Causes and enlightenment of stampede on the bund of Shanghai

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Abstract. Large-scale activities gathered a great number people, which was prone to stampede endangered public safety. Take the Shanghai bund stampede for example, the cause of the stampede was analyzed, the problems of early warning mechanism, information release and prevention are pointed out, the prevention and control strategy of large-scale activities stampede were put forward.

Introduction

Along with the rapid development of economy of China, the social principal contradiction has transformed into the contradiction between the people’s growing demand for a better life and the development inadequate and unbalanced. For meeting the public demand for cultural activities, some institutions and organizations hold large celebrations to create a festive atmosphere. These celebrations revitalized the business activity and were conducive to economic development to some extent, but with the increase of enlarging scale and increasing frequency, stampede accident threaten the public safety and social stability.

General Situation and Characters of Shanghai Bund Stampede

General Situation of Shanghai Bund Stampede. On the evening of Dec. 31st 2014, a large number of tourists and residents gathered in the bund scenic spot to watch the activity of New Year countdown. The number of people broke through 300,000 at 11 pm, which reached the capacity limit of the bund scenic, beyond more three times than the flow of people at ordinary times. At the southeast corner of Chenyi square, the stairways leading to Huangpu River Scenic platform were narrow to restrict the large flow of people. The crowd below the steps broke the alert and retrograded to up the steps, which form hedge to the flow of people down steps. Because of the pushing and crashing, someone fell, and the people behind fell one by one, at last overlying together. This stampede caused 36 people died and 49 injured eventually.

Characters of Shanghai Bund Stampede.

Suddenly Occurring. Shanghai bund stampede occurred because someone fell on the steps, and subsequent crowd fell and overlying. This process cannot be controlled, which was characterized by sudden.

Complexity of the Crowd. As seen from the death list released by the Shanghai municipal government, the participants included of all ages and different occupations. Shanghai bund stampede has the characteristics of complexity.

Various Incentives. “The complexity of the crowd creates potential safety hazard between individuals and groups, which lead to more sources of accident hazard. At the same time, the reactions of the crowd toward safety hazard are diversiform. Such two reasons result in more security issues.”[1] Because of the crowd overcrowding, lack of action guidance and weak guard security forces on the spot, under an uncertain situation, people were inclined to scream and shoving out of the instinct, which triggered more casualties.

Harmfulness. This stampede happened in the Shanghai bund, the urban public Spaces, which are likely to gather a good many people. Once someone crowds or falls, the scene will be out of control in a very short time, and mass death and casualty will be happened.

Passive Disposal. “In the process of the accident, each member is often difficult to control inner impulse and their behavior, their mood swings and infects mutually.”[2] It was because of this kind
of psychological characteristics and activities, the scene of Shanghai bund stampede was difficult to control, the disposal and rescue were hard, which formed the passive situation.

Analysis of the Causes of Shanghai Bund Stampede

**Information was not Released in Time.** Since 2011, the Shanghai government has held the activities of the New Year countdown for three consecutive years in the bund. But to the New Year in 2015, considering security, the Shanghai municipal government decided to hold the activity in the bund source [3]. Because related units did not make full of propaganda work, not released information timely, clearly and completely, a large number of tourists and residents still thought that the New Year countdown activities would be held in bund. The Huangpu district government did not make scientific risk assessment for crowd gathering, which eventually lead to the stampede.

**Monitor of Personnel Flow was not Timely Warning.** From 8 PM on 31 December to the event occurring, the people flow in bund scenic showed a trend of rising, gradually formed intensive community crowd. Due to paralysis and lack of attention, Huangpu public security bureau did not take any effective measures to guide people steam, Huangpu district government did not release early warning, and did not timely respond to the Shanghai public security bureau’s demand of analyzing the security risk situation. The occurrence of this incident, to some extent reflected the question that information communication between the higher and lower was not timely, and lack of efficient and fast communication channels [4].

**Prevention and disposal were Improper.** Huangpu district government held the executive meeting for the New Year countdown activity location change, and clearly required to make a comprehensive security solution. But Huangpu public security bureau only evaluated the risk of the bund scenic area, ignoring the bund source. Because of the deficiency about the cognition of safety management, Huangpu public security bureau only deployed around 350 police, 108 urban management and support staff, 100 armed police [5]. The security guard force is far from enough for the activity on that night.

The Prevention and Control Strategy of Large-Scale Activities Stampede

**Strengthen Early Warning and Risk Assessment Mechanism.** Our risk management work paid more attention to the emergency management and recovery after the risk event happened. In the aspects of risk assessment and early warning mechanism, we have to improve. When dealing with the public emergency, first of all, we should take it into the government's long-term strategic objective and daily management activities, which to result the problem of insufficient cognition. Second, for make sure the early warning scientific and accurate, government should enhance the early warning means through various high-technologies, such as big data analysis, monitoring etc.

**Improve the Relevant Laws and Regulations.** “Large mass activities safety management regulations” signed by the State Council, ruled a handful of large-scale activities. But with the continuous development of social economy, large-scale activities present the diversification trend. These regulations implemented now are lagged and not applicable. For perfecting relevant laws and regulations, firstly, legislative level should be enhanced to provide a powerful legal security and improve the executive ability of relevant security administration. Secondly, relevant legal provisions should be updated to keep pace with the times. Thirdly, relevant legal details should be refined. When to formulate the related laws about large mass activities, we must consider comprehensively, not vaguely.

**Improve Contingency Plans and Exercises.** Relevant government departments should make various, detailed contingency plans ahead. And to carry out the consistent principle of training and war, apply series methods, such as lecture, do, research, practice, assessment and so on, which to form safeguard training mechanism of large mass activities. In addition, the site environment usually changes, and appears the situations not in contingency plans. Therefore, when the plans exercise, the uncertain factors shall be join in, to improve the abilities of random strain and emergency disposal, to ensure emergency commands ordered, appropriate and effective.
**Increase Public Awareness of Safety.** First of all, public emergency skills should be improved, and the ideology should be transformed drastically. Second, the government should disseminating the knowledge of emergency management through radio, television, newspaper, network and other carrier, explained the stakes, increase the public attention. Finally, according to the distribution and frequency of the public emergent events, the government shall establish institutions of training emergency knowledge and skills for free. As thus, the public participation will be increased, the emergency knowledge could be combined with the emergency skills and play its efficacy.

**Conclusion**

There were problems and loopholes in the safety management of the large-scale mass activities incidents in our country. This paper put forward a series of suggestions on the disposal of large mass stampede through the study of relevant theory, with the purposes of ensuring the personal safety and property safety of our citizens, maintaining city public security, and promoting social stability.

**References**


