

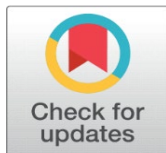
BEYOND HEROES AND VILLAINS: PORTRAYAL OF HEALTHCARE WORKERS IN FILM "VIRUS"

Anaina C ¹  , Dr. Nikhil Kumar Gouda ²  , Dr. Sudhir Kumar Patnaik ³  

¹ Creative Content Writer, Vintbit info Digital Solutions, Calicut, Kerala, India

² Associate Professor, Department of Journalism and Mass Communication, Central University of Odisha, Koraput, India

³ Assistant Professor, Department of Basic Science and Humanities, GMR Institute of Technology, Rajam, India



Corresponding Author

Dr. Sudhir Kumar Patnaik,
sudhirkumar.p@gmrit.edu.in

DOI

[10.29121/shodhkosh.v5.i3.2024.1218](https://doi.org/10.29121/shodhkosh.v5.i3.2024.1218)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2024 The Author(s). This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.



ABSTRACT

The portrayal of healthcare workers in films significantly influences public perception. This study delves into the Malayalam film "Virus," a dramatization of the 2018 Nipah virus outbreak in Kerala, India. Using a semiotic approach, it investigates the representation of healthcare workers through visual elements, character traits, and interactions within the film. Rather than resorting to clichéd depictions of heroic saviors or villainous doctors, "Virus" offers a nuanced and realistic portrayal. The analysis scrutinizes how healthcare workers are visually depicted through clothing, body language, and facial expressions, reflecting their dedication, expertise, and resilience. It delves into the film's portrayal of character traits, emphasizing their unwavering commitment despite facing significant personal risk and exposure to a deadly virus. Furthermore, it examines how their interactions with patients and authorities illustrate the challenges they confront during a public health crisis. By dissecting these signs and symbols, the research aims to unravel the underlying messages conveyed about the healthcare profession in "Virus." This analysis has the potential to foster a more balanced public perception of healthcare workers in India and globally. Additionally, it highlights how films like "Virus" can employ scientific accuracy to depict the complexities of managing real-world epidemics.

Keywords: Epidemic, Portrayal of Healthcare Workers, Semiotic Analysis of Film, Film Virus

1. INTRODUCTION

The World Health Organization (WHO) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." The 21st century has witnessed numerous global pandemic threats, including infectious diseases like Ebola, Middle East Respiratory Syndrome (MERS), H1N1 and Severe Acute Respiratory Syndrome (SARS). Public health emergencies require complex and uncertain responses with limited resources and information. These situations may cripple healthcare systems, trigger social unrest, and destabilize established institutions.

In 2018, the state of Kerala faced the Nipah virus onslaught. Emergency measures were taken. Immediate public health responses helped largely contain the outbreak (Arunkumar & Chandni, 2019). The Nipah virus (NIV) is a zoonotic virus (transmitted from animals to humans) that can also spread through contaminated food or directly between people. It causes a range of illnesses, from asymptomatic (subclinical) infection to acute respiratory illness and fatal Encephalitis. The virus can also cause severe disease in animals like pigs, resulting in significant economic losses for farmers (WHO, 2023).

Aashiq Abu's 2019 Indian Malayalam-language medical thriller film "Virus" is set against the backdrop of the 2018 Nipah virus outbreak in Kerala. The story unfolds in Kozhikode, following the course of the virus from initial detection to complete eradication. It showcases the courageous acts that prevented the virus from spreading further. The film explores the anxieties and suspicions raised by the Nipah outbreak and its disruption of both individual lives and healthcare professionals. It tells the story of a group of courageous people who stood firm in the face of adversity, risking their own lives and fighting valiantly (Paul, 2020).

2. REVIEW OF LITERATURE

Several authors working in this area content that films play a significant role in shaping public perceptions of public health workers and their functions with tools such as emotive storytelling and relatable characters (Han & Curtis, 2021; Pinar Bölüktaş, 2022 & Paul, 2020). The cinematic portrayal has changed significantly over time, mirroring broader societal attitudes towards the medical field and shaping public perceptions of healthcare (Blackmore, 2023).

