

Susan R. Holman
Satchit Balsari

Stampede at the Kumbh Mela: Preventable Accident?

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Early in January 2013, pilgrims began to gather in the dry sands about three miles beyond the city center of Allahabad, India, to attend the Kumbh Mela, an ancient Hindu religious ritual and festival that draws millions of devout pilgrims for spiritual purification. The festival takes place every 12 years at a holy and auspicious location where the Ganges, Yamuna, and the mythical Saraswati rivers meet. Government officials, administrators, and hired workers had spent months preparing, and the site now stretched to the horizon, with hundreds of multi-colored tents, electrical poles and utilities, bridges, and new roads (see Figure 1). From an adjacent hillside bluff, visitors could look down and see the blue and yellow waters of the Ganges and Yamuna meeting in turbulence at the *sangam*, the most sacred convergence of land and water for bathing, just east of an ancient fort. The entire stretch of sand and rivers—under water most of the year until the annual dry season exposed it anew each winter—had special meaning in Hindu religious belief and practice. Here, it was said, “Mother Ganga” offered purification to all who bathed in her waters during the 55-day festival. Religious leaders, pilgrims, tourists, celebrities, and village laborers would be converging on this small strip of land from around the world and across India to take a holy “dip” in the river and perform religious rituals. As many as 100 million visitors were expected in 2013. On the most holy day of all, which fell on February 10 this year, officials predicted as many as twenty to thirty million people would bathe.¹ An event that public health experts called a “mass gathering” due to its high volume and dense crowds, the Kumbh Mela was a festival that Indians regarded with reverence and national pride. The smallest mishap, the 2013 administrative officials knew, would reflect badly on the national, state, and regional government leaders who organized, built, and administered site facilities. If something went wrong, it would attract media publicity like lightning, perhaps become an international incident. Would the Kumbh Mela of 2013 take place safely?

Constructing a Temporary City

The Kumbh Mela at Allahabad (ancient Prayag or Prayaga) had a long history in India’s religious memory. As early as the seventh century CE, a Buddhist monk traveling through India in search of manuscripts wrote about a holy festival along the Ganges at Prayag where, he said, pilgrims came hoping “to escape from birth and death.” He called the flat plain “the field of charity” because there kings and nobles assembled to compete over who could be the most generous. Their extravagant divestment and exchanged gifts benefited people from every social class in the surrounding city, from priests, leaders, and members of other religious groups, to alms for the widows and bereaved, orphans and desolate, poor and mendicants.² The event came to be called the “Kumbh Mela” or “pot festival,” following Vedic tradition that in a fight

This case was developed by Susan R. Holman, MS, PhD, Senior Writer, Global Health Education and Learning Incubator at Harvard University, and Satchit Balsari, MD, MPH, emergency medicine physician and Research Fellow at the FXB Center for Health and Human Rights at Harvard University, based on research that was part of Harvard University’s multidisciplinary project, “Mapping the Kumbh Mela.” It is used and distributed with permission by the Global Health Education and Learning Incubator at Harvard University. Cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

Stampede at the Kumbh Mela: Preventable Accident? Case Study

between the gods some drops from a pot of the elixir of immortality had fallen to earth at four points along the Ganges River; Allahabad was one.^a The ancient tradition of philanthropy, including free gifts for all who came at the expense of local governors, has continued to characterize the festival throughout the centuries. By India's national independence in 1947, the city of Allahabad and the stretch of land and river where the Kumbh Mela takes place belonged to the Indian State of Uttar Pradesh, and this state's government fully funded and administered the festival's construction and maintenance. The Allahabad Kumbh Mela festivals of 2001 and 2013 were each estimated to cost the government approximately US\$130 million.³

While the state pays the bills, the festival's most powerful leaders are the thousands of religious holy men, or *sadhus*, who lead the sacred rituals. Sadhus compete with one another for the privilege of claiming a land allotment as close as possible to the sangam for their congregation or *akhara* (religious compound). Holy bathing also depends on the date, a lunar calendar determining which days are most auspicious.^b In 2013 the festival's most auspicious bathing day, February 10, began before dawn with a spectacular procession of sadhus parading together to the sangam to perform their rituals. Following their ablutions, new monks would traditionally undergo their initiation baths, followed by the waiting crowds of pilgrims.

