

Original Article

The Role of History in the Acceptance of Gomutra: How YouTube's Cow Urine Discourse Is Quietly Rewriting Indian History

Ananya Sharedalal

Independent Researcher, Mumbai, Maharashtra, India.

Corresponding Author : ananyasharedalal@gmail.com

Received: 24 June 2026

Revised: 30 July 2026

Accepted: 13 August 2026

Published: 29 August 2026

Abstract - Although there is not much evidence about the medical properties of gomutra (cow urine), it is widely rumored on Indian YouTube. The study asks why these claims are believed and answers that the belief is conveyed less through chemistry than by a highly selective version of Indian history. The study examines the transcripts of 83 most-viewed YouTube videos on the subject of 'Gomutra', which consist of promoter videos (Ayurvedic channels, wellness influencers, and television news reports) and debunker videos (Science communicators and medical doctors). There are two findings: First, videos referring to Indian history refer only to the Vedic period: 26 videos mention Sanskrit literature, 13 cite the Vedas, and 13 cite rishis and sages, but there are no mentions of the medieval period or the Mughal and colonial period. Secondly, the West does not come into this discourse as a coloniser but as a validator, with American patents, the World Health Organization, export markets, and Western media. Debunkers, in contrast, argue more on a scientific basis and never engage with this historical frame. The paper focuses on the implications of such patterns for the viewers' understanding of medical authority and for the introduction of Ayurvedic material into the NCERT science textbooks per the NEP 2020.

Keywords - Cow Urine, Gomutra, YouTube, Ayurveda, India, Vedic Pe.

1. Introduction

Before getting into the analysis, it's worth discussing why cow urine, of all things, merits a whole paper. Gomutra sits at this unusual intersection where almost every Faultline in contemporary India meets at once: Hindu religious practice (the cow is sacred), traditional medicine (it shows up in Ayurvedic texts), a multi-crore wellness industry (Baba Ramdev's company Patanjali alone sells huge volumes of bottled cow urine under the brand Godhan Ark), and pseudoscience claims that have reached cabinet ministers and prime-time news anchors. What makes it useful as a case study is that the same yellow liquid gets framed as scripture, medicine, product, identity marker, and political tool, sometimes in the same video. Few other Indian topics let you study religion, science, commerce, and politics together in one corpus.

Upon entering the Gomutra sphere on YouTube, there is something that becomes apparent almost immediately. People are not just discussing the healing properties of cow urine and whether or not it can actually cure cancer; they are debating what kind of history India has had and whose historical authority should take precedence. A Patanjali wellness video and a debunker video by Dhruv Rathee, one of India's most-

followed YouTubers, known for political commentary and myth-debunking content, both seem to be participating in the same discourse, yet their rhetoric and evidence couldn't be more different.

The purpose of this paper is narrower than it might sound. It doesn't attempt to settle whether cow urine works; instead, it uses Gomutra as a small, somewhat manageable window into a much bigger phenomenon: how Indian public memory is being shaped on YouTube in real time. The concern of the paper is historiography: which historical periods get amplified, which get erased, and who gets to be the authority on "what India was like" and what that means for Indians today. This is a form of narration, and historical claims can be approached more easily like this, where they are on the surface, rather than embedded in subtexts, as they are in other kinds of discourses.

The existing literature on gomutra misinformation tends to focus on the biomedical/epidemiological aspect, involving the identification of gomutra's biochemical composition (Randhawa & Sharma, 2015; Raut et al., 2024), the tracking of how the claims circulated during the COVID-19 pandemic (Al-Zaman, 2021; Hurford et al., 2022), and the analysis of



rhetorical strategies that make the claims persuasive (Khan et al., 2026). This body of work has taken the lead in demonstrating that the claims are widely spread and not well supported by clinical evidence, but has mostly approached the base appeal from a rhetorical or scientifically uninformed perspective, without questioning which version of Indian history the claims are based on to be convincing in the first place. This paper fills that gap; it does not ask “does gomutra work?” rather it asks “what history does gomutra discourse tell?” and “what does it not tell?”.

A similar rhetoric on social media in India is observed by Akbar et al. (2022), who detailed the weeks of eventful construction of a narrative on the internet concerning the death of the actor Sushant Singh Rajput in 2020. The study illustrates the reworking of a single event in near real time, and as unsubstantiated claims were piling up around it, shaping the narrative agenda. In the case studied in the present paper, the restructuring process takes place in a different way, and also in a longer period of time: not a single event, but a longer historical narrative is restructured in many videos that have been collected over the years. The paper focuses on two findings that all touch on history and how it gets used: (1) the Vedic past is invoked, and (2) the West turns up not as a coloniser but as a validator.