Films centered on themes of disease, infection, and contagion generally fit into one of three main categories: fantasy, science fiction and horror (Han & Curtis, 2020). These films may impact on public perception: by dramatizing the spread of diseases, these films can increase viewers' awareness and concern regarding real-life health issues; influence on behavior: inspire viewers to adopt preventive health behaviors; potential for education: films could be utilized as educational resources, offering audiences valuable insights into disease transmission and prevention methods (Kendal, 2021)

In films, healthcare workers are presented broadly into two categories: Negative portrayals and positive potential. There is a growing trend of unfavorable representations of healthcare workers in films which may have a negative effect on patient-physician relationship. Despite the negative trends, films that depict healthcare workers can also have a beneficial impact. They can mirror public sentiment regarding the medical profession, act as educational resources for healthcare professionals and students, and foster social change, especially in efforts to reform managed care systems (Flores, 2002).

In epidemic-related films, public health workers are often portrayed as elite or authoritative figures, usually male, who have specialized knowledge and skills. These characters are commonly shown grappling with personal challenges and sacrifices that remain unacknowledged by the communities they aim to help (Han & Curtis, 2021).

The review emphasizes that media representations frequently present a largely negative image of nursing. These portrayals tend to perpetuate traditional stereotypes, characterizing nursing as a profession primarily occupied by women, centered exclusively on caregiving, and often positioned as subordinate to other healthcare professions, especially medicine (González, 2023).

Nurses are often cast as supporting characters, with an emphasis on their physical appearance or romantic relationships rather than their professional competencies. The representation of male nurses often embodies negative stereotypes, implying that they are in nursing as a secondary option due to their failure to become doctors, thereby reinforcing the idea that nursing is a less prestigious career (Pinar Bölüktaş, 2022). Common stereotypes of nurses in movies and TV shows include as the 'sexy', 'subservient', 'overly emotional' and 'incompetent' (Blackmore, 2023)

The analysis of doctors in movies reveals that doctors are being increasingly presented as bereft of compassion and idealism. This has picked up particularly since the 1960s, indicating a growing skepticism towards the medical profession. They are presented as greedy, egotistical, uncaring, and unethical. Films also prioritize research above patient care, complicating public perceptions of medical ethics (Flores, 2002)

Epidemic films also highlight the human aspects of healthcare workers by focusing on their imperfections, limitations, and emotional journeys, which help to connect these "elite" figures with the everyday communities they serve. This representation typically includes acknowledgment of mistakes and guilt by healthcare workers; emotional and compassionate traits of healthcare workers that reflects a deeper understanding of their roles, illustrating their battles against bureaucratic and political obstacles while striving to do what is best for the community; themes of self-sacrifice and lack of recognition and personal bonds with the community by demonstrating their dedication to public health that extends beyond their professional duties. This connection often leads them to challenge authority or take risks for the greater good (Han & Curtis, 2023).

Enduring negative stereotypes in media representations lead to a misunderstanding of the healthcare workers. It adversely impacts how the profession is viewed. It diminishes public perception and respect for them hindering their ability to assert their professional identity and autonomy (González, 2023; Pinar Bölüktaş, 2022; Dr. Seeta Devi, 2021; Paul, 2020). These stereotypes can have a profound effect on public perception, leading to misconceptions about healthcare workers and the healthcare system (Blackmore, 2023)

Research emphasizes that filmmakers have a duty to accurately and thoughtfully depict health issues. Given cinema's impact on public perception, there is an urgent need for films to take health literacy seriously, particularly in the context of recent global health crises. This may be attributed to the insufficient health literacy and balancing authenticity and sensationalism in films. While some films may address health topics, they typically fail to deliver comprehensive or accurate information that could improve public understanding. The research highlights a conflict between entertainment value and authentic representation. Many films tend to favor dramatic narratives over realistic depictions of health issues, which can result in misinformation and misconceptions about infectious diseases. This sensationalism undermines the educational potential of cinema (Paul, 2020).