During the 55 days of the festival, the geographical area of the Kumbh Mela is a jurisdictionally discrete township called a *nagri*. It is a temporary city with temporary but official infrastructure; this includes the delivery and management of public services, including police, electrical power, water pipes, health and sanitation, food, and civil supplies.⁴ Appointed officials take time away from their posts elsewhere to direct the site's administration according to an official government schedule. When the festival ends, each official returns to regular employment, many in government posts in Allahabad or other nearby cities.

The event is free. Anyone in the world may attend. There are numerous access routes to the site, with constant traffic to and from the city of Allahabad. Pilgrims may come for a quick dip or they may be *kalpavasis*, pilgrims who remain throughout the entire festival, bathing daily.⁵ Authorities cannot reliably estimate how many will attend or when they will come. Even the ground facilities cannot be mapped out until the river recedes, approximately six or eight weeks before the festival. Officials do as much planning as possible in advance to anticipate the placement of roads, bridges, tent compounds, and utilities.⁶ In 2013, the entire region of the fairground covered 1936.56 hectares,⁷ roughly equivalent to 36 square miles.⁸

Construction materials, new and those saved from previous festivals, are gathered off-site months in advance, cleaned and repaired as needed, and prepared for transport to the festival. By the first auspicious bathing day in 2013, January 14, facilities included 35,000 toilets, approximately 97 miles of roads, 355 miles of water pipes, 497 miles of electric wires, 73 power substations, 30 fire and police stations, four food warehouses, 38 hospitals (14 allopathic, 12 homeopathic, and 12 ayurvedic) with 370 combined hospital beds, 120 ambulances, 56 watchtowers, more than 12,000 state police on site, and 89 CCTV cameras.^{9,10} Eighteen hollow metal pontoon bridges, each weighing six tons, connected land and rivers.¹¹ After the 2013 festival ended, on March 10, the entire site would be taken apart, tents and supplies returned to storage or used for other purposes. All that remained would be abandoned to the rising river and local scavengers.¹²

^a The other three cities in India where the Kumbh Mela festival takes place at different times are Haridwar, Nasik, and Ujjain.

^b Major bathing dates for the 2013 Kumbh Mela at Allahabad were: January 14 and 27, February 6, 10, 15, 17, 18, and 25, with February 10 as the most auspicious date in the festival. The 2013 festival officially ended on March 10. <http://www.mahakumbhfestival.com/2012/02/allahabad-maha-kumbh-mela-bathing-dates-for-year-2013>.

Will There be Enough Trains?

Religious pilgrimage is a journey. For Hindus, as for pilgrims of other religions around the world, the spiritual benefits of the journey are often believed to be greater when the experience is difficult. For centuries, the most pious Kumbh Mela pilgrims arrived from home on foot. The pilgrims who came in 2013 were predominantly poor villagers from across India,¹³ but in the modern world many chose to journey by train. National, state, and regional planning officials knew that more trains would be needed going to and from Allahabad during the festival. This increased need would be greatest on the major bathing days, when many would arrive early, hop off the train in the morning, take their holy dip at the sangam, and then board the evening train home.

Pilgrims who traveled by train would typically arrive at one of four railway stations within the city limits of Allahabad: the stations of Allahabad, Rambagh, Prayag, and Prayag Ghat.¹⁴ Trains were operated by the National Railway Authority, under the administration of the Government of India. All train stations were outside of the nagri, and not within the Kumbh Mela's official civic jurisdiction. From their arrival at the train station, pilgrims could typically reach the festival from the city—and return—on foot, bicycle, rickshaw, or motor vehicles. In the dense crowds, pilgrims who traveled the few miles between the stations and the festival grounds often held onto one another as the only way to stay together. As poor villagers, many did not come with suitcases but rather carried their possessions in a round cloth bundle over their shoulders or on their heads. This bundle typically contained all they expected to need for their entire trip. For those who could afford it—and for tourists—"luxury" tents and campsites offered housing around the city and on the nearby hillside bluff. The most pious pilgrims sought a simple ascetic lifestyle as part of the spiritual experience, many sleeping outside on open ground within the nagri.

