

Article

# Hinduism, Ecological Conservation, and Public Health: What Are the Health Hazards for Religious Tourists at Hindu Temples?

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Received: 15 July 2020; Accepted: 11 August 2020; Published: 13 August 2020



**Abstract:** This exploratory ethnographic study aims to understand the visitation experience and to identify health hazards at pilgrimage sites in India. Specifically, this research aims to assess the tourism potential of holy Hindu temple sites located along well-known pilgrimage routes. During our fieldwork, we visited several of the most significant Hindu temples in India. Framed by a critical ethnography lens, our study used unstructured interviews with local stakeholders, as well as observations and reflexive notes. The findings revealed that most of the temples have serious safety, hygiene, accessibility, and environmental issues. A lack of action could lead to serious consequences for locals and tourists. For example, important for tourism, warnings of pandemics have been sounded over the years, and disease pandemics originating in India may only be a matter of time. We propose some immediate solutions and areas for future research.

**Keywords:** ethnographic study; health hazards; heritage protection; Hindu temples; management implications; pilgrimage tourism; pilgrims' safety; public health

# 1. Introduction

Religious travel has been undertaken since time immemorial and is thus one of the oldest forms of tourism (e.g., Collins-Kreiner 2016; Raj and Griffin 2015; Timothy and Olsen 2006). Devotees travel to sacred places to perform spiritual rituals and to obtain "divine blessings". Christians travel to the Holy Land, Judaists visit the Wailing Wall in Jerusalem, and Muslims travel to Mecca, while Hindus visit Varanasi's Ghats (Shinde and Olsen 2020).

This exploratory ethnographic study focuses on India, where pilgrimage is almost as old as Indian civilization, and the institution of pilgrimage to "tirtha-yatra" (holy places) is an ancient and continuing religious tradition of the Hindus (Eck 2012; Singh 2004). Each year, millions of Hindus visit temples located along well-known pilgrimage routes, such as Char Dham and Chota Char Dham (e.g., Sati 2014). For example, in 2012, the Amarnath Holy Cave was visited by 635,000 pilgrims, and the Badrinath temple had 985,000 visitors (Apollo 2017).

In 2018, a group of four international scholars (authors) were invited to participate in ethonographic field research in India to learn more about ancient Hindu culture, religion, and temples. The itinerary of the field trip was off the beaten track for foreign tourists, although some of the temples visited



are internationally known. This allowed the scholars to critically assess these temples, which are considered remote for international visitors but are frequented heavily by Indian Hindu believers. Overall, the main issues that downgrade the pilgrims' experiences are poor infrastructure, pollution (noise, air, and water), congestion, traffic, vandalism, etc. (Woodward 2004). Thus, during the fieldwork, we focused on the issues and challenges that Hindu pilgrims are facing in India; particularly, we critically assessed safety, hygiene, and accessibility issues along with physical impacts.

The main aim of this exploratory research is to compile what we learnt from this trip and to recommend urgent changes in management policy with implications for future research.

## 2. Motivation, "Expectation of Experience", and Potential Hazards

Once defined exclusively as a journey prompted by religious motivation, pilgrimage today has been redefined as a modern secular journey (Collins-Kreiner 2016; Sharpley and Sundaram 2005; Timothy and Olsen 2006). Fladmark (1998) observed that although pilgrimage tourists travel to ancient holy places and religious sites such as temples and are triggered by religious motives, it may be possible that many are equally driven by a number of non-religious motives, such as a desire for adventure, the discovery of something different, and cultural enrichment. Thus, even if someone is primarily motivated by religious purposes, (s)he is not immune to motives of leisure and simple curiosity as well as a quest towards greater understanding and a search for the sacred and the transcendent (Fladmark 1998; Cohen 2003; Shuo et al. 2009). In our case, we were primarily motivated by a form of secular pilgrimage driven by seeking cultural understanding, adventure experiences, and deeper insights into Hindu religious practices.

Overall, in developed countries, cultural motivations and gaining new experiences are deemed more important than religious motivations or the promise of spiritual fulfilment (Abbate and Di Nuovo 2013; Amaro et al. 2018). This trend is also gaining traction in developing countries (Singh 2004); therefore, pilgrimage should not be solely described from a religious perspective. In fact, globalization has transformed pilgrimage into a global and secular product (Burns and Holden 1995).