Research suggests that commercial cinema can enhance public understanding of infectious diseases by integrating accurate health information and fostering health literacy within film narratives (Paul, 2020; Kendal, 2021). However, there is a need for films to depict infectious diseases realistically, steering clear of sensationalism and unrealistic portrayals that could mislead viewers. By accurately showcasing diseases and their effects, films can function as valuable educational resources (Kendal, 2021).

2.1. JUSTIFICATION

The 2019 Malayalam film "Virus" was a major box office success and stands out for its portrayal of a real-life public health crisis – the 2018 Nipah virus outbreak in Kerala, India. The film's focus on the role of healthcare workers in containing the outbreak makes it a valuable case study for examining how film as an entertainment media represents healthcare workers and their profession.

2.2. OBJECTIVES

This study aims to analyze the portrayal of healthcare workers in the Malayalam language film "Virus" using a semiotic approach. Specifically, the study will investigate:

- The visual representation of healthcare workers in the film.
- The character traits and behaviors associated with healthcare workers in the film.

By examining these elements, the study will contribute to a deeper understanding of how entertainment media shapes public perception of healthcare workers in India and beyond.

3. METHODOLOGY

This study employs a qualitative content analysis approach using semiotics to analyze the portrayal of healthcare workers in the Malayalam film "Virus". Semiotics provides a framework for examining the signs and symbols used in films to understand the underlying meanings conveyed (Allen, 2017). Content analysis allows for a systematic examination of the film's content to identify recurring themes and patterns related to the portrayal of healthcare workers (Hsieh & Shannon, 2005). By examining visual elements, dialogue, and behavior, researchers can gain insights into the underlying messages conveyed in films (Worth & Gross, 1981). This approach can shed light on the values and attitudes associated with the healthcare profession that are communicated to the audience.

The concept of semiotics was introduced and familiarized by Ferdinand de Saussure and Charles Sanders Peirce. The idea behind semiotics was to decode what certain signs mean on a larger canvas and how the audience unconsciously interprets it. Semioticians initially started with language and later it was applied to other fields of work. Though the codes were initially propounded by Saussure, it attained its full potential later at the hands of Roman Jakobson. In the present attempt, the study of social codes of Jakobson, such as verbal codes (dialogues), bodily codes (facial expression, gaze etc.) commodity codes (fashion, vehicle, gadgets etc.) and behavioral codes (rituals, how a person behaves, etc.) were explored.

Data Analysis

The analysis involves the following steps:

- 1) **Data Collection:** The entire film "Virus" was viewed multiple times to ensure familiarity with the plot and characters.
- 2) **Coding:** A coding scheme will be developed to identify relevant elements related to the portrayal of healthcare workers. This coding scheme includes aspects such as:
 - Visual representation (dress code, facial expressions, body language)

- Dialogue and spoken language associated with healthcare workers
- Actions and behaviors of healthcare workers
- Interactions between healthcare workers and patients or other characters

3) Data Analysis: The film was coded scene-by-scene using the developed coding scheme. Coded data was then analyzed to identify recurring themes and patterns in the portrayal of healthcare workers.

4) Interpretation: The identified themes and patterns were interpreted in the light of the semiotic framework to understand the underlying messages conveyed about the healthcare profession in the film.

Some Important Verbal Codes- Please refer to Table I

Some Important Bodily Codes- Please refer to Table II

Some Important Commodity Codes- Please refer to Table III

Some Important Behavioural Codes- Please refer to Table IV

4. DISCUSSION: REFRAMING HEALTHCARE WORKERS THROUGH FILM

Traditionally, movies have painted a mixed picture of doctors, often portraying them as either heroic saviors or insensitive villains. This discussion explores how the Malayalam film "Virus" breaks this mold, offering a more realistic and positive portrayal of healthcare workers while tackling a public health crisis.

While many studies highlight negative portrayals of medical professionals in films, "Virus" presents a refreshing contrast. The film emphasizes the dedication and expertise of healthcare workers as they tirelessly treat patients, investigate the source of the outbreak, and prioritize patient safety through prescribed biosecurity measures. This positive portrayal may serve as a powerful counterpoint to the negativity often found in cinema and contribute to a more balanced public perception of the medical field.