2. Literature Review

Cow urine (gomutra) is a traditional medicine used in India and is also included in the five constituents of panchgavya, classical Ayurvedic literature, which has ascribed it antimicrobial, digestive, immunomodulatory, and rejuvenating properties. Al-Zaman (2021) analyzed 125 instances of fake news about COVID-19 on Indian social media platforms and revealed that roughly two-thirds of the cases were of health-related misinformation, the majority of which were a mix of text and video and were largely disseminated via online media (Twitter, Facebook, WhatsApp, and YouTube) rather than mainstream media. This literature can be divided into two parts—one dealing with the nature and extent of the alleged misinformation and the other with biomedical or pharmacological research conducted on the actual properties of cow urine and the claims that have been developed based on it.

The biochemical composition and pharmacological activity of cow urine have been the subject of an extensive amount of experimental studies. It has been reported to contain urea, uric acid, creatinine, volatile fatty acids, enzymes, minerals, and phenolic compounds, which have been suggested for its biological activity; several in vitro studies reported antimicrobial activity of it similar to established antibiotics like ofloxacin and tetracycline against gram-positive bacteria as well as certain fungi (Randhawa & Sharma, 2015). One specific line of misinformation that Hurford et al. (2022) singled out was that of claims that cow urine and cow dung protected against SARS-CoV-2. After

India's first case was confirmed in early 2020, the authors followed how cow excreta became a 'proven' preventative remedy that was widely promoted by religious and political leaders.

Joshi et al. (2022) performed a narrative review of the extensive uses of gomutra in Ayurveda, summarizing the limited analytical, animal, and clinical research undertaken, but making it clear that there was a lack of solid clinical evidence. Recently, Raut et al. (2024) tested the pharmaceutical properties and in-vitro antibacterial activity of “Gomutra Ghana”, a concentrated and solidified cow urine, which adds to the existing laboratory evidence regarding its biochemical composition.

In addition to biomedical research, gomutra is gaining increasing importance as a source of digital misinformation and ideology; with the help of social media, health claims can be spread quickly and framed in a culturally and religiously appropriate way. As Khan et al. (2026) found, the promotion of dubious information on YouTube generally blends traditional beliefs with pseudoscience, creating arguments that are hard for viewers and also hard for automated misinformation detection systems to identify, since culturally-specific misinformation is based on history, religion, and national identity, not necessarily only on false scientific claims.

Comparing the pattern in India with the United States, Sharma and Kapoor (2021) determined that message sharing and verification behaviour were influenced by the content of the messages, their emotional content, and the perceived importance. A positively framed message was more likely to be shared among Indian users, and a negatively framed message was more likely to be shared to trigger verification behaviour. In the context of gomutra health claims, this distinction could have implications for the understanding of how health claims become widespread on digital platforms, even in the absence of scientific evidence.

Rhetorical appeals highlighted in cow-urine videos found in the database are efficacy, testimonials, appeals to tradition, and conspiracy framing, with counter-arguments from academia and science-based sources being appeals to science and evidence. Misguided rumors that the dominant healthcare systems, pharmaceutical firms, or scientific communities are trying to cover up the benefits of gomutra are commonplace, leading to distrust of mainstream health care and helping to create group identity among its supporters.

3. Methodology

3.1. Sample Selection

The sampling frame was created with the use of YouTube's internal search and sort by views function and Hindi- and English-language search terms that encompassed the ways gomutra is discussed in health-related content (e.g.,

variants of 'gomutra benefits', 'cow urine cure', 'gomutra Ayurveda' and 'gomutra cancer'). All results were sorted by the number of views per query, and duplicate hits were combined and ranked. The top 100 most viewed videos from this merged list were selected, and 83 of these were used in the final dataset, which includes 77 different channels, ranging from 105 to 14,500,000 views ($M = 1,027,214$; total = 84,231,546 views across the sample). Of the 17 videos excluded, 5 were either re-uploads or duplicates of the same material on a different channel; 6 were not at all about gomutra, but rather mentioned it tangentially in a longer wellness or religious video; 4 did not have a suitable transcript for coding, and 2 were too short in duration for any meaningful coding.

Videos were retained irrespective of the stance, with a sample that covers eight of the categories of content YouTube has assigned to its videos on its own website, most of which were in People & Blogs (12), News & Politics (8), Nonprofits & Activism (7) and Education (7), followed by smaller numbers in Science & Technology (4), Howto & Style (3), Entertainment (2), and Pets & Animals (2). The most viewed videos, in each camp, were not chosen by random sampling or stratified sampling, and were selected by purpose because the goal was to see what is actually happening to create the public conversation about gomutra, rather than to estimate the prevalence of a text view of gomutra across all gomutra content on the platform; this is discussed as a limitation in Section 5.6.