It should be mentioned that even in India, this change in motivation has been observed. This is why religious journeys should not be described stereotypically anymore (Wright 2007). According to Shinde (2007), along with a substantial increase in the volume of visitors to sacred Hindu sites, qualitative changes are visible in the very essence of pilgrimage. The modern pilgrimage has become more touristic and includes changing patterns of visitation, limited engagement of visitors with rituals, commercial organization typical of package tours, a particular way of marketing the destinations, and the increasingly consumerist behaviour of visitors (Gladstone 2005; Guha and Gandhi 1995; Singh 2002, 2013; Sharpley and Sundaram 2005). A large proportion of visitors to sacred Hindu sites have an additional motive of getting away on holidays (Gladstone 2005) and visit sacred sites on holidays irrespective of the religious importance of time in performing the pilgrimage (Shinde 2007; Singh 1997). Singh (2004) noted that some of the Yamunotri temple's visitors do not even enter the temple itself while others do so only after dinner. All this evidence supports the notion that pilgrimages to Hindu sites in India are becoming increasingly secular and touristic.

Blackwell (2007) used the Herzberg's theory of motivation Herzberg (1974) and divided factors influencing the motivation of pilgrims and religious tourism into two sets: hygiene factors and motivating factors. Hygiene factors do not actually motivate people but will lead to a feeling of dissatisfaction if they are absent or inadequate, while the motivators are those things that motivate the individual but will not cause dissatisfaction if absent (Blackwell 2007). The motivation of pilgrims does not change with faith (religion); however, the behavioural characteristics of pilgrims can differ according to faith. The Hindu approach to environmental protection may differ from that of Christians or Buddhists, even though the Creator, through every religion's sacred book, speaks of the same thing—that the environment is considered as sacred (Taylor 2007; Watling 2009; McDuffie 2019; Shinde and Olsen 2020). It can be concluded that every religious person should therefore respect and protect the environment because their god created it as a habitat for humans. However, despite the

holy scripts' teachings, not all pilgrims behave responsibly towards the environment (Taylor 2007; Patange et al. 2013; Shinde and Olsen 2020).

Mass gatherings are characterized by high concentrations of people, both temporally and spatially, which may lead to outbreaks of infectious diseases due to enhanced transmission between attendees (see, for example, Koul et al. 2017; Sokhna et al. 2017). There is evidence that disease epidemics have been spread internationally by pilgrims (e.g., Chatterjee 2007; Rondy et al. 2011; Taha et al. 2000). This has been well-demonstrated in the context of the Hajj and Umrah pilgrimages in Saudi Arabia (Gautret and Steffen 2016). Infectious diseases were also prevalent with, notably, a high rate of febrile systemic illnesses, diarrheal diseases, and respiratory tract infections. Such results are likely to be linked to overcrowding and climatic conditions, the relative lack of sanitary facilities, and limited medical resources being available during the event (Sokhna et al. 2017). In tourism, warnings of pandemics have been sounded over the years (e.g., Gössling 2002; Hall 2006; Page and Yeoman 2007; Gössling et al. 2020; Hall et al. 2020). Wu et al. (2017, p. 18) mentioned that, among other factors, the "high-risk areas for the emergence and spread of infectious disease are [...] cultural practices that increase contact between humans [...]". Thus, pollution and a lack of hygiene can increase the risk of diseases (Niu and Xu 2019).

In reference to the issues mentioned, we used Herzberg (1974) two-factor motivation theory to carry out an exploratory ethnographic study that focused on safety and hygiene factors, as well as accessibility and environmental impacts, at Hindu temples in India.

#### 3. Methods

Our research site stretched from the shores of the Bay of Bengal to the northern frontier of the Indian Himalayas. Over 27 days, the expedition team travelled 8000 km and visited more than 50 Hindu temples. Our study focused on eight significant Shiva Temples (Figure 1); however, our findings were supported by evidence from other Shiva temples visited during the trip.

We collected ethnographic data by visiting temples, observing local and international visitors, and deconstructing the religious narratives and visual data. Fourteen semi-structured, in-depth interviews (Bryman 2016) with various stakeholders from high and low socio-economic backgrounds in India were conducted (Table 1); all participants' names are anonymized. Our participants included two high priests, three temple managers, and nine local expedition members from diverse socio-economic backgrounds.