The film goes beyond simply showcasing good bedside manners. It delves into the investigative rigor of healthcare professionals. We see doctors meticulously trace the source of the virus, highlighting the crucial role of scientific inquiry in disease control. This scientific accuracy further enhances the film's credibility and educates viewers about the complexities of managing an epidemic.

Films like "Virus" can bridge the gap between importance of health literacy and public's understanding of health issues by providing realistic portrayals of medical situations and procedures. By showcasing compassionate, sensitive, understanding, responsible and dedicated healthcare workers the film may encourage positive interactions with the medical system and dispel potential anxieties of the public.

The positive reception of "Virus" underscores the impact films can have on public perception. When viewers connect with the struggles and triumphs of healthcare workers on screen, it can foster empathy and appreciation for their real-life counterparts. The film's focus on the human cost of the outbreak, including the emotional toll on medical personnel, further adds depth to this portrayal.

5. CONCLUSION

"Virus" stands out for its realistic portrayal of healthcare workers battling a Nipah virus outbreak. The film showcases their compassion, dedication, expertise,

and unwavering commitment despite immense personal risk and exposure to a deadly contagion. This realistic depiction not only sheds light on the epidemic from the medical professionals' perspective but also fosters public appreciation for their tireless efforts. "Virus" serves as a powerful counterpoint to the often-negative portrayals of healthcare workers in cinema, highlighting their crucial role as guardians of public health. Further studies exploring audience reception and the film's impact can provide valuable insights into the potential of films to reshape societal views on the medical system and healthcare workers.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

- Allen, R. C. (2017). *Understanding semiotics*. Bloomsbury Academic.
- Blackmore, A. (2023). How the inaccurate portrayal of nurses in movies and TV impacts the profession. *Shiftmed Blog*.
- Dr. Seeta Devi. (2021). Nursing Profession- Portrayal of Nurses in Indian Cinema and its Impact on Public Opinion about the Nursing Profession. *Annals of the Romanian Society for Cell Biology*, 7204–7209. Retrieved from
- Flores G. (2002). Mad scientists, compassionate healers, and greedy egotists: the portrayal of physicians in the movies. *Journal of the National Medical Association*, 94(7), 635–658.
- González, H., Errasti-Ibarrondo, B., Iraizoz-Iraizoz, A. & Choperena, A. (2023). The image of nursing in the media: A scoping review. [Intehttps://doi.org/10.1111/inr.12833](https://doi.org/10.1111/inr.12833)
- Han, Q., & Curtis, D. R. (2020). Social Responses to Epidemics Depicted by Cinema. *Emerging Infectious Diseases*, 26(2), 389-394.
- Han, Q., & Curtis, D. R. (2021). Epidemics, public health workers, and 'heroism' in cinematic perspective. *Visual Studies*, 36(4–5), 450–462.
- Han, Q., Curtis, D.R. (2023). Heroism and Healthcare Workers in Epidemic Films. In: *Encyclopedia of Heroism Studies*. Springer, Cham.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), 1277–1288.
- Kendal E. (2021). Public health crises in popular media: how viral outbreak films affect the public's health literacy. *Medical humanities*, 47(1), 11–19.
- Paul, S. (2020). *Contagious Disease and Commercial Cinema: A Study of Selected Films for Their Impact on Health Literacy*. *Global Media Journal-Indian Edition*. 12 (1).
- PINAR BÖLÜKTAŞ, R. (2022). How Nurses Are Portrayed In American And Turkish Movies. *GEVHER NESIBE JOURNAL OF MEDICAL AND HEALTH SCIENCES*, 6(11), 6–11.
- Tyagi, S. (2021). Changing portrayal of doctors in Bollywood films, 1940–2020: Is it time for introspection? *Natl Med J India* 2021; 34:235–7.
- WHO. (2023). *Nipah virus infection*. WHO.
- Worth, S. & Gross, L. (1981). *Studying Visual Communication*. Philadelphia: University of Pennsylvania Press.