3.2. Transcription, Translation and Coding

The auto-generated transcriptions from the YouTube videos were taken, and in the case of Hindi and Hindi-English videos, translated to English using LLMs. Each translated segment was then compared to the original-language transcript by the researcher, especially those that were to be paraphrased, and any segments that were quoted from in this paper but could not be confirmed by the researcher were not paraphrased but dropped.

In addition to a set of structural variables that were coded for all videos, this set included a fixed number of variables related to the content of each video: the number of subscribers, the number of views, the number of people shown on screen, the claimed health benefits, the reference to ancient texts, the mention of rishis/sages, the reference to the West, the reference to political aspects, and the explicit periodisation of history. The free text narrative style descriptions were then divided into the five higher-level categories listed in Table 1 (promotional/testimonial, explainer/factual, devotional/faith-based, opinionated/political, and not coded). As a quick check that the coding scheme was not drifting, the researcher coded each video as representing a borderline or ambiguous judgement call; this was raised for 6 of the 83 videos (7.2%) and was then returned to one by one before coding was completed.

Large language models were then used for a preliminary extraction of quotes and thematic tagging, with each quotation and thematic tag from the results manual checked by the researcher for accuracy against the transcript, and discarded if not accurate. The above process of discrepancies flagging was performed by one researcher; however, this was used as an internal check and is not a substitute for independent inter-rater reliability testing, which is a limitation noted below.

3.3 Platform Bias and Language Limitation

Two constraints concerning the sample warrant explicit mention. First, the sample was constructed using the search and view-count ranking of YouTube itself, rather than a neutral and exhaustive cross-section of gomutra content on the platform: channels that are deprioritised by the recommendation system, or that use different terms, may be under-represented. Second, the data is restricted to Hindi and English translated videos, and thus the results apply to the Hindi and English gomutra discourse context specifically, rather than gomutra content in other Indian languages, which might have a different historical context.

Table 1. Sample description (n = 83)

Variable	Category	Total
Views	Mean per video	1,027,214
	Median per video	91,000
	Total	84,231,546
Gender of the channel	Male	54
	Female	9
	Neutral / organisation	20
Content style	Monologue	47
	Interview	11
	News report	10
	Repurposed clips	8
	AI-generated	5
Narrative style	Promotional / testimonial	25
	Explainer / factual	11
	Devotional/faith-based	6
	Opinionated/political	8
	Not coded	33

The resulting sample is summarized in Table 1 across the variables used in the structure; the content-specific results that led to this study are presented in the following sections.

4. Findings

Coding produced several patterns, including claim-bundling, a recurring promotional formula, and debunkers getting more views than promoters, even though they're outnumbered 5:1.

One of the cleaner patterns in the data is that gomutra claims rarely travel alone. If a video says cow urine is good for the liver, it will usually also claim it's good for the kidneys, weight, skin, and digestion in the same breath. Hardly anyone promotes cow urine for a single condition, and the bundling isn't random; it follows a reasonably predictable ladder. At the base sit the everyday, plausible-sounding claims: constipation and digestion (32 of 83 videos), skin and hair (21), and obesity (16). The middle level is chronic disease – liver (23), kidney (14), immunity (14), joint pain (11), diabetes (7). Most of these are chronic conditions; there is no clear short-term cure, so someone may end up using these unproven 'medicines' for several months to find no results and may be told that they used the medicine incorrectly and hence did not achieve the desired effect. At the very top sit the grand claims: cancer (25 videos) and the claim that there is gold in cow urine, which only 2 creators make, but debunkers frequently attack. Promoters almost always lead with the small, believable claims before escalating to the large ones. By the time a viewer has nodded along to the suggestion that it helps with constipation, they're already several agreements to "a cure for cancer".

The structure is doing rhetorical work that no single claim could do on its own. The single most revealing experiment in the whole dataset is that Baba Ramdev and Dhruv Rathee, the loudest promoter and the loudest debunker, respectively, built entire videos around the same demonstration. Ramdev's setup is short and visual; he pours a few drops of Betadine into a glass with water, adds cow urine, and within seconds the dark colour fades until it is almost clear. He holds the glass up to the camera and frames the result as proof of gomutra's vishaghna or "poison-killing" property; the visual is the argument. Rathee's setup is the same as the demonstration, but he uses his own urine instead of gomutra and gets the same result. Rathee explains that colour change isn't cow-specific; it's a neutralising property that any liquid reducing agent can do. The "miracle" becomes just a magic trick the moment the same trick works with his own urine.