Nr	Name	Gender	Occupation	Socio-Economic Background
1	Aryan	Male	High Priest	Low
2	Hitesh	Male	High Priest	High
3	Vijai	Male	Temple manager	Low
4	Rohan	Male	Temple manager	Low
5	Rani	Female	Temple manager	High
6	Kumar	Male	Businessman	High
7	Amit	Male	HR manager	High
8	Siya	Female	Sales manager	High
9	Priya	Female	Homemaker	High
10	Manish	Male	IT specialist	Low
11	Harish	Male	Driver	Low
12	Jatin	Male	Construction worker	Low
13	Avi	Male	Driver	Low
14	Diksha	Female	Street hawker	Low

Table 1. Research participants (note: pseudonym names are used).



Figure 1. Location of ancient Shiva temples used for the field study.

We used a flexible interview process in this research and allowed participants to follow their thoughts. The interviews were conducted with a conversational dialogue style, which allowed participants to share their ideas and personal experiences while we gathered "rich" data (Kvale 1996; Patton 2015). Our participatory observation benefited this exploratory ethnographic study because our engagement was active and reflexive and allowed us to get deeper meanings of the visitation experience to pilgrimage sites in India (Ingram et al. 2017). Essentially, in this study, a team of four international researchers adopted central positions in the investigation by being both the instruments of data collection and engaged, reflexive participants visiting the temples (Ellis et al. 2010). While visiting the temples, we made observations and immersed ourselves in the context by familiarising ourselves with temple settings, rituals, the people, and the narratives that underpinned the findings.

The team of researchers aimed to observe "naturally" occurring encounters of religious tourism while in the field. In this setting, "naturally" assumes that events and actions in the field primarily derive from the intentions of the research participants rather than from researcher interference

(Hammersley 1998). In this case, we, the researchers, were the primary tool for the data collection, and our reflections and reflexive thoughts are crucial for the outcome of the research (Charmaz 2004).

There is no "one-size-fits-all" solution to reaching data saturation. However, the ethnographic element of this study, the prolonged engagement in the field, and the multitude of data collection methods enabled us to reach data saturation after visiting the seven temples mentioned in Figure 1 (Fusch and Ness 2015). The data collected appeared to be many-layered, intricate, detailed, and nuanced, and the analysis emerged from synthesizing the events and information gained through interviewing, participant observation, and our reflexive notes. To elicit deeper meanings from the data gathered, we adopted inductive thematic analysis (Braun and Clarke 2007). The inductive approach involves extensive reflection on the potentially divergent perspectives, different positions, philosophies, and ideals behind the visitation of Hindu temples. As exploratory researchers, we read carefully through the data looking for keywords, trends, themes, and ideas (Guest et al. 2012), mainly focusing on the key themes of safety, accessibility, hygiene, public health, and environmental impacts. The data analysis moved "beyond counting explicit words or phrases and focus[ed] on identifying and describing both implicit and explicit ideas within the data, that is, themes" (Guest et al. 2012, p. 10). To achieve trustworthiness in this research (Shenton 2004), our team discussed emerging themes and collectively co-examined each other's points of view (Ingram et al. 2017).

#### 4. Results

Based on an exploratory ethnographic approach, supported by interviews with 14 diverse stakeholders, four key themes emerged (see Table 2). These themes represent important aspects of pilgrimage tourism and describe what the health hazards for religious tourists at Hindu temples are. The first three themes cover the health and safety aspects, while the fourth addresses concerns about the environmental and visual pollution of temples.

The first emergent theme talks about the risk of infection and spread of diseases in the temples due to the lack of cleanliness and the Hindu custom of walking barefoot on temple grounds. One of the female authors recalls:

"walking barefoot in many temples was really problematic. The floor area in temples was dirty and dusty. Another issue is the heat and potential to burn feet. I immediately thought of gentle children's feet. And also, for us foreigners, it is unusual since we are not used to walking barefoot on hot surfaces."

