratory search, three Chinese search terms were identified, and they included: Longmen (“龙门”), doctor (“医生”), and slash (“砍”). We limited the search period to the dates between July 15, the date of the story was first reported, and August 15, 2015. This generated a corpus of data consisting of 664 Chinese original micro-blogs, that is, we did not include micro-blogs that had been re-posted by other users. Three micro-blogs were excluded from the dataset, because they did not specifically discuss the LCPH incident. 661 micro-blogs constitute the final dataset for this study.

The content analysis was conducted in two stages. We first conducted an exploratory thematic analysis on 10% of the dataset. Based on these findings, we developed a coding framework that include the following twelve questions: 1) Is the sender an organization or individual user? 2) If it is posted by an organization, what type of organization is it? 3) If it is sent by an individual user, what is his/her background? 4) Does the text show sympathy to the injured doctor? 5) Does the text condemn the attacker’s behavior? 6) Does the text express disappointment with the government? 7) Does the text mention that the hospital’s poor medical treatment is one of the reasons for the tragedy? 8) Does the micro-blog indicate that the deteriorating patient-physician relationship is the reason for the tragedy? 9) Does the text mention the attempt to quit the doctor’s job or express regret about studying medicine? 10) Does the text mention that measures should be developed to protect doctors from being injured? 11) Does the text include a statement of “stop violence?” and 12) Does the text mention that the hospital should disclose the incident publicly?

One of the authors coded the entire dataset. Given the subjective nature of the content analysis, an independent coder also coded approximately 10% of the micro-blogs in our dataset ($n = 66$). We used Cohen’ Kappa to calculate the inter-coder agreement. Initial calculation of Kappa scores revealed poor agreement for two items, question 4 and 5. To resolve disagreement, the two coders held a meeting and arrived at a consensus on the definition of “sympathy” and “condemnation.” After recoding based on the agreed upon definitions, Kappa scores ranged from 7.13 to 1.00, indicating substantial to perfect agreement [13].

Results
The majority (73.2%) of micro-blogs ($n = 484$) were published by individual Weibo users, and the remaining micro-blogs ($n = 177$) were posted by organizations (26.8%). Among the 484 individual users, 48 described themselves as either doctors or health care providers, while users from the legal profession were rarely...
identified. With regard to the organizations, news media and medical institutions were the two major microblog publishers, who posted 97 and 24 micro-blogs respectively. 3 micro-blogs were published by courts and legal service agencies, i.e., the China’s Supreme People’s Procuratorate, Heze Yuye County Court, and Democracy and Legal System Official Website.

Seven micro-blogs indicated that the deteriorating patient-physician relationship was the cause of the problem. 20 micro-blogs expressed disappointment with the Chinese government, arguing that poor protection of physicians in China is the fault of the government. Moreover, 33 micro-blogs were very dissatisfied with the LCPH’s silence after the incident. They urged that the head of the hospital to speak up, disclose the facts of the incident, and publicly condemn the attacker’s violent behavior (see Table 1).

15.9% of the micro-blogs (n = 105) mentioned that measures should be taken to improve the protection of health care providers’ personal safety and prevention of hospital violence. Slogans such as “stop violence,” or “no violence” were advocated by 15 micro-blogs. Nonetheless, with the exception of 3 micro-blogs that proposed concrete measures to stop hospital violence, the remaining micro-blogs did not suggest any constructive strategies. At the same time, 8.3% of micro-blogs (n = 55) expressed regrets about studying medicine or entering a medical career and attempts to quit their doctor’s positions. Among these micro-blogs, 8 were sent by Weibo users who identified themselves as healthcare providers.

Our data indicates that 56.3% of micro-blogs (n = 372) showed sympathy for the injured doctor. They used emotional adjectives, i.e., “sad,” “miserable,” “pray,” “crying,” and “horrible” to express their shared feelings (see Table 1). 43.4% of micro-blogs (n = 287) did not contain any emotional expressions in regards to the incident. 22.5% of micro-blogs (n = 149) explicitly condemned the attacker’s violent behavior. Moreover, 3 micro-blogs recalled their experience at LCPH, criticizing the hospital’s poor medical conditions and doctors’ irresponsible attitude. Two other micro-blogs, by blaming the doctors’ bad medical performance and attitude in general, even supported to the patient’s attack.