The remainder of the two findings focuses on how history is being misrepresented in this discourse. Many gomutra videos are doing historiography without realising it. Collectively, they are writing a version of the Indian past where Vedic medicine flows uninterrupted to today's bottle of Godhan Ark, the Mughals and British never existed, and the West shows up only as verification. And the debunker side, by confining strictly to chemistry, has let that historiography go unchallenged.

4.1. The Past Refers Only to the Vedic Period

The single most striking pattern in the dataset is how much of Indian history is missing. Out of 83 videos, more than half participate in some form of ancient framing, but it's always the same: ancient. There are no references to the medieval, Mughal, or colonial period, and only a single

mention of cow slaughter being banned. The story jumps directly from the Rishis to today; the lines between history and mythology are often blurred. This is meant to imply that Indian history has been a black hole between the Vedic period and today, essentially suggesting that Indian history got pushed back by whatever happened in between. Table 2 breaks down how the "Vedic" past is invoked.

Table 2. How videos invoke the Vedic past (out of 83 videos)

Subtheme	Count	Example
Named ancient texts (Charaka, Sushruta, Ashtanga Hridaya, Bhavaprakasha)	26	"Three great texts ... Sushruta Samhita, Charaka Samhita, Bhavaprakasha Nighantu" (Rakesh Agarwal)
"Thousands of years ago" / "since ancient times"	12	"For thousands of years, cow urine has been used..." (Dr. Raj Satpute)
Rishis/sages/ancestors	13	"Vagbhata Rishi has described the 'Mutravarg'..." (Dr. Rupali Jain)
Vedas referenced	13	"In the Vedas, it is given the status of Amrit" (Rakesh Agarwal)
Sacred vocabulary (Amrit, Vishaghna, Rasayana, Shivambhu)	Scattered	"Urine is called Vishaghna or killer of all poisons" (Akshay Chopra)

A reasonable objection arises at this point: if the Vedas actually do mention cow urine, how is invoking them a misrepresentation? They do mention it. But two separate things are going wrong, and they're worth keeping apart. First, the medical part: the Vedas aren't a scientific text; they're religious literature, where medicine wasn't separated from ritual. Citing a Vedic verse as clinical proof is therefore an error; the existence of the Vedas isn't misinformation; treating them as a peer-reviewed source is. Second, the historical part, which this paper focuses on more: even if you grant the medical claim, what these videos do with the citations is a selective rewriting of Indian history. The 2,000-year intervening medical tradition gets collapsed into a flat "ancient times," when Charaka and Sushruta Samhita were written centuries after the Vedas and routinely disagreed with earlier sources. Two misrepresentations stacked on each other: one about what the text says, one about what Indian history was.

Beyond the overall use of the past, it is interesting to observe the way in which the past is evoked by these speakers: the vocabulary varies in registers, without registers being marked. Rakesh Agarwal says, "It is referred to as Amrit in

the Vedas, which means ‘which does not let you die’, which is a life-saving medicine”. In one sentence, the term shifts from the theological to the pharmacological: the drink of the gods, Amrit, is redefined as “a life-saving drug” at the end of the sentence. What the three frames do in this and other videos is to combine in a way that not one of them is used to test the others, a combination that might plausibly protect the claim from being tested in any one frame. A similar trend is evident when sacred words like Vishaghna (“killer of all poisons”), Rasayana, Sanjeevani and Shivambhu are used to shift cow urine from the medical column to the metaphysical one; a substance that is used primarily as a religious offering is not, on its own, a simple subject for clinical assessment.

Time-distance claims do something a bit different. “Over the past few thousand years, cow urine has been used to cure and prevent incurable diseases of the root,” says Dr. Raj Satpute. In other words, the use of the product over time, without explicit mention, is offered as proof of effectiveness – a claim that cannot be logically deduced because the length of time of use is not proof of effectiveness. Also, it merges two sizeable claims that are not supported: that cow urine can cure ailments that modern medicine can't, and that it cures them, not just treats them. The claim is then followed by a series of references to “a lot of yogis” in “our ancient Indian texts” and then extended to Chinese, African and American traditions, which may make it more difficult to simply dismiss as being parochial yet not specifically Indian. No non-Indian text is named, so this general claim can only be substantiated on a limited scale.

The implication is bigger than gomutra. If this is how a popular health debate is being historicised, where, from Vedic times, it directly cuts to the present, then a whole part of Indian history is being quietly edited out of public memory. The conventional script (Mughal destruction, British suppression, modern reclamation) doesn't even need to be invoked here; the Vedic past, standing alone, does all the work.