However, in interviews, Vijai (temple manager) mentioned, "I don't see any problem—it's our tradition", and the Aryan (high priest) confirmed that there are no problems as "God will save us; also they [priests] are sick very rarely". These statements were supported by participants from a lower socio-economic background. Instead, Kumar, a successful and educated businessman from a higher socio-economic background, described that some temples' hygiene standards were low and "that is why I use my socks". Another participant, who works as an office clerk in a large city, mentioned that he would not want to visit this temple with his family due to the unsanitary conditions in the temple and low hygiene standards. Amit said:

"I'm ok to walk inside the temple, as I'm old and strong enough and I doubt some disease will catch me. However, I will never take my children with me, especially inside the temple. We [in India] have a serious problem with hygiene [its lack]. Here many people are defecating in the open. So, I never agree with my children to walk around barefoot. I'm worried that they will hurt/cut the feet and will get something. For the same reason, I never agree for my children to drink tap water."

Aspect (Key Theme)	Danger	Potential Risk	Potential Solution	Future Research
1. Walking barefoot	Exposure to pathogens carried by other pilgrims and rats; intentional introduction of pathogens (e.g., terrorist attack)	The rapid spread of disease on both countrywide and global scales	Allow the use of shoes inside the temples, or at least introduce hygienical ablution before and after entering the temple	Collect samples from the floor and identify all bacteria and viruses
2. Air quality inside the temple	Many people breathing the same air in enclosed spaces; dust, odour, and the smoke from incense	Serious health problems for people staying in temples, especially for the priests who are on duty for several hours in the dusty and polluted temple air	Replace wax candles with LED candles. Reduce the use of incense. Install ventilation in temples (fans currently in use only recirculate the same polluted air)	Install an air quality meter, and check the quality of the air in various parts of the temple
3. Temple passageways	Passageways limited and/or locked by grates; lack of emergency exits	Panic (caused by real threat or by joke), which can lead to hundreds of deaths or injuries	Clear the passageways and allow people in need (fainting, stress, fear) to exit the temple or the queue safely	Create a floor plan of the temples for display. Run training evacuations and check evacuation routes and speeds
4. Visual appeal	Rubbish; "ugly" information plates improperly fixed; inappropriate architecture and materials used to repair or create new buildings	Destruction of visual appeal	Use the authority of priests to force the faithful to keep clean and not litter. Use appropriate materials and designs for the construction of new facilities	Show two pictures to pilgrims, one with information plates and one without (same picture with plates removed using computer editing), then ask if one picture is more visually appealing (check if they notice what is different).

**Table 2.** Experience, visitation impacts, health hazards, and the future research potential of Indian Hindu temples.

Thinking about hygiene issues, it must be noted that India's approach to health has serious implications connected with its diversified economy. Siya (a sales manager in a large company) recalls, "barefoot walking without possibility to wash feet before and after entering the temple was very unhygienic, and unpleasant". In the same vein, Priya (homemaker) expressed her opinion: "they [temple managers] should install taps so I will be able to wash feet now". That problem has been noticed by a participant from a lower socio-economic background; Manish (IT specialist) said: "I hate to wear shoes on dirty feet". Previous studies (e.g., Gupta 1999; Kaul and Gupta 2009; Tripathi et al. 2010) pointed out the abovementioned key problems faced by the pilgrimage sites in India. These include inadequate facilitation services, a lack of quality infrastructure, and a lack of hygiene. India is home to 60 per cent of the world's population that defecates in the open (for more information, see WHO and UNICEF 2014). This has serious health implications and is consequently a substantial economic burden (John et al. 2011). Open defecation causes numerous waterborne diseases, such as diarrhoea. In India alone, about 400,000 children die annually because of diarrhoea and other

waterborne diseases (Kumar and Vollmer 2013). Therefore, as international researchers, we share the concerns of our participants.

The temples are not only a home of "faith" but also for animals. Some of the animals were deliberately introduced by temple administrators. For example, some of the temples kept an elephant at the temple. Its presence was meant to bring fortune and good luck. For one of our participants, this practice was considered unethical. Priya said, "keeping an elephant inside a dark and stuffy temple is very sad". In her observation, Siya (sales manager) recalls noticing a destructive pest, "I saw a rat passing in front of me, and it's disgusting". When we asked a participant from a lower socio-economic background who works as a taxi driver, Harish stated, "yes, I saw one, but so what?". However, all the authors shared similar concerns regarding the presence of animals at the temples that can also introduce zoonotic diseases. Zoonoses are diseases transmitted from animals to humans, posing a significant threat to the health and life of people all over the world (Chlebicz and Śliżewska 2018).