Discussion
Our findings indicate that news media organizations, both the party-owned and market-oriented news media institutions, actively spread information about the violent incident at LCPH using Weibo. However, news media organizations are not the only sources of information. Other Weibo users such as medical institutes and individual micro-bloggers also played a role in spreading information. This finding is in accordance with existing social networking research that has found that news media organizations play a role, though not a dominating one, in disseminating information in the era of social networking [14]. Our analysis also finds that individual users not only promoted the spread of the information, but also actively engaged in discussions and debates.

Given that doctors are the victims of the hospital violence, it is understandable that many doctors used Weibo actively to spread the news and engage in discussions. However, it is worth noting that individual users from the legal profession were absent from discussions. In the context of hospital violence, numerous legal issues associated with healthcare, e.g., patient-physician relationships and physicians’ rights, need to be carefully and promptly addressed, and lawyers and legal scholars should play a key role in leading and shaping the discussions. Nonetheless, legal discourses on how to prevent violence against physicians and compensation for the injured doctor were rarely mentioned. The lack of representation of and attention paid from the legal profession renders the discussion of hospital violence incomplete, i.e., the debate is missing the rule of law perspective, and, furthermore, contributes to deficient legal protection of doctors and the healthcare system in general [15]. According to the judgment made by the Longmen County People’s Court on March 30, 2016, the attacker was sentenced to two years imprisonment [16].

Many micro-blogs claimed that actions should be taken to stop hospital violence and improve the protection of healthcare providers’ life rights. However, with the exception of micro-blogs originally posted by Foshan Daily (see Table 1), the majority of micro-blogs did not include any constructive suggestions or recommendations. This may reveal some real challenges that the Chinese government is facing, i.e., measures to stop the hospital violence have been ineffective thus far [17]. A series of severe hospital attacks that occurred in May 2016, including an incident in Guangdong province, in which Dr. Zhongwei Chen was brutally killed by a patient, indicates that the deteriorating doctor-patient relationship has not improved significantly, and that no effectual methods have yet been developed to stop the violence.

Without effective measures, the attacks against physicians become unpreventable and endless. Less than 25.0% of micro-blogs that explicitly condemned the attacker’s behavior reveal possible permissive attitudes of Weibo users towards the phenomenon of hospital violence. One micro-blog argued: “condemnation is not meaningful anymore; doctors should escape from this chaos and switch careers” (see Table 1). Indeed, we found that nearly 10.0% of micro-blogs expressed regrets about studying medicine or entering a medical career and attempts to quit doctor positions. Recent news reports and surveys suggest that such career changes are in fact taking place [4, 5, 18]. The decreasing number of
### Table 1 Examples of micro-blogs

| Senders | Micro-blog texts |
|---------|------------------|
| **Organizations** | |
| People’s Daily | 广东惠州一名女医生被患者连砍数刀 肌腱断裂血管肉模糊 | 欧丽芝从医14年,广东龙门县人民医院医生。前日查房时，一男患者廖某向她提出要检查完时，欧医生拒绝。患者在随后的查房过程中，突然向欧医生身上连砍数刀，欧医生的下巴、背、手均被砍伤，刀口很深,血管肉模糊。目前欧某已被拘留。 |

| Southern Metropolis Daily | 广州一名女医生被患者连砍数刀 | 欧丽芝从医14年,广东龙门县人民医院医生。前日查房时，一男患者廖某向她提出要检查完时，欧医生拒绝。患者在随后的查房过程中，突然向欧医生身上连砍数刀，欧医生的下巴、背、手均被砍伤，刀口很深,血管肉模糊。目前欧某已被拘留。 |

| Medical Website | 广东市龙门县人民医院一名女医生被患者砍伤 | 7月15日，一位34岁男子廖某将刀藏塞入皮带内带进龙门县人民医院，直接冲向前台的患者就要来打欧医生。目前这名女医生因伤重被送往中山一院救治。 |

| Foshan Daily | 广东省各医疗机构设置警务室 | 7月15日，广东省龙门县龙门县人民医院发生砍伤事件，一名34岁的男子廖某将刀藏在包内带进龙门县人民医院，直接冲向前台的患者就要来打欧医生。目前这名女医生因伤重被送往中山一院救治。 |

| Individuals | | |
| --- | --- | |
| 医生 | 紧急通知 | 7月15日中午12时，广东龙门县人民医院急诊科医生正在查房，一名34岁的医生患者廖某（化名）来到病房，说自己前年曾经被查房过程中患者反复的暴力行为，欧医生拒绝。患者在随后的查房过程中，突然向欧医生身上连砍数刀，欧医生的下巴、背、手均被砍伤，目前这名女医生因伤重被送往中山一院救治。 |