To serve the anticipated crowds, the National Railway Authority had promised that as many as 50 extra trains would run through Allahabad on major bathing days. Indian Railways had added more than 200 special trains to the route,¹⁵ and trains were also scheduled to stop at many nearby stations to minimize congestion at the Allahabad Railway Station. According to one Railway Ministry official, 198 trains served the city on Sunday, February 10, including 61 "special" trains. Each special train had 24 coaches with an estimated capacity of 3000 passengers.¹⁶ For the estimated 30 million people expected on February 10, four color-coded sheds were built just outside the Allahabad Railway Station's main entrance by Platform 1 to help channel passengers, guiding them to waiting areas according to the different directions pilgrims would be traveling home. Inside the station, several small footbridges provided passenger access to the various tracks. Officials knew that these footbridges would be used by many thousands more people during this time than was usual during the rest of the year.

Public Health at the Kumbh Mela

Safety concerns at the Kumbh Mela include many other issues in addition to safe transportation. The officials in 2013 organized carefully planned efforts to ensure public health and safety, related particularly to risks of potential disease and accidents within the nagri and along the sangam. By the third week in January, the festival was buzzing with noise, music, and ordinary daily life in an Indian religious setting. From 3 AM until 11 PM every day, loudspeakers broadcasted religious music, announcements, drama, and teachings that could be heard for miles. By 5 AM each morning, pilgrims lined up to use the public toilet areas as they prepared for their daily sacred bath at the sangam. Some used the built toilet units constructed at regular intervals; others defecated in fenced-in open areas, following cultural customs. The World Health Organization estimates that India has the world's largest number (626 million) of people who practice open defecation.¹⁷ By 8 AM, as the sun rose pink in a haze of smoke from the campfires, pilgrims flocked to the sadhus' religious compounds, where thousands of volunteers from around the world worked together to provide free

breakfast. Altars were burning with ritual sacrifices as groups of sadhus gathered in their tents, sitting cross-legged in conversations with followers, pilgrims, and tourists, and smoking *chillum* pipes of cannabis. Children ran and begged along the metal-plate and straw-strewn roads, some dressed as Hindu deities they represented in the nightly theater performances. In the workers' camps, children stood by the water pumps for a morning scrub by their mothers, or peered shyly from the patchwork tents. Utility workers sprinkled sanitizing powder around the toilets; merchants from the city sold fresh fruits, vegetables, and small souvenirs from wheeled carts; and naked, ash-strewn holy men wandered unpredictably. Throughout the day, trucks clattered over the roads, spraying waste water on the dust and blasting clouds of insecticide to minimize mosquito-borne disease risks such as malaria and dengue. An estimated 8,000 cleaners worked to tidy up, chasing plastic bags and litter, cleaning toilets, and pushing carts with refuse for removal.¹⁸

Officials worried most about three potential mishaps: disease such as cholera,¹⁹ fatal accidents due to drowning and fire, and both injuries and fatalities that could follow from crowd-related stampedes. A stampede, a “sudden or unreasoning rush or flight of persons in a body or mass,”²⁰ was always a risk of large gatherings, whether the event was religious (such as the Kumbh Mela and the Hajj) or a sports event (such as the Olympics). Allahabad's Kumbh Mela had suffered deadly stampedes in 1840, 1906, 1954, and 1986.²¹ The stampede of 1954—the first Kumbh Mela after India's independence in 1947, was especially tragic. The festival that year had suffered from a series of other accidents before the stampede began: several people died in two smaller crowd crushes; 12 pilgrims drowned when their boats overturned; and a fire consumed hundreds of huts when water-and-fire brigades failed.²² Prime Minister Jawaharlal Nehru had come to bathe, increasing the crowds who flocked to see him. On February 3, 1954, crowd control efforts fell apart, as people continued to jam together toward the sangam. In the extreme pressure, people began to fall over one another, and disaster followed.²³ Some said that the tragedy that day was aggravated further when pilgrims transgressed over into the sadhus' sacred procession. The holy men—known throughout the centuries for their reputation for violence²⁴—acted accordingly, and chaos ensued.²⁵ The exact death count remained controversial.²⁶ Many blamed the government; an appointed Fact Finding Commission was accused of “refusing to answer certain questions, presumably to avoid conceding that there were fundamental flaws in the manner in which the government and prominent individuals” responded.²⁷ The 1954 disaster cast a shadow on the nation and resulted in serious efforts to implement a number of safety measures to address these issues and prevent another stampede.²⁸

When officials, festival administrators, and public health leaders reflected on these earlier incidents in planning for the 2013 festival, it was clear that several situations created particular risks of crowd-related injuries. One was the directional flow (and press) of human bodies against each other, in a culture where people in public space are accustomed to pack together very tightly and do not form orderly lines. Second was the capacity of the ground surface, recently dried sand and metal plate roads, including the metal pathways and guard rails of the pontoon bridges, to safely support the human flow. Third, there was the challenging risk that pilgrims encountered every time they entered and submerged in the rapid river currents for the purpose of holy bathing.²⁹ In planning for 2013, officials addressed these risks with a number of proactive measures, described below, related to crowd flow control, ground safety, bathers' safety, lost and missing person surveillance, and onsite medical care.