Researchers suggest that not only a lack of sanitation and cleanliness leads to the spread of disease but also the social contact patterns (including attending religious gatherings) play a significant role in the transmission of airborne infectious diseases (Feenstra et al. 2013). As such, Indian authorities have quarantined at least 40,000 people following a coronavirus outbreak linked to a single priest who attended several religious gathering while being infected by COVID-19 (Moska 2020), and Laliotis and Minos (2020) observed that COVID-19 spread faster in predominantly Catholic regions of Germany.

A second key theme related to health hazards is about the risk of illness due to poor air quality and a lack of proper ventilation systems. Similarly to the first key theme mentioning the risk of infection and spread of diseases, priests do not perceive any hazards related to the poor air quality in temples. One of the high priests, Hitesh, mentioned that "priests never complain about that", supporting what was mentioned above about religious pilgrims putting their trust in god. Instead, Rani, the female temple manager, did not want to make a definitive statement about whether being inside the temple is safe but mentioned, "it's only for a few minutes, so its ok". Thus, reading between her words, she is admitting that some problems exist. One participant, however, mentioned that "the temple was so smelly that my eyes got painful. I started to be anxious, and my lungs hyperventilated. I was afraid that I do not get enough air, so I left the temple before the ceremony end" (Amit). This is supported by one of the female authors who experienced a panic attack because of crowding and a lack of air, and also started hyperventilating and needed to leave early. The poor air quality was noticed by all the authors and our female participants, highlighting a heightened sensitivity to smells and a lack of fresh air by women.

The third key theme that emerged from the data mentions the risk of death or injury caused by the accumulation of people in small areas without emergency exits. Temples could be considered intentionally crowded places when a number of people find themselves gathered in a physical space to worship their God(s). Crowded areas could be dangerous places when the proper risk mitigation strategies are not in place (AIDR 2018). As such, focusing on the risk and safety issues faced by religious tourists, Kumar (a businessman) stated:

"When I was moving in the passageways limited by grates, I was scared, especially when I realized that emergency exits are locked, and no one has a key to unlock them. Then I decided to [go] back as it was unsafe in the crowd of people."

In the same vein, one author admits that he was feeling like being at a rock concert, "we were literally packed in there like sardines"; however, at the concerts, "we have at least marked and wide escape routes". This is especially dangerous for children and older people. Furthermore, in the case of emergency (natural or human-made disaster), the consequences might be severe or even fatal. Panic attacks (caused by a real threat or by a joke) can lead to hundreds of deaths or injuries. Overall, as such holy sites are regularly visited by adepts, especially during religious festivals, they require detailed disaster management plans (Korstanje et al. 2018).

The last key theme is concerned with visual appeal (mainly pollution). Pollution is presented as a twofold theme with two discrete sub-themes emerging from the analysis. The first sub-theme is improper rubbish disposal in and around temple areas. It is not surprising that the authors shared strong disapproval for pollution noticeable around the temples. This is shared by the participants from higher socio-economic backgrounds who also expressed strong opposition, for example, "we should care more, and secure the environment for the future generation" (Amit, HR manager).

However, immediately afterwards, some participants tried to justify the historical lack of cleanliness. Priya (a homemaker) said "I think that waste [rubbish] created by pilgrims is not nice, but it was always like that'. She admits that even if people will change their behaviour, there is no established waste management procedure in place and as "[temple] administration does not support garbage disposal". Pollution, in this case, is caused by visitors who pollute the sacred areas, which lack rubbish bins and have weak rubbish disposal procedures in place. One of the male authors recalls his thoughts on this matter: "it is so difficult to take a picture without a dirty background". Avi, who works as a driver, could not comprehend the dilemma, and he mentioned, "it's a matter of the temple [to be on the picture] not the background". It is also worth noting that several participants threw garbage directly to the floor themselves. One of the authors noticed that "throwing out a plastic bag or container after feeding monkeys or other animals is quite normal". The pilgrims did not perceive anything wrong with their behaviour. Overall, spiritual leaders (priests) should remind the faithful that protecting the environment is their sacred responsibility, rather than making it optional.