Table 1

Table 1 Some Important Verbal Codes			
SL.NO.	Scene	Description	Inferred Meaning
1	Doctors' Discussion (11:26)	Young surgeons talk about a patient.	Fear and urgency surrounding patient care.
2	Nurse-Doctor Interaction (21:40)	The nurse informs the doctor of her possible infection. Doctor responds.	Doctor offers consolation.
3	Doctor-Minister Meeting (22:17)	Doctor reports on worsening patient conditions.	Professional and factual communication.
4	Doctor - Patient-Relative Interaction (22:55)	Doctor apologizes for harsh behavior towards a patient's relative.	Initial irritation followed by empathy.
5	Neurologist - Patient Interaction (23:49)	Neurologist expresses sympathy for a helpless situation.	Compassionate but limited ability to help.
6	Medical Students-Superintendent Confrontation (28:54)	Students challenge the superintendent's handling of the situation.	Doctors suspect lack of transparency.
7	Meeting (30:58)	Doctor admits limited understanding of transmission dynamics.	Admission about knowledge gaps.
8	Doctor- Minister Meeting (31:52)	Doctor emphasizes the need for non-medical intervention.	Practical assessment and call for broader support.
9	Public Health Announcement (36:54)	Health director confirms Nipah presence and assures public of control measures.	Admission of problem and spreading hope and confidence.
10	Doctor - Family Interaction (39:20)	Doctor avoids interaction with parents.	Act to protect the loved ones.
11	Minister – Doctor Meeting (40:29)	Doctors expresses the challenges of monitoring a large population.	Realistic optimism.
12	Doctor - Patient Interaction (41:37)	Doctor's assurance.	Providing comfort and emotional support.
13	Doctor's Frustration (43:30)	Doctor expresses frustration upon learning of a patient's death.	Emotional impact of losing a patient.
14	Ambulance Driver's Concerns (45:52)	Ambulance drivers raise safety concerns.	Fear of personal safety.
15	Medical Staff Discussion (48:59)	Medical staff express fear.	Dedication and courage in the face of danger.
16	Doctor - Relative Interaction (53:46)	Doctor avoids revealing details to relative.	Ethical obligation to patient privacy.
17	Doctor- Collector Call (1:04:10)	Doctor maintains a firm stance against public panic.	Resilience and strong leadership.
18	Health Department Meeting (1:32:10)	Doctor's argument.	Emphasis on logic and scientific reasoning.
19	Doctor-Relative Conversation (1:37:38)	Doctor avoids personal contact.	Commitment to duty even during personal challenges.
20	Public Announcement (1:38:25)	Doctor announces the availability of potential treatment options.	Providing updates and offering hope.

21	Doctor - Driver Interaction (1:41:35)	Doctor attempts to trace patient contacts.	Proactive approach to contain the outbreak.
22	Doctor-Staff Phone Call (1:46:36)	Doctor receives positive test results for a colleague, expressing relief.	Camaraderie and concern for fellow healthcare workers.
23	Doctor - Family Meeting (1:54:30)	Doctor interacts with infected person's family.	Compassionate care and focus on emotional well-being of patient-family.
24	Nurse- Patient Interaction (1:59:55)	Busy nurse attends to a patient's needs despite hectic engagements.	Care, dedication and commitment to patient care under pressure.
25	Doctor - District Magistrate Discussion (2:00:46)	Doctor and district magistrate discuss the potential source of infection and conspiracy theories.	Critical thinking and responsibility to address public concerns.
26	Doctor - Patient Interaction (2:02:27)	Doctor questions a non-cooperative patient.	Frustration in dealing with uncooperative patients.
27	Doctor's Presentation (2:17:25)	Doctor explains the likely source of the virus outbreak.	Scientific reasoning and focus on evidence-based solutions.