Crowd Flow Control

To control the flow of people in competing directions, most of the 97 miles of new roads were wider than is usual in India. On the busiest bathing days, festival police banned motor vehicles within the nagri, permitting only those carrying sadhus who lived in the akharas and emergency vehicles such as ambulances (though they could in fact rarely move due to the crowds, and ambulance lanes were nonexistent in the nagri, urban

Allahabad, and nearby towns). Reserving dedicated space for public figures such as politicians and other VIPs who might come in 2013, the police kept a narrow pedestrian-only corridor cordoned off along each major road. Police also monitored crowd traffic across the pontoon bridges.³⁰ Each bridge had metal cord railings strung along wooden posts along the length of the bridge on each side. (See Figure 2) The bridges became one-way pedestrian routes to and from the sangam, with permissible crowd flow direction across the bridges depending on which direction most people were likely to move at different times of the day. On major bathing days one could rarely choose; people were simply pushed along in the press of bodies. The nagri administrators also structured bamboo racks of barricade fencing along the sand to guide channeled lanes across open fields down to the sangam. This effort was less successful, since many pilgrims simply used the racks to dry their clothes after bathing, and slipped under them to move more directly to the sangam. Only a few locations had predictable queues, for example, in the akhara precincts, where “tens of thousands of pilgrims are lined up daily in tightly ordered rows to receive communal meals.”³¹

Ground Safety

The ground surface, a mix of earth and sand, easily turned to mud when wet. To reinforce the ground for vehicular traffic, the major roads consisted of large rectangular metal plates laid end-to-end. These plates, when used in previous events, had tended to shift or turn upwards, putting tires at risk. For 2013, the Mela administration bolted them together to keep them in place.³² For pedestrian safety on the remaining open ground, straw was laid over the entire site to fortify the sand and keep paths safe even when the ground was wet. The roads were regularly sprinkled with water from trucks filled with non-potable “grey water” to minimize dust and help visibility. Sandbags lined the banks at the edge of the rivers within the Mela nagri, so that pilgrims walked over not earth but sandbags.³³ This extra safety measure also improved traction as bathers stepped down into and out of the water.

Bathers’ Safety

For those in the water itself, boundary fences kept the bathing crowds within the shallow area, within several feet of each shore, minimizing risk of wading or falling into deep water. Lifeguards and rescue boats monitored the entire shoreline. Fencing and sandbags were also projected out into the water like teeth at regular distances. This measure created “eddy breakers” that controlled water flow to help prevent bathers from getting caught in the currents. Since the most sacred spot was mid-stream at the rivers’ confluence, pilgrims could also hire boats with rowers to take them further out if they wished. These boats sometimes capsized. Three capsized on February 9,³⁴ and some reported that the body of a young boy, perhaps an overlooked victim, washed up on the sangam the next day.³⁵ In addition, despite all of these efforts, the media reported two deaths following a small stampede within the nagri on February 10.³⁶

Bathers also faced risks of disease from contaminated water, since pilgrims often sip small amounts of river water as part of religious ritual. Water safety measures included a variety of efforts to reduce the risk of waterborne diseases. The 2013 festival included a “Green Kumbh” publicity campaign sponsored by several religious groups to highlight the importance of keeping the Ganges clean.³⁷ Water contamination was further limited by controlling upstream factory discharge before and during the festival. Upstream dams scheduled releases to increase flow and volume of fresh water into the bathing area.³⁸ Since sewage in India typically flows directly into the rivers, during the Kumbh “all the city sewers were directed downstream of the sangam to keep the bathing ghats free of filth.”³⁹ Piped bore wells provided clean drinking water, and the trucks sprinkling the roads were labeled with signs in Hindi to warn pilgrims that water from these trucks was not safe for drinking.