This periodisation is implicitly definitional as it delimits what is considered “Indian” medical knowledge by excluding the development of that knowledge from the Vedic period to the present from the definition of indigenous tradition. This involves the Indo-Islamic medical tradition (Unani-tibb) which evolved in parallel to Mughal political culture and was a socially embedded and dynamic tradition that continued to flourish into the nineteenth century (Alavi, 2008); the adaptation of western biomedicine during the colonial period, which was formed by the colonial social and political context and, in turn, influenced it; and finally the development of modern medical institutions in post-independence India. In this interpretation of the Vedic to present times, these eras are placed outside “our tradition”, even though they have emerged on Indian soil; this can be a sorting move that helps to mark the eras as authentically “Indian” and the others as outside “our tradition”, whether or not this is a conscious effort on the

part of individual creators. It fits into the larger, long-standing conflicts in Indian public life about the criteria for “true” national or cultural identity, but a discussion of this is outside the scope of this paper.

4.2. The West Shows Up as a Validator, Not a Destroyer

This is in contrast to the more common Western image in public discourse in India, as a validator of local knowledge, rather than as a coloniser or suppressor of local knowledge. In this dataset, the Western validation has been identified in a few types that are summarized in Table 3.

Table 3. How the West is invoked in gomutra videos

Subtheme	Example	What is doing the work
American patent as proof	“America has granted it a patent” (Baba Ramdev; Sudhir Chaudhary)	The word “patent,” with no detail on scope
Big-name institutions	“NIH... AYUSH... International Journal...” (Lotus Pregnancy Care)	Stacking acronyms
WHO certification	“certified by the World Health Organization” (B.K. Sahu)	The brand of WHO
Export markets as judges	“Singapore, Germany, America, Britain, UAE are buying” (Sushant Sinha)	Foreign markets as validation
Western media as a quality stamp	“Washington Post, New York Times, Guardian have praised...” (Sudhir Chaudhary)	Newspaper names as authority

The claim is not that the West must show up as a coloniser, or that validation from the West is inherently bad; people may cite whoever they wish. Two narrower points are being flagged here. First, the rhetorical function: phrases like “America has granted a patent” are being used to end the conversation rather than open one. None of the speakers describes what the patent actually covers, whether any medicine was approved, or what its legal scope is. There are 4 widely cited patents where cow urine, specifically gomutra or its distillate, is the core active ingredient or focus of the invention: US Patent No. 6,410,059 (2002), US Patent No. 6,896,907 (2005), US Patent No. 7,235,262 (2007), and US Patent No. 7,297,659 (2007). The patents are presented as proof of medical efficacy, whereas the patents are simply a legal test of novelty. The brand of “America” does all the work, and that's worth flagging regardless of whether one considers the West a hero or a villain in the story. Second, the historiographical observation: in most Indian discourse,

including cow protection politics, Hindutva commentary, and anti-secularist talk, the West figures as the destroyer of Indian local knowledge. Here, suddenly, it doesn't, and that inversion is the finding, not a complaint.

Sushant Sinha's remark is particularly revealing: "These are the countries that understand the power of India's centuries-old Ayurveda, but our people consider it a joke." Two rhetorical moves happen in this sentence – First, Western respect is treated as proof of value. Second, the argument is quietly shifted away from whether cow urine actually works to whether Indians are loyal enough to their own tradition. Sinha leans on Western validation while criticising Indians for caring about Western opinion; this contradiction invites cultural obligation rather than critically evaluating it.

The Sudhir Chaudhary and Ramdev patent claims work the same way. None of them actually describes what the patent covers, whether any medicine got approved, or what the legal scope is. Simply saying "patent" carries weight.

5. Discussion

5.1. What Does This Mean for Young People Who Grow Up Watching This?

The most striking structural feature of the gomutra content analysed is not what it says, but what it leaves out. No videos in this dataset mention the British, and none mention the Mughals. There is no story of loss, suppression, or reclamation; there is a seamless jump from ancient rishis straight to today's bottle of Godhan Ark, with roughly 2,000 years of Indian history left unspoken. For a young person watching hours of this content, the picture of the past that forms are one in which India had extraordinary medical knowledge in the Vedic period; this knowledge has existed uninterrupted ever since, and the only people who doubt it are those with an "agenda." Sushant Sinha, on a channel with 625,000 views, puts it plainly: "Have the agenda-driven people specifically attacked the ancient practices by dismissing what Ayurveda says?" The word "agenda-driven" does the magic here; it bluntly discredits any critic, turning scepticism itself into evidence of bad faith.