Table 2

Table 2 Some Important Bodily Codes			
SL.NO	TIMELINE	SCENE DESCRIPTION	INFERRED MEANING
1	15:05	The couple discusses a peculiar medical case with extremely high blood pressure.	Doctors' fear and confusion about the unknown disease.
2	21:40	Contagious illness. She mentions a patient with similar symptoms who died.	Infected health worker warns about a contagious and deadly virus.
3	22:55	The patient's son brings a sample for advanced testing and meets the doctor. The doctor initially shows irritation towards the relative but apologizes after learning their relationship.	Irritating behavior by the doctor to the relatives of an infected patient, followed by apology.
4	23:49	The neurologist converses with the ailing patient.	Fear of virus transmission of a sympathetic but helpless doctor.
5	26:49:00	The doctor removes his glasses upon identifying the deadly virus and picks up his phone to make a call.	Doctor is worried.
6	30:58:00	A Meeting assesses the situation and plans the strategy to contain the virus spread, but with limited information.	Lack of clarity on transmission dynamics of the disease.
7	36:54:00	The Health Director delivers a public statement	Spreads hope & confidence to the public.
8	39:20:00	The house surgeon hesitates to enter his house despite his mother's insistence.	Worry
9	40:29:00	The Ministry and the doctor discuss the action plan.	Doctors are optimistic.
10	53:46:00	The doctor reads a letter written by a deceased nurse. The letter is passed to her husband.	Doctor grief-struck
11	01:04:10	The doctor faces a raging public who are afraid to burn bodies at the crematorium.	Doctor panic
12	01:45:57	Sara's phone reveals how she got infected. This information is passed to the community medicine officer.	Doctor is happy and ready for further investigation.
13	02:17:25	A bat is confirmed as the cause of the Nipah virus spread.	Doctors' satisfaction at finding the closest explanation of the exposure of virus.

Table 3

Table 3 Some Important Commodity Codes			
Sl. No	Timeline	Scene Description	Inferred Meaning
1	26:49:00	The doctor, wearing full PPE gear, conducts a test on the sample in a viral institute lab.	Doctors following safety measures.
2	41:37:00	The doctor is treating a patient in the hospital room. The patient asks for a pen and paper. Doctor obliges.	Considerate doctor.
3	43:30:00	A medical staff immediately removes a dead nurse's life support system.	Commitment to patient care even at the time of loss of near and dear.
4	01:30:45	The doctor in a PPE kit walks through the busy emergency room and finds the house surgeon without his mask on.	This scene depicts the emotional toll of the crisis on the medical staff.

Table 4

Table 4 Some Important Behavioral Codes			
Sl.No	Timeline	Scene Description	Inferred Meaning
1	05:15	A busy emergency room with medical staff working tirelessly to save lives.	A feeling of urgency by medical staff
2	23:49	The neurologist has a conversation with a sick patient.	Sympathetic and concerned doctor
3	26:49:00	The doctor, upon detecting the virus through a test, takes off their glasses and makes a phone call.	Behavioral changes e.g. expression of shock by the doctor.
4	43:30:00	The house surgeon receives a call informing him about the death of a nurse.	Emotional behavior of doctors.
5	53:46:00	The doctor reads an emotional letter written by a nurse who died. It is then passed on to her husband.	Showing the human face of the medical staff who are deeply affected by the loss of their colleague.
6	01:11:34	The doctor and health inspector visit the first patient's house and see bats fly out of a well, suggesting a possible link.	Seriousness and sincerity to unearth the source, shown by the medical staff.
7	01:12:36	The community medicine doctor visits a patient. The auto driver, however, wears a mask but avoids dropping her too close. The patient's mother expresses relief at being spoken to in person.	Health workers defy social stigma by visiting patients. Public fear and misconceptions are evident.
8	01:30:45	The doctor in a PPE kit walks through the busy emergency room and witnesses the house surgeon having an emotional breakdown without his mask on.	Doctor witnesses the emotional vulnerability of a colleague, highlighting the stressful situation.
9	01:59:55	A boy is brought to hospital after a dog bite. The scene shows a busy nurse who is late to attend to the child.	Busy hospital staff overwhelmed by workload.
10	02:06:01	An infected patient's girlfriend provides photos and videos to the health inspector. The patient was found with a bat, suggesting a potential source of the virus.	Doctor's patient and careful analysis.