Lost and Missing Person Surveillance

Another risk pilgrims faced was that of getting lost (or abandoned⁴⁰). Crowd surveillance took several forms. Police monitoring sites included the “Sangam Tower” as well as military surveillance from the nearby Allahabad Fort. People lost, missing, or otherwise displaced during the event were directed to either the nearest police station or to the nongovernmental organizations that have been sheltering and reuniting those lost at the Mela since the 1940s.⁴¹ The site-wide public address system throughout the festival broadcast names of those wishing to be reunited and where to find them.

Onsite Medical Care

Medical care was organized into services within each of the nagri’s 14 administrative geographical sectors. Thirteen sectors each had its own (temporary) allopathic medical clinic. A fourteenth facility, a permanent building adjacent to the sangam, housed an allopathic medical hospital. Medical personnel in each sector clinic were recruited (or appointed) from nearby hospitals and medical schools. Clinics also contained basic pharmaceutical supplies, two or three camp beds for patients who needed to lie down, and four types of disaster preparedness kits: for stampede, bomb blast, burns, or drowning.⁴² All medical care within the nagri during the duration of the festival was free. Across South Asia it is traditional for individuals to rely on a variety of different cultural health care practices, often overlapping advice from diverse practitioners in treating the same complaints. In addition to the allopathic medical care at the festival, the site also included 12 homeopathic and 12 ayurvedic hospitals.

The Most Auspicious Holy Dip

By Sunday morning, February 10, 2013, the festival—and the crowds—were at their peak. This was Mauni Amavasya, the Kumbh Mela’s “highest holy day.” Pilgrims surging onto the fairground from the railway station that morning had one goal in mind: a bathing experience for spiritual cleansing. Could they reach the sangam with time necessary to properly revere Mother Ganga, perform ritual offerings and prayers to wash away sins, taste the holy nectar of immortality, and travel back to the station that evening to catch their train home?

India has many sacred spots for bathing along the Ganges River. But the 2013 Kumbh Mela offered many of the fragile elderly who came in their later years with a once-in-a-lifetime opportunity. According to Dr. Ahmed Shaikh, a physician from Mumbai who attended the 2013 festival to help monitor the medical risks, “most of the people who come for these pilgrimages are... retired from their professions and now they want to be closer to God... So these are elderly people... a huge population at risk... women, disproportionately, and elders.”⁴³ Many of these elderly had younger family members with them to help them fulfill this most sacred ritual in hope of a blessed death.

We Have a Stampede: Now What?

Around 6 PM in the evening on Sunday, February 10, 2013, several miles west of the sangam, the 21-coach Rajdhani Express—one of the added special trains with a capacity of 1,400 passengers⁴⁴—was approaching the city of Allahabad for its scheduled stop at the Allahabad Railway Station. The train was carrying hundreds of people intent on a holy dip. At the train station, additional throngs of pilgrims who had come that day from the sangam after their bathing waited (many still in wet clothing) with luggage, family, and friends, to board the trains and go home.

There were no restrictions on who could enter the station. Unreserved seats on the trains were available—as they are in much of the world’s public transport—on a first-come, first-served basis. As Logan Plaster, an American journalist at the site, remembers, “These unreserved cars are packed dangerously full, at two or three times safe capacity;” the result was a “frantic scramble that goes on at each new train’s arrival.”⁴⁵ (See Figure 3) The Rajdhani Express was due to arrive on Platform 1.⁴⁶ As in many train stations, Platform 1 is the platform closest to the street, the point of greatest intersection between crowds coming in and going out .

The festival’s vehicle ban did not apply to the city of Allahabad. Its streets were packed with the press of cows, motorcycles, bicycles, taxis, rickshaws, wagons, cars, trucks, wandering animals such as wild pigs, and pedestrians. The numbers of people waiting at the station had increased as the day progressed. According to reports, “train service was severely delayed during the early evening ... leaving more and more passengers stranded in the small station.”⁴⁷ By 6:30 PM, rail officials reported that, “all foot-over-bridges were jam-packed. The travellers’ sheds installed at the entry of the station through platform number one were also chock-a-block and people were waiting for their trains at the platforms.... [T]here was little idea about which passenger on which platform wanted to go where.”⁴⁸ Only a fraction of the promised extra trains had actually reached Allahabad Railway Station by early evening.⁴⁹

