

Running Head: Demystifying Superstitions

Demystifying Superstitions: Uncovering the Scientific Explanations Behind Indian Beliefs

Shreejeeta Kargupta

Junior Research Fellow

Basic Science and Humanities

Institute of Engineering & Management, Kolkata

University of Engineering and Management, Kolkata

Dr. Samapika Das Biswas

Professor

Basic Science and Humanities

Institute of Engineering & Management, Kolkata

University of Engineering and Management, Kolkata

Susmita Bhakat

Assistant Professor

Basic Science and Humanities

Institute of Engineering & Management, Kolkata

University of Engineering and Management, Kolkata



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Abstract

Superstitions have been a significant aspect of human culture for centuries, providing explanations for the unknown and serving as practical guidelines for daily life. In India, superstitions are deeply intertwined with cultural practices and beliefs, often considered irrational or unfounded. However, many of these superstitions have logical foundations rooted in historical contexts and scientific explanations. This article aims to demystify 20 common Indian superstitions by uncovering the scientific reasoning behind them. From the belief in the auspiciousness of cow dung floors to the practice of crushing a snake's head after killing it, each superstition is examined through the lens of science and history. By understanding the rationale behind these beliefs, we can appreciate their cultural significance while fostering a critical and informed mindset. This approach allows us to respect tradition while embracing reason and science, ultimately striking a balance between cultural heritage and modern understanding.

Keywords: Superstitions, practical origins, cultural beliefs, scientific explanations, evil eye, menstruation taboo, solar eclipse, good luck

Introduction

Superstitions have been an integral part of human culture for centuries, often serving as explanations for the unknown or as practical guidelines for daily life. These beliefs, passed down through generations, vary widely across different cultures and societies. In India, a country rich in cultural diversity and traditions, superstitions hold a particularly significant place in daily life. They influence various aspects of behavior, from personal habits to major life decisions. While many superstitions may seem irrational or unfounded, they often have logical foundations rooted in historical contexts and scientific explanations.

This article explores 20 common Indian superstitions, examining the scientific reasoning and logical explanations behind them. By delving into these beliefs, such as the auspiciousness of cow dung floors or the practice of crushing a snake's head after killing it, we uncover the fascinating stories and truths behind their origins. Understanding the science and history behind these superstitions enables us to approach them with critical and informed perspective. This perspective helps in appreciating their cultural significance while avoiding harmful or unfounded beliefs.

In a world increasingly driven by science and technology, it is essential to bridge the gap between tradition and modern understanding. By demystifying these superstitions and revealing their logical underpinnings, we can respect cultural heritage while promoting reason and science. This balanced approach enables us to navigate the complexities of cultural practices with insight and knowledge, fostering a more enlightened and harmonious society.

Superstitions and Their Scientific Explanations

1. Hanging Lemon and Chillies Near Entrances

- **Belief:** Hanging a bunch of lemon and chillies at the entrance of homes or shops prevents the evil eye and brings good luck.
- **Scientific Explanation:** Lemon and chillies, when strung together with a cotton thread, release certain chemicals that act as natural insect repellents. In a time when chemical pesticides weren't available, this combination helped keep flies, mosquitoes, and other pests away, thereby keeping the entrance area clean and hygienic. The practice was later associated with warding off evil forces because a clean home was often seen as a "protected" home.

2. Menstruating Women and Impurity

- **Belief:** Women during their menstrual cycle are considered impure and are often restricted from entering religious spaces or participating in household chores.
- **Scientific Explanation:** In ancient times, the lack of proper sanitary products made menstruation an uncomfortable and misunderstood phenomenon. Excluding women from strenuous tasks or religious activities was likely a way to give them a break from daily labor. Additionally, it might have been a means to avoid infection or accidents, considering the hygiene standards of the time. The belief that women were "unclean" was a cultural misunderstanding of menstruation.

3. Cutting Fingernails or Sweeping Floors After Sunset

- **Belief:** Cutting nails or sweeping floors after sunset brings bad luck.
- **Scientific Explanation:** Before electricity became widespread, lighting at night was dim and unreliable, making tasks like cutting nails or sweeping floors dangerous. These activities could lead to injury (cutting oneself with a blade or nail cutter) or losing small valuable items (like coins or jewelry) while sweeping. This practical advice for avoiding accidents at night morphed into a superstition to prevent misfortune.

4. Having Curd and Sugar Before Heading Out

- **Belief:** Eating a mixture of curd and sugar before embarking on an important task or journey brings good luck.
- **Scientific Explanation:** In many parts of India, where the climate is hot, curd acts as a natural coolant for the body, while sugar provides a quick source of energy. Consuming this combination helped people stay hydrated and energized during long journeys or stressful events. Over time, this practical practice was linked with bringing good fortune due to its positive effects on health and stamina.

5. Sleeping with the Head Towards the North

- **Belief:** Sleeping with one's head pointing north brings mental illness or invites death.

- **Scientific Explanation:** The Earth has a magnetic field, and our bodies also generate small magnetic fields. Sleeping with the head towards the north may disturb the natural alignment of the body with the Earth's magnetic field, possibly affecting blood circulation and leading to discomfort. In addition, in ancient Hindu traditions, the body was laid to rest with the head pointing north, so sleeping in this direction might have symbolically been linked to death.

6. Broken Glass and Misfortune

- **Belief:** Breaking glass, especially mirrors, brings seven years of bad luck.
- **Scientific Explanation:** In ancient times, glass, particularly mirrors, was an expensive and delicate commodity. Breaking a mirror meant financial loss and inconvenience. To instill care in handling such fragile items, people associated breaking them with bad luck. The superstition of seven years of misfortune could be linked to the significant cost and time it would take to replace a valuable mirror.