The second sub-theme relates to aesthetic pollution. While one temple manager stated that "we do our best to use proper materials" (Vijai) for temple repairs, one religious tourist mentioned that "they [temple management] should use proper materials for constructing new buildings, at least in a similar colour to the surrounding buildings" (Jatin, a construction worker). Another participant, Siya, mentioned that "plastic or metal roofing sheets look ugly, especially on historical temples". Overall, the visual pollution experienced at the temples, be it through rubbish or the aesthetics of the religious sites, negatively impacted the secular and religious pilgrim experience for most participants.

To summarise the research results, based on the conducted thematic analysis, we established four aspects (key themes) that focus on dangers, potential risks and solutions, and future research (see Table 2).

#### 5. Discussion

This study conceptualizes the future of Hindu pilgrimage tourism as outlined by Herzberg's two-factor theory of motivation. While increasing numbers of individuals are seeking spiritual experiences through travel (e.g., Prayag et al. 2016; Willson et al. 2013), our findings reveal that domestic tourists from higher socio-economic backgrounds are more concerned about the lack of hygiene and visible physical pollution at the temples. Thus, Bauer (2008) calls for the improvement of the health and hygiene standards for citizens as well as tourists, especially in developing countries, where the primary focus should be on reducing potential public health risks for locals. Furthermore, the health and hygiene standards for most tourists are critical determinants for choosing a destination (Jovanović et al. 2015), and health and hygiene factors are an important element for tourism sector competitiveness (Ringbeck and Gross 2007).

In many pilgrimage sites, commonly reported environmental problems include unhygienic conditions resulting from overcrowding and strain on physical infrastructure, land use changes, and increased pollution of natural resources (Shinde 2007). Several physical environmental studies have reported on the impacts associated with visitor flows during pilgrimage events including overcrowding, traffic congestion, short-term stress on natural resources and environmental services, large quantities of waste, high levels of pollution (air, water, and soil), and the clearing of land for temporary accommodation (e.g., Apollo 2017; Patange et al. 2013; Timothy and Nyaupane 2009; Kaur 1985; Singh 2002). This echoes our participants who reported that Hindu sacred places are often highly polluted.

Regarding hygiene issues, the focus was on hazards connected to barefoot walking inside the temples. A high number of pilgrims are crowded in a small temple area, which can potentially lead to the spread of diseases and viruses. In one instance, Pamba river (close to the pilgrimage centre of Sabrimala in south India) has shown levels of E. coli of 95,000 per 100 mL, compared to the permissible limit of 500, which is mainly due to the presence of human excreta that clogs the river along with plastic bags, bottles, and coconut husks (E. coli is the measure used to indicate pollution; more than 5 million pilgrims visit Sabrimala every year) (Nair 2004).

Pollution and a lack of hygiene can also seriously increase the risk of disease transmission. Hindu sacred places are renowned as one of the most polluted in the world (Timothy and Nyaupane 2009). In highland pilgrimages to the Himalayas, the dumping of waste and rubbish in open spaces and in bodies of water leads to air and water pollution (Apollo 2017; Patange et al. 2013; Sati 2014, 2015; Singh 1997). Chatterjee (2007) mentioned that various diseases, including cholera, have spread from the subcontinent in the past, following popular trade and pilgrimage routes.

With a rapidly growing and mobile world population, urbanization trends and the concentration of people, the development of global transport networks (Pongsiri et al. 2009; Labonté et al. 2011), and tourism could be acting as the main spreading vectors of pathogens (Gössling et al. 2020; Hall et al. 2020). For all the reasons outlined here, a disease pandemic originating in India may be considered only a matter of time.

Furthermore, more highly educated pilgrims pay more attention to security issues and visual impacts. Thus, managers should preserve the cultural heritage in a way that retains the integrity of the building or site, including its historical significance, context, and aesthetic or visual aspects. Finally, religious site managers need to better understand the motivations and expectations of various types of visitors to their sites in order to meet their varied needs (Blackwell 2007; Weidenfeld and Ron 2008; Olsen 2013; Wickens 2002) and ensure safety measures are a primary concern for everyone. This research also evidenced weak management in the organization of visiting the facility. Passageways were limited and/or locked by grates; a lack of emergency exits is one of the commonly mentioned examples. Hence, overcrowding, congestion, and stampedes are likely to occur at the religious sites. Crowded areas could become dangerous places when proper risk mitigation strategies are not in place (AIDR 2018). For example, more than 40 people died and 250 were injured in a stampede due to a fire in Tanjore in 1997 (Kashinatha 1997), 53 people died in a stampede at Sabrimala in 1999 (Krishnakumar 1999), and 110 people were killed and more than 350 were injured in the fire of Puttingal Temple in Paravur (Pereira 2016). In all the mentioned accidents, people in the temple complexes were held captive and had problems with exiting the temples. This is why our findings suggest that temple managers need to improve safety measures to prevent panic (stampedes) in the future.