Suddenly, for reasons that remain unclear, a track change was announced just as the Rajdhani Express was pulling into the station. The train arrived not on Platform 1 but on Platform 6. To reach Platform 6, passengers would need to cross over at least one station track, climbing a set of stairs within the station and crossing a narrow footbridge. According to Dr. Shaikh, only one footbridge connected platforms 1 and 6; this footbridge was located at the far western end of the station.⁵⁰ Those waiting for the train on Platform 1 had to quickly reach and cross the bridge to Platform 6. Those exiting the train to take their holy bath would need to cross the same narrow footbridge, in the opposite direction in order to reach the street. (See Figure 4) As a result, there was virtually no room on bridge, stairs, or platforms for anyone to move in any direction. In the pressure and panic of the following minutes, 36 people died, including 27 women, most of them poor and elderly, and one eight-year-old girl.⁵¹ Thirty-nine more were admitted with injuries to nearby medical facilities. The crowds and the noise in the station were so intense that one person in the station at the time but not involved in the stampede reported, “We were waiting on Platform 9, and the stampede happened on Platform 6 killing 30+ people. Heavy crowd and noise, we didn’t even know such an incident happened on the opposite platform.”⁵²

Where Were the Doctors?

Media reports on the stampede highlighted how “there was no doctor or ambulance for at least two hours after the accident.”⁵³ The medical system in India does not typically include personnel such as paramedics or emergency medical technicians (EMTs). The crowds in and around the station made it difficult for anyone to move in any direction, even after the stampede. Victims who could be moved through the packed crowds at the station began to be transported on foot, in improvised “stretchers,” often covered with white sheets from the trains.⁵⁴ Victims who needed urgent medical care due to deep tissue injuries and fractures required splints before they could be moved safely, said Dr. Shaikh, “and there was no way to ask for help.”⁵⁵ As a result, he noted, it was the victims who could move easily—those least injured and most likely to survive—who most quickly reached nearby medical facilities, while the victims with more serious life-threatening injuries or broken bones took up to seven hours to reach a medical facility.⁵⁶ (See Figure 5)

Could the police have helped? The security and police forces in the city of Allahabad during the Kumbh Mela belonged to one of four different official organizations, and could be distinguished by their uniforms. They included the city police, the state police, the Rapid Action Force (a special armed body that specializes in civic crises and disaster response), and the Indian Army. Each group functioned independently. “I saw the doctors at the [nagri] sectors using walkie talkies but I did not see the security forces [in the railway station]

using [them],” said Dr. Shaikh. “There was no way for them to communicate from the station bridge... to clear out the crowds outside so help can get in.”⁵⁷

Medical care would also depend on the type of facility. The city of Allahabad contains a number of permanent medical facilities. At the time of the stampede, these included: a small Railway Clinic; the Northern Central Railway Hospital, across the street from the station; and several area hospitals. The area hospitals included the Swaroop Rani Nehru Hospital (SRN), a 1,000-bed tertiary care facility located one block away from the station, equipped with a trauma center;⁵⁸ Tej Bahadur Sapru Hospital (“Beli” Hospital), about two miles north of the Allahabad Railway Station; and MLN Hospital on Colvin Road (“Colvin”), about a half mile south of the stampede site.⁵⁹

The Railway Clinic, nearest and easiest to reach, was located in a remote corner of the station. Six of the first stampede victims reached this clinic, two with soft tissue injuries and four who were already dead.⁶⁰ Dr. Shaikh described the facilities at this clinic as he found them the following morning:

This clinic was a single one-room clinic. It had two stretchers, no bed to examine the patient, and it was manned by one doctor who wasn’t trained or qualified. And the doctor was working literally out of his suitcase! I’m not exaggerating; I was there; he opened his suitcase, and he’s got strips of medication, and some suturing material, and some other stuff, maybe some splints, sanitizer... And there was obviously no dress code... no way to identify in a huge crowd to know this guy’s a doctor.⁶¹

The Railway Hospital, across the street from the train station, was primarily an observation unit intended for emergency triage and referrals to the larger area hospitals. The Railway Hospital had X-ray facilities and could bandage wounds. Medical staff at the Railway Hospital on February 11, 2013, said Dr. Shaikh, consisted of a total of two doctors and two nurses.