This framing might well shape misconceptions about history and science, but the video-level design of this study cannot measure this effect directly (Section 5.6). Because the Mughal and British periods are simply absent from the discourse, young viewers are not learning that those periods produced their own contributions to medicine, scholarship, and science, that Mughal-era physicians translated and brought together Greek, Persian, and Indian medical traditions, or that the colonial period, for all its downsides, introduced scientific methodologies on which modern medicine now relies. Instead, the story they receive is that the Vedic period was when real knowledge existed, and the only science worth trusting is the science that confirms what the rishis already knew. Rajiv Dixit hints at this in a video with

78,000 views: "Today's science proves what Baghbhatt ji said thousands of years ago." Science here is not a method for testing ideas; it's just a way of obtaining official-sounding approval for beliefs that were already decided long ago. Consequently, this suggests that whatever came in with the Mughals and British – Islam, Westernization of certain kinds – was bad for India. This matters because it does not just affect how young people understand gomutra; it shapes the entire category of what counts as "legitimate knowledge." If Vedic science is always already correct, and modern beliefs are merely catching up, then there is no independent role for evidence, and experiments only confirm the claim instead of testing it.

5.2. Implications for Our Understanding of Medicine Itself

One of the most disorienting features of this content is the genuine confusion it creates around authority. Rakesh Agarwal, introduced as an "IIT Bombay PhD", tells viewers that Amrit means "a life-saving drug", a switch from Vedic terminology into pharmacology that happens so quickly that most viewers would not notice the shift. R.S. Chauhan, described as "the former Director of the IVRI", is cited by Sushant Sinha as endorsing cow urine as "a truly remarkable substance." These are not anonymous internet commentators; they are people with credible titles, and their credentials are being used not to test ancient claims, but to vouch for them. On the debunking side, Dr. Navin Agrawal says simply that "the chances of benefiting from this in the eyes of modern medicine are not acknowledged," staying firmly in the present, citing institutional authority. According to the data, this is far less effective: his video has 8,400 views against Rakesh Agarwal's 2.4 million.

The deeper problem is that people's understanding of medicine is being shaped by their understanding of history. If viewers have already accepted that Vedic science is the foundation of all true knowledge, they won't be moved by an experiment performed by a YouTube creator. The promoters have already answered the question on historical grounds, and the debunkers are still trying to answer it at the level of chemistry. The two sides are not in the same conversation. This raises a difficult question: who do people learn to trust when they are sick – a doctor trained in modern medicine who dismisses traditional practice, or an influencer backed by ancient texts, IIT credentials, and an American patent? In this dataset, the influencers are winning, not because the claims are stronger, but because the historical frame that supports them has been left completely unchallenged.

5.3. Ayurveda in Indian Science Textbooks

What happens on YouTube might seem like a self-contained problem, but similar framing exists at the level of the NEP. Under India's National Education Policy (NEP) 2020, the current government has introduced Ayurveda into NCERT science textbooks for Classes 6 to 8. The Class 6 Curiosity textbook now references the Ashtanga Hridaya

Sutra Sthana, the very same ancient text that Dr. Rupali Jain cites on YouTube, with 726,000 views, to authorise the medical properties of cow urine. The texts that live on wellness channels now live in the national curriculum. The Class 8 textbook includes a chapter titled “Ayurveda: Balance of Body, Mind, and Environment,” covering daily routines and seasonal habits drawn from traditional practice. The University Grants Commission (UGC) is simultaneously developing course modules to bring Ayurvedic principles into higher education. This is a systematic, institutional movement.

5.4. Cross-Platform and Print Comparison

Gomutra and Ayurveda do not just exist on YouTube. Al-Zaman (2021) found that during COVID-19, a huge amount of health misinformation spread on WhatsApp, Facebook and Twitter, and cow urine was featured in the print and television media in Hindi and English at times during the period, sometimes credulously and at other times as a fact-check.

This is an open question which cannot be answered by this dataset, as the sample was collected from one particular platform (YouTube) using the search and ranking processes specific to that platform. A systematic comparison of WhatsApp forwards, Twitter/X posts, and newspaper articles using the same matched sample, and coding them (or the same subset of each) in the same categories as used here, is a logical next step and is suggested, not asserted, by this study.

5.5. Limitations and Generalisability

There are a few restrictions to the interpretation of the results. The sample is not random, but view-ranked (see Section 3.1), and the findings reflect the most-viewed gomutra content on the site at the time of sampling and cannot be interpreted as a representative sample of the average gomutra content. The results might not generalise to gomutra discourse in other Indian languages, as the video sample and the search terms were limited to Hindi and English.