Our study also revealed that aesthetic/visual pollution is widely noted by all the participants. Nearly 30 years ago, scholars had already noted the necessity of using local materials and building techniques for temples. In India, structures are constructed almost entirely by hand, and most materials are available and manufactured at nearby sites (Orland and Bellafiore 1990; Singh 1997). Pilgrims reportedly enjoy staying in these kinds of structures because they provide a pleasant atmosphere and are visually compatible with the surrounding villages (Orland and Bellafiore 1990). Thus, all constructions surrounding the temple "[ ... ] should be an integral part of a coherent policy of economic and social development of urban and regional planning (Menon 1989, p. 6)". Furthermore, the "[ ... ] sacredscapes are threatened by human activities which lack a commitment to humanitarian values and a respect for symbolic identity (Singh 1997, p. 17)". Consequently, we recommend that temple managers use proper materials matching the heritage style of the temple buildings when developing new constructions.

#### 6. Additional Considerations: Health Hazards of COVID-19

At the time of writing, the world is facing a global pandemic due to the novel COVID-19 virus. Small corridors, small passageways, and confined spaces inside Hindu temples can cause a serious threat to pilgrims and visitors. Humankind co-exists with Severe Acute Respiratory Syndrome (SARS virus), influenza A, and many other diseases that can be easily transmitted from human to human in this environment. The confirmed modes of viral transmission are primarily but not exclusively through contact with contaminated environmental surfaces (fomites) and aerosolization (Yu et al. 2004). Viral pathogen survival on environmental surfaces extends to several days. In the case of COVID-19, the virus can survive for at least three days on a variety of materials (e.g., stainless steel and plastic) (Van Doremalen et al. 2020).

Many scholars are hopeful that the current time provides an opportunity to reshape tourism into a model that is more sustainable, inclusive, and caring of the many stakeholders that rely on it (Cheer 2020; Everingham and Chassagne 2020; Lapointe 2020; Nepal 2020). The response to the pandemic should include a call to religious site managers to improve health and safety and use this hiatus to improve policies aimed at minimizing health hazards. The "pandemic" highlighted weaknesses within our society, especially in terms of health issues; hence, by addressing some of the challenges discussed in this paper, pilgrimage tourism to Hindu temples can be made safer for locals and tourists.

#### 7. Conclusions and Future Research

This exploratory ethnographic study highlights that without significant improvements in safety and hygiene factors, accessibility restrictions, and environmental waste management, Hindu visitors—especially those that are more highly educated and come from higher socio-economic backgrounds—might potentially stay away from temples in the future. We noted that the lack of hygiene in Indian temples could lead to the transmission of diseases.

Furthermore, in Table 2, future research areas are recommended, and solutions are suggested to be implemented immediately. Our recommendations make economic sense for temple managers, as most Indian temples are privately funded through entry fees (Moodie 2018), and the solutions will not only enhance tourist experiences and encourage visitation but also make it safer for local visitors. More tourists equals more entry fees, and the recommendations should increase their security and protect India's cultural heritage, along with potentially reducing the spread of diseases among local populations. This leads to a potential win–win situation for all stakeholders involved, especially in a time of global pandemic.

**Author Contributions:** Conceptualization by M.A. and Y.W.; methodology, investigation, and formal analysis by M.A., Y.W., and H.S.; writing by M.A., Y.W., H.S., and G.M. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was financially supported by the Reiseakademie India Education, Nishant Katkoria and Ashvin Kumar Patel.

**Acknowledgments:** We would like to thank the anonymous referees for their valuable suggestions and comments. We are also thankful to the Special Issue Editor, David C. McDuffie, for his contribution. We are also thankful to Trish Brothers for language proofreading.

Conflicts of Interest: The authors declare no conflict of interest.

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