7. Avoiding Solar Eclipses

- **Belief:** Watching a solar eclipse is harmful and brings bad luck.
- **Scientific Explanation:** During a solar eclipse, harmful ultraviolet (UV) rays are more concentrated, and staring directly at the sun can cause retinal damage, leading to partial or permanent blindness. In times when people did not have access to protective eyewear, the easiest way to protect the community was to encourage people to stay indoors. This practical advice became linked to the superstition that eclipses were bad omens or dangerous.

8. Adding One Rupee Extra in Gift Amounts

- **Belief:** Adding an extra one rupee to gift amounts (such as giving 101 instead of 100) brings good luck and blessings.
- **Scientific Explanation:** The extra rupee signifies an indivisible number, symbolizing continuity and progress. It implies that the blessings or good wishes associated with the gift will continue to grow and prosper, rather than being "complete" or final with a round number.

9. Avoiding Peepal Trees at Night

- **Belief:** Evil spirits are believed to reside under peepal trees at night.
- **Scientific Explanation:** The peepal tree, like all plants, releases carbon dioxide at night. In areas with dense foliage and limited ventilation, breathing in too much carbon dioxide can lead to suffocation or breathing problems. To prevent people from resting under these trees and potentially inhaling too much CO₂, the belief that evil spirits inhabit these trees at night was perpetuated.

10. Black Cats Crossing Paths

- **Belief:** A black cat crossing your path brings bad luck.
- **Scientific Explanation:** In the Middle Ages, black cats were often associated with witches and supernatural entities, believed to be harbingers of evil. However, a more practical explanation is that black cats are harder to see in low light conditions (especially at night), increasing the risk of accidents. The superstition arose to make people more cautious when they encountered a black cat in the dark.

11. Twitching Eyes

- **Belief:** Eye twitching is a sign of upcoming events or bad luck.
- **Scientific Explanation:** Eye twitching is medically known as myokymia, often caused by stress, fatigue, or eye strain. It is a common physiological response to stress, which may explain why people link it to anxiety about impending events.

12. Nazar Utaarna (Removing the Evil Eye)

- **Belief:** Applying kohl or a black mark on a child's forehead protects them from the evil eye.
- **Scientific Explanation:** Kohl or a black mark might make the child less visually appealing to envious onlookers, thus reducing the risk of attracting undue attention. This practical approach to diverting negative focus became associated with warding off the evil eye.

13. Stepping Out During an Eclipse

- **Belief:** Stepping out during a solar or lunar eclipse brings misfortune.
- **Scientific Explanation:** Solar eclipses, as mentioned, pose a real danger to eyesight if viewed directly. Advising people to stay indoors during an eclipse was a precautionary measure to avoid accidents or harm to their vision.

14. Bathing After Attending a Funeral

- **Belief:** Bathing after attending a funeral removes impurity from contact with the dead.
- **Scientific Explanation:** Funerals, especially in ancient times, involved close contact with dead bodies, which might carry bacteria or pathogens. Bathing afterward is a hygienic practice to minimize the risk of infection and maintain cleanliness, a practical measure turned into a ritual.

15. No Cooking During Shraadh (Mourning Period)

- **Belief:** Cooking during the Shraadh period is forbidden.
- **Scientific Explanation:** Shraadh is a time for mourning and performing rituals for deceased ancestors. Prohibiting cooking gives the grieving family members time to focus on the

rituals and reflect, free from the burden of daily chores. It allows them to grieve without distractions.

16. No Sweeping After Sunset

- **Belief:** Sweeping the floor after sunset invites misfortune or poverty.
- **Scientific Explanation:** Before the advent of electricity, sweeping after dark increased the risk of accidentally discarding valuable items. The association with poverty likely evolved from the need to prevent material losses.

17. Swallowing Tulsi Leaves

- **Belief:** Chewing tulsi leaves is disrespectful to the sacred plant.
- **Scientific Explanation:** Tulsi (holy basil) leaves contain a small amount of mercury and arsenic, which can be harmful to dental enamel. Swallowing the leaves instead of chewing them minimizes dental damage, and this health practice may have become linked with religious reverence for the plant.

18. Plastering Floors with Cow Dung

- **Belief:** Cow dung is auspicious and its use on floors brings good fortune.
- **Scientific Explanation:** Cow dung has antibacterial properties and can act as a natural disinfectant, repelling insects and maintaining hygiene. Its use in plastering floors served a functional purpose and was considered a sign of cleanliness and prosperity.

19. Shalik Bird Superstition

- **Belief:** Seeing two Shalik birds together brings good luck, while seeing one brings bad luck.
- **Scientific Explanation:** During their breeding season, Shalik birds (mynahs) migrate in pairs, symbolizing unity and new beginnings. Conversely, seeing one bird alone, especially during the monsoon, could symbolize loneliness or a harbinger of difficult times.

20. Crushing a Snake's Head

- **Belief:** Failing to crush a snake's head after killing it invites revenge from its kin.
- **Scientific Explanation:** Even after decapitation, a snake's body can still have reflexive movements, posing a potential danger. Crushing the head ensures complete safety. This precaution likely evolved into a superstition.

Conclusion

Superstitions, while not always based on reality, continue to hold significance in people's lives. As the saying goes, "Bissase milaye bostu torke bohudur" (Superstitions are deeply rooted, and it's

difficult to eradicate them). Understanding the scientific explanations and historical contexts behind these beliefs allows us to approach them with a critical and informed mindset. This way, we can appreciate their cultural significance while avoiding harmful or unfounded beliefs. Ultimately, it's crucial to strike a balance between respecting tradition and embracing reason and science.

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