A large language model was used in a first-pass tag extraction; while every quotation and tag used in the analysis was manually verified, there was no inter-rater checking of the coding. Lastly, the design is descriptive and correlational: the data can demonstrate that some historical framings tend to occur in high-view gomutra content, and that debunker videos rarely involve such framings, but cannot on its own establish that the viewers who watch these videos come to hold the beliefs the videos promote, or that the viewing leads to any downstream changes in how viewers understand Indian history or medical authority.

The potential impact on the audience is thus presented in Sections 5.1 and 5.2 as possible interpretations in the context of the content patterns derived, rather than as measured audience effects, as this would require survey and/or interview data with real viewers, which was not possible for the present study and is mentioned as a direction for future research.

5.6. Positioning Relative to Prior Work

The contribution of this study in comparison with the nearest work is worthy of being elaborated and not simply left as an implicit one. While Al-Zaman (2021) and Hurford et al. (2022) have established gomutra-related misinformation as a public-health communication issue, this study investigates the phenomenon with a historiographical, as opposed to an epidemiological, question, considering the videos not merely as vectors of a false health claim, but as evidence of the construction of a version of Indian history. The most similar methodological approach to date is by Khan et al. (2026), who developed an automated method for detecting culture-specific health misinformation using large language models, but in this study, full manual verification of each quotation and tag was added (Section 3.2), meaning the claims made here are based on human-verified evidence rather than LLM detection alone. In contrast to Sharma and Kapoor (2021), who tried to model sharing and verification behavior in general, this study presents the descriptive results of view counts, which is an indicator of visibility, rather than a causal outcome variable. What distinguishes this study is not greater accuracy or predictive power but a different unit of analysis – the historical framing within the claims – that the reviewed misinformation-detection and public-health literature does not directly examine.

The connection back to this study's findings is not incidental. The gomutra videos in the dataset operate by treating ancient texts as having authority; “the Charaka Samhita says so” is used as a conversation-ender, not as an invitation to inquiry. When that same logic enters the science classroom through state-approved textbooks, it is no longer just one influencer among many; it becomes the curriculum. The movement from the imagination of history to the imagination of science to the imagination of medicine is no longer just a pattern in online content. If what counts as scientific knowledge is shaped by what confirms India's ancient greatness, and if that idea becomes standard in classrooms and eventually in medical training, then the medical establishment itself, which gets trained, what gets funded, and what treatments get recommended will increasingly reflect a vision of science defined by history rather than by evidence.

6. Conclusion

This paper focused on answering a specific question: if the medical properties of gomutra are largely unproven, why do so many people believe in them? Within this dataset, the answer is that belief is not carried by chemistry but by history, or more specifically, by a very selective version of history. Across all the videos, the pattern is consistent: the ancient Vedic and Ayurvedic past is invoked relentlessly, with 26 videos citing named Sanskrit texts, 13 citing the Vedas, 13 mentioning rishis and sages, while everything that happened between that past and the present is simply absent. The West appears as a validator: American patents, Washington Post

articles, NIH name-drops, ratifying what “history” already established. And the debunkers, for all their reach – Rathee's Betadine video alone accumulated 8.1 million views – never actually engage with this historical frame. They argue about chemistry, the promoters argue on cultural grounds, and so the two sides never meet.

Together, these patterns fit with an account of how this specific narrative of misinformation operates in India. It does not work through outright political dialogue; it works through cultural memory and ancient authority. Viewers feel like they're learning about their heritage, not being persuaded, but the ideas they absorb are ones in which scepticism is “agenda-driven” and modern science only counts when it agrees with

what the rishis already knew. The study cannot measure the experience of that framing of the content, but the content itself is designed to be received as heritage, not persuasion. Once that framework enters NCERT textbooks, which it already has, with Ayurveda entering the Class 6 and 8 science curriculum under NEP 2020, it is not just limited to YouTube. The same historical imagination that makes gomutra believable online can shape what a generation of Indian children understands as science, and eventually, as medicine. What the gomutra case shows is at least one example of how a selective history can become the foundation for a disputed collection of scientific claims, with a particular use of terms like “rishis,” “ancient texts,” and “western approval.”