| | SAP | 7月15日中午12时，广东龙门县人民医院急诊科医生正在查房，一名34岁的医生患者廖某（化名）来到病房，说自己前年曾经被查房过程中患者反复的暴力行为，欧医生拒绝。患者在随后的查房过程中，突然向欧医生身上连砍数刀，欧医生的下巴、背、手均被砍伤，目前这名女医生因伤重被送往中山一院救治。 |

| | 乳癌 | 转来的朋友圈,今天下午在医院的身边广东龙门县医院一个医生先生被一位患者砍伤，他很年轻，才38岁，一名很善良的好医生，在没有一点征兆的情况下被袭击，完全没有防备的机会因为她是一名医生，所以她在上班时，她在半生的痛苦就这样被毁了，我们只能为她祈祷吧!健康中国 |

| | 健康 | 强烈谴责广东龙门县人民医院患者暴力伤医事件 | 广东龙门县人民医院暴力伤医事件，一名34岁的医生患者廖某（化名）来到病房，说自己前年曾经被查房过程中患者反复的暴力行为，欧医生拒绝。患者在随后的查房过程中，突然向欧医生身上连砍数刀，欧医生的下巴、背、手均被砍伤，目前这名女医生因伤重被送往中山一院救治。 |

| | Hand | 单纯的谴责已经毫无意义了，医疗工作者应该想想如何转行远离暴力，因为我们已经承受不起了。 | 广东龙门县人民医院暴力伤医事件，一名34岁的医生患者廖某（化名）来到病房，说自己前年曾经被查房过程中患者反复的暴力行为，欧医生拒绝。患者在随后的查房过程中，突然向欧医生身上连砍数刀，欧医生的下巴、背、手均被砍伤，目前这名女医生因伤重被送往中山一院救治。 |
Table 1 Examples of micro-blogs* (Continued)

| R### | 言的号一名医生在医院被打成这样都没有医护和医院官方正式公开发声，没有医护和官方举办新闻发布会公布事情经过澄清事实真相。试想如果是一个患者在医院被打成这样或者在医院被监，可能会有医护医院站出来实话实说吗？龙门县人民医院的院长，你站出来哦！不打死你。
 |
|      | Well done! A doctor was slashed so badly, but no healthcare providers’ and the hospital’s official voice, no healthcare providers and officials made a press conference to announce and clarify the truth of the incident, imagining that if a patient is slashed in a hospital or a patient’s kidney is stolen in a hospital, will a healthcare provider or hospital official stand out to tell the truth? The Dean of Longmen County People’s Hospital, Wu Yaotang, you stand up! I promise not to beat you to death.
 |

*Translated by the authors

| Authors anonymized the users’ Weibo names for privacy concerns |

drers will aggravate the shortage of physicians, and this will bring critical challenges to the current Chinese health care system.

A long-term impact of the hospital violence on the healthcare industry would be far-reaching. Existing surveys have demonstrated that the anxiety and insecurity surrounding careers in medicine have inhibited talented students, new blood, from entering medical schools [19]. If the failure to attract elite students into the medical community persists, it will set back Chinese medical research and the quality of healthcare in the future. Accordingly, in the face of the already large and aging population, along with a shortage of physicians and low quality healthcare, a health care crisis is foreseeable. What's more challenging is that this health crisis will not be limited to China. As indicated by a recent “fake” vaccine crisis in China and the loss of confidence in the Chinese vaccination system, Chinese patients might rush to health care centers abroad, triggering issues in the local health care systems of nearby countries and regions [20].

Conclusions

In summary, social media can play a role in reflecting and shaping public opinion and policy decisions [12] and our findings demonstrate that Weibo users played a role in distributing information about the violent incident at LCPH, and more than half of the micro-blogs showed sympathy for the injured doctor. However, the legal perspective was inadequately represented in the debate, and the exchange of views on constructive measures for protecting doctors and preventing hospital violence was rare. Our research indicates that some Weibo users consider doctors to be a vulnerable population and that more effective measures are required to prevent hospital violence. However, without the presence of valuable legal perspectives in these public debates, the threats to the safety of Chinese healthcare providers may remain or become worse, and perhaps the growing rate of hospital violence may even trigger crises in the domestic health care system.
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