Those accompanying the injured victims made their way to whatever facility they could find. All stampede victims who arrived at a health care facility and sought treatment were admitted regardless of the severity of their wounds.⁶² This lack of decision-making triage quickly challenged the medical resources that would be available for those who arrived for care last, often the most seriously wounded.⁶³ With resources stretched thin and bed spaces filled, late-arriving patients were referred to the Casualty (emergency) units of other, more distant facilities, further delaying their treatment. One news report estimated that at least 15 of the 36 deaths had been caused by “severe delays in medical treatment.”⁶⁴ Since all stampede victims were admitted, Dr. Shaikh recalls, “One guy said to me, ‘They’re just separating the dead from the alive.’”⁶⁵

By Monday morning, February 11, all available medical personnel in the city, including medical interns at Allahabad Medical College, were mobilized to provide their services to stampede victims across the city’s medical facilities.⁶⁶

By Tuesday morning, the National Railway officials posted lists of the dead and injured at various medical facilities where friends and relatives might come looking for them. (See Figure 6) Lists included names and ages (when known), gender, injury type and severity, and the facility where they had been admitted for care. Those injured ranged from ages 18 to 82, and those who died ranged from ages 8 to 72. Notices also directed relatives of those who had died to the Allahabad Medical College, where they had been moved for post-mortem examination.⁶⁷

Who is to Blame?

The immediate question that dominated the media was: who should be held responsible? Mohammad Azam Khan, a cabinet minister in the Uttar Pradesh state government, who had been appointed to head the

Kumbh Mela administration during the period of the festival, resigned. He made it clear that his resignation was a symbolic gesture, telling reporters, “Though the incident took place outside the Kumbh Mela premises, I take moral responsibility.” With his resignation, however, he blamed the railways authorities for mismanagement, noting that, “[T]he railways appeared to be indifferent and negligent.”⁶⁸

Railways Minister Pawan Kumar Bansal denied that the railway was at fault and blamed the crowds. He claimed that the railways had made “adequate arrangements well in advance” to deal with the passenger rush during the festival. In addition to “112 routine trains, we also ran 69 special trains on Sunday,” he said. “There were too many people on the platforms. The station was overcrowded.”⁶⁹

The initial reports incorrectly attributed the tragedy to the footbridge—or some part of it—collapsing.⁷⁰ Journalist Logan Plaster visited the site the next morning and found the bridge “perfectly intact,” he said; “The problem wasn’t infrastructure.”⁷¹ Railway Minister Bansal also dismissed the false rumors of a broken footbridge handrail.⁷²

Others blamed the stampede on police use of batons as weapons.⁷³ Dr. Shaikh noted that “What precipitated this is that the police... got frustrated and started using batons to control these crowds. That just triggered a stampede.”⁷⁴ Officials admitted that indeed batons were eventually used in an attempt to control the crowds.^{75,76}

Mohammad Azam Khan also blamed the media for creating panic by its report of the incident that had taken place in the Kumbh that day (See Figure 7), complaining that,

The death of two persons after falling in drain was run as breaking news in channels saying that deaths took place due to stampede in Kumbh...Due to this news, people started moving to the railway station due to which pressure increased there.⁷⁷

Officials responded to the tragedy with promises of monetary compensation for victims. India’s Prime Minister, Manmohan Singh, immediately issued a general promise of compensation for the injured and families of those killed.⁷⁸ While outside the hospital morgue, Dr. Shaikh recalled,

I was following what’s called a magistrate general... moving in his entourage of policemen and these armed force heads, and... suddenly in the middle of it the media [asked about] all these injuries, who’s going to compensate? So he announced a monetary compensation of 5 lakh [500,000] rupees for the ones who are dead and 2 lakh [200,000] rupees for the injured.⁷⁹

The crowds were also unhappy due to a perceived lack of public information about medical services for the victims. At SRN Hospital, for example:

Divisional Commissioner of Allahabad Devesh Chaturvedi and Dr. S. P. Singh, Principal of Motilal Nehru Medical College to which the hospital is attached, were mobbed by people angry over “lack of proper care and facilities.” The officials, who had visited the hospital to take stock of the relief work, had a tough time assuaging the frayed tempers. Some of the bereaved people complained that they were being prevented from taking away the bodies of their near and dear ones. The official requested them to “have patience till the post-mortem and other formalities” were complete.⁸⁰

Months later, at a follow-up seminar on the Kumbh Mela at the Harvard University Radcliffe Institute in August 2013,⁸¹ Inspector General Alok attributed the stampede to several factors. He was upset that the Railways had arbitrarily cut back the number of trains initially promised, leading to overcrowding at the platform. However, he attributed the more immediate reason for the stampede to crowd behavior. Most pilgrims carried their luggage on their heads. This prevented them from looking down at the steps on the

footbridge, as they could only look straight ahead. A landing half way up the stairs is where someone is mostly likely to have misjudged a step. Given the densely packed crowds on the footbridge, a cascade was inevitable.