References

- [1] Syeda Zainab Akbar et al., “Devotees on an Astroturf: Media, Politics, and Outrage in the Suicide of a Popular Film Star,” *Proceedings of the 5th ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies (COMPASS '22)*, Association for Computing Machinery, New York, NY, United States, pp. 453-75, 2022. [CrossRef] [Google Scholar] [Publisher Link]
- [2] Seema Alavi, *Islam and Healing: Loss and Recovery of an Indo-Muslim Medical Tradition, 1600–1900*, Springer, 2008. [Google Scholar] [Publisher Link]
- [3] Md. Sayeed Al-Zaman, “COVID-19-Related Social Media Fake News in India,” *Journal of Media*, vol. 2, no. 1, pp. 100-114, 2021. [CrossRef] [Google Scholar] [Publisher Link]
- [4] S. Chaudhary, Do those Who Insult Gomutra Know this?. [Online]. Available: <https://www.youtube.com/shorts/8nDDBoWT08k>
- [5] Beth Hurford, Abhishek Rana, and Rohan Sachan, “Narrative-based Misinformation in India about Protection against COVID-19: Not Just another “Moo-Point”,” *Indian Journal of Medical Ethics*, vol. 7, no. 1, pp. 1-10, 2022. [CrossRef] [Google Scholar] [Publisher Link]
- [6] R. Jain, Video Discussing the Mutravarg and the Medical Properties of Gomutra. [Online]. Available: <https://youtu.be/YrOPq35xKoU>
- [7] Twinkle Joshi, Vaishali Kuchewar, and Aman Chhabra, “Multidimensional use of Cow Urine (Gomutra), One of the Ingredients of Panchagavya – A Narrative Review,” *International Journal of Ayurvedic Medicine*, vol. 13, no. 3, pp. 606-612, 2022. [CrossRef] [Publisher Link]
- [8] Anamta Khan et al., “When Cow Urine Cures Constipation on Youtube: Limits of LLMs in Detecting Culture-Specific Health Misinformation,” *arXiv*, pp. 1-13, 2026. [CrossRef] [Google Scholar] [Publisher Link]
- [9] Ministry of Human Resource Development, Government of India, National Education Policy 2020, 2020. [Online]. Available: https://static.pib.gov.in/WriteReadData/userfiles/NEP_Final_English_0.pdf
- [10] National Council of Educational Research and Training, Materials around us, In Curiosity: Textbook of Science for Grade 6, NCERT, 2024. [Online]. Available: <https://ncert.nic.in/textbook/pdf/fecu106.pdf>
- [11] Patanjali Ayurved, Video Demonstrating the Betadine Experiment with Gomutra. [Online]. Available: <https://youtu.be/IB0lSmH4RKY>
- [12] Gurpreet Kaur Randhawa, and Rajiv Sharma, “Chemotherapeutic Potential of Cow Urine: A Review,” *Journal of Intercultural Ethnopharmacology*, vol. 4, no. 2, pp. 180-186, 2015. [Google Scholar]
- [13] D. Rathee, Video Demonstrating the Betadine Experiment with his Own Urine. [Online]. Available: <https://youtu.be/rjMbE9fUUhQ>
- [14] Payal Ashok Raut et al., “Pharmaceutical Analysis and Evaluation of In-vitro Antibacterial Activity of Gomutra Ghana: A Concentrated and Solidified Form of Cow’s Urine,” *Journal of Clinical and Diagnostic Research*, vol. 18, no. 11, pp. 6-11, 2024. [CrossRef] [Google Scholar] [Publisher Link]
- [15] Ananya Sharedalal, Gomutra YouTube Video Sample, Google Sheets, 2026. [Online]. Available: <https://docs.google.com/spreadsheets/d/1sL5OCSKUtzv3nrFb4C7ct3ZXCcCEMgzDfk0wVSu1970/edit?usp=sharing>
- [16] Anumegha Sharma, and Payal S. Kapoor, “Message Sharing and Verification Behaviour on Social Media during the COVID-19 Pandemic: A Study in the Context of India and the USA,” *Online Information Review*, vol. 46, no. 1, pp. 22-39, 2021. [CrossRef] [Google Scholar] [Publisher Link]
- [17] University Grants Commission, Guidelines for Incorporating Indian Knowledge System in Higher Education Curricula, UGC, 2023. [Online]. Available: https://www.ugc.ac.in/pdfnews/6436045_Guidelines-IKS-in-HE-Curricula.pdf
- [18] U.S. Patent No. 6,410,059 B1, U.S. Patent and Trademark Office, 2002. [Online]. Available: <https://patents.google.com/patent/US6410059B1/en>
- [19] U.S. Patent No. 6,896,907 B2, U.S. Patent and Trademark Office, 2005. [Online]. Available: <https://patents.google.com/patent/US6896907B2/en>

- [20] U.S. Patent No. 7,235,262 B2, U.S. Patent and Trademark Office, 2007. [Online]. Available: <https://patents.google.com/patent/US7235262B2/en>
- [21] U.S. Patent No. 7,297,659 B2, U.S. Patent and Trademark Office, 2007. [Online]. Available: <https://patents.google.com/patent/US7297659B2/en>