When journalist Logan Plaster returned to the stampede site on February 11, officials were strictly enforcing queues at the station. He climbed the bridge to view the stampede platform up close, writing later,

I saw a pile of shoes that seemed to have been tossed over the railing. By their positioning, these most likely belonged to the deceased. But besides these jettisoned relics, there was no sign whatsoever that a tragedy had struck so recently. No plaques, no pictures; just streams of passengers moving on with their lives... The obvious lack of pause seems to ignore the dead—and makes it more difficult for authorities to remember the past and learn from mistakes.⁸²

Conclusion

Although the disaster had not happened on festival property, 36 people died during the 2013 Kumbh Mela in the railway station stampede and 39 others were injured. This may be compared to hundreds who died in the infamous 1954 stampede on the Kumbh ground itself. Was this a sign of failure—or did it prove that preventive measures for the festival had been a success? Whether the 2013 Kumbh Mela was a success or failure, such tragic unintentional injuries and accidents caused by stampedes remain a risk for mass gatherings. How might those who would be responsible to plan and prepare for the next Allahabad Kumbh Mela, in 2025, keep everyone safe?

Figures

All photos were produced as part of Harvard University's "Mapping India's Kumbh Mela" project and are used here with permission.

Figure 1. View from the bluff overlooking the 2013 Kumbh Mela, looking southwest toward the Allahabad Fort. (Photo credit: Susan Holman)



Stampede at the Kumbh Mela: Preventable Accident? Case Study

Figure 2. Police monitoring the crowd flow and bridge security during the Kumbh Mela. (Photo credit: The Lakshmi Mittal South Asia Institute at Harvard University)



Figure 3. Crowds at the Allahabad Railway Station, the day after the stampede. (Photo credit: Derek Brown)



Figure 4. Crowds on the railway bridge at the Allahabad Railway Station. (Photo credit: Derek Brown)



Figure 5. Ambulance wading through pedestrian traffic on February 10. Emergency response vehicles took several hours to ferry patients over distances that should have taken a few minutes. (Photo credit: Dhruv S. Kazi)



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Figure 6. Sample sheet from the Northern Railways posted in public places outside medical facilities in Allahabad listing victims' injuries, mortalities, and medical facilities providing care. A summary of all non-fatal injuries and hospital locations is given in the box at bottom right. (Photo credit: Ahmed Shaikh)

31	Unknown	55	M	Unconscious	??	At SRN Medical College Hospital ALD
32	Ayushi	18	F	d/o M. P. Sharma	Gwalior	At SRN Medical College Hospital ALD
33	Ajay Prasad Gupta	45	M	s/o TriveniSahu	Latehar	At TejBahadurSapru Hospital
34	Krishna Devi	65	F	w/o Raja Ram	Sakurbasti Delhi	At TejBahadurSapru Hospital
35	Laxmi Devi	70	F	w/o Ram Kishore Awasthi	Banda UP	At TejBahadurSapru Hospital
36	Rajesh Gupta	45	M	s/o KedarNath Gupta	Farida bad	At TejBahadurSapru Hospital
37	Dhanpati	70	F	w/o Gayadeen	Sultanpur	At TejBahadurSapru Hospital
38	RameshwarMistri	70	M	C/o Ramawtar	Mayapuri, Delhi	Rly Hospital
39	Munish Devi	50	F	W/o Raj Bahadur SHIV RAJ	Delhi	Rly Hospital
Summary						Hospital Wise
Grievous-3						At SRN (Medical College)- 30 Patients
Simple -36						At Tej Bahadur Sapru Hospital- 5 Patients
Total -39						At MLN Hospital (Colvin) 2 Patients
						At Railway Hospital- 2 Patients

Figure 7. The site of the stampede where several people died inside the Kumbh Mela on Sunday, February 10. The pool visible here was quickly fenced in and all evidence of scattered personal effects removed. (Photo credit: Derek Brown)



Endnotes

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