

Outbreak Narratives and Medical Humanities: A Transdisciplinary Comparative Approach to the Literary Representation of Ebola in Preston's *The Hot Zone* (1994) and Tag Elsir's *Ebola 76* (2012)

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Abstract

Humanity has been ravaged by a number of disastrous epidemics/pandemics that have exposed the cultural, social, political and hygienic fabric of societies. 'Outbreak Narrative' is a term coined by Priscilla Wald to describe a certain type of plot that manipulates the emergence of a latent viral disease that spreads world-wide and becomes a pandemic. The present research analyzes Richard Preston's *The Hot Zone* and Amir Tag Elsir's *Ebola 76* through a transdisciplinary comparative approach. Choosing Preston's *The Hot Zone* (1994) and Tag Elsir's *Ebola 76* (2012) in particular is due to the fact that both texts handle the same epidemic/pandemic, Ebola, so that exploring the two texts illuminates the contributing factors in the eruption and containment of the epidemic as well as how fiction is instrumental in penetrating the realities of epidemic/pandemic disasters. The transdisciplinary approach is chosen because of the complex nature of epidemics/pandemics. The theoretical framework utilizes concepts from literature, anthropology, epidemiology and Medical Humanities. Such theoretical framework probes the interconnectedness and multi-dimensionality of the epidemic/pandemic crisis. *The Hot Zone* and *Ebola 76* reveal two disparate perspectives of Ebola that undermine cultural differences and the role of literature in penetrating the realities of viruses.

Keywords: Outbreak Narratives, Medical Humanities, Transdisciplinary Approach, Epidemic/Pandemic, *The Hot Zone*, *Ebola76*

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*On the Ebola ride,
paranoia is the driver.
It takes you on a high
leaving your senses hanging in the wild.
Fear is its deputy,
and panic, the conductor. (Juah 34)*

Introduction

Epidemics/pandemics⁽¹⁾ expose the precarity of our infrastructure that undermines the discrepancy between developed and developing countries; rich classes that can afford medical treatment at private hospitals and poor classes that gasp to find a room in a public hospital. These glaring disparities shake the entire governmental system and people's awareness. With the emergence of Coronavirus, Outbreak Narratives and 'Pandemic Fiction' are spotlighted as genres that need further research to examine how narratives help to shape the interconnectedness of literature and Medical Humanities. The present research adopts a transdisciplinary comparative approach to examine the literary representation of Ebola epidemic/pandemic in Richard Preston's *The Hot Zone* (1994) and Amir Tag Elsir's *Ebola 76* (2012), seeking to fathom the Outbreak Narratives and Medical Humanities as hot topics in contemporary society. This research attempts to compensate the lack of research on Outbreak Narratives and their connections with Medical Humanities, in addition to the role they can play in broadening people's understanding of epidemics/pandemics through exciting narratives. To achieve this objective, the transdisciplinary approach adopted here cements the interconnectedness of literature to the other disciplines in its representation of life in its totality and

complexity. The transdisciplinary approach is an attempt to integrate concepts from different disciplines to get better understanding of ‘epidemics/pandemics’ literary representation. Penetratingly, the transdisciplinary approach addresses the context, the interconnections and the wider implications of epidemic/pandemic outbreaks

Theoretically, transdisciplinarity/transdisciplinary is a term coined by Jean Piaget, the Swiss psychologist. Piaget presents transdisciplinarity as a higher stage that “surpasses the boundaries among the different disciplines” (138). Similarly, Alfonso Montuori considers transdisciplinarity as a “new way of thinking, engaging in inquiry” (“Foreword” ix). This ‘new way of thinking’ is not about “abstract knowledge, but about knowledge that is embedded and embodied” (“The Complexity” 51). Erick Jantsch agrees with Piaget and Montuori on the emerging need to the transdisciplinary approach due to the shattering of boundaries among disciplines as well as the amounting threats to sustainability of life. From Jantsch’s perspective, the transdisciplinary approach enhances the co-ordination of all disciplines and interdisciplines in the education/innovation system on the basis of a generalized axiomatics (introduced from the purposive level down) and an emerging epistemological (‘synepistemic’) pattern.(106).

Accordingly, the transdisciplinary approach supports research in “humane science” as it demonstrates the integration of the diverse disciplines as well as “reverence of life, man and the human condition” (Mahan 21). In this respect, the transdisciplinary approach integrates knowledge from diverse disciplines; both scientific and non-scientific. This integration is influential in unearthing the complexities of contemporary ecological disasters, including epidemics/pandemics. Apparently, the transdisciplinary approach has salient joint characteristics: the

unity of knowledge that transcends disciplinary boundaries; manipulation of multi/interdisciplinary researches; inclusion of societal factors as well as the emerging world problems (Lawrence, et al 47). These characteristics pertain to the complexity of Ebola Virus and provide the transdisciplinary approach as an appropriate means to probe the multiple frames interconnected with Ebola Virus. This view is emphasized by Jay Bernstein who finds in Basarab Nicolescu's transdisciplinarity "the integration of the humanities, including spiritual subjects such as religion, and philosophies of knowledge and education with physical science subjects such as those extant in laboratories and space observatories" (6). It can be inferred that the transdisciplinary approach illuminates the paradigmatic frames embedded in viruses and discloses the entangled implications of their recurrent outbreaks.

As coined by Priscilla Wald, 'Outbreak Narratives' refer to "a formulaic plot that identifies the eruption of pandemic exploration of the global networks involved as well as the epidemiological work that results in its containment" (*Contagious Cultures* 2). This 'formulaic plot' can be seen as a series of images, stories and scenarios that blur the border between the real and the imaginative as they display human beings at war: humanity versus virus (Wald, "Panic and Precaution"). In this respect, the Outbreak Narrative is a "crisis narrative" (Wald, "Panic and Precaution"), as it presents the emergence of a virus that spreads widely and the narrative ends with its enclosure.

In analyzing Outbreak Narratives, the transdisciplinary approach presents human beings as nodes in the intertwined webs of the ecological system influenced by the socio-political catalysts that shape their surroundings. Therefore, the transdisciplinary approach is a meta-paradigmatic approach delving into Outbreak Narratives as a complex genre. Interweaving the interconnected

factors, the transdisciplinary approach is a challenging method to explore Outbreak Narratives that display the emerging viruses which threaten sustainability, tranquility and provide wider perception of ecological hazards.

The two selected works are Richard Preston's *The Hot Zone* and Amir Tag Elsir's *Ebola 76*. These two works represent two different cultures coping with the same epidemic/pandemic; or, to put it in another way, the two works display the perspectives of two writers from different cultures exemplifying political as well as medical orientations. Their works integrate fact and fiction as they create scenarios that make us visualize disaster and provide outlets to our fears. This visualization of Ebola increases the possibility of believing that the visualized event will occur in the future. This view is asserted with the framing of Ebola, which is an epidemic viral disease, toward a 'pandemic' narrative reversing attention away from "medical solutions, humanitarian aid, and national safety toward government and military action, biosecurity and the global species network" (Gerlach 611). This shift in the perspective of Ebola as a pandemic rather than epidemic happened after the appearance of Ebola carriers in the United States (611). Consequently, Outbreak Narratives of Ebola enhance world-wide emotional and cognitive orientation of epidemic/pandemic disasters. Significantly, this research is timely as it explores the realities of Outbreak Narratives with the current anxiety caused by the emergence of Corona Virus Pandemic. The research postulates a number of questions: What are the characteristics of Outbreak Narratives as presented in the two selected texts? How is Ebola virus represented in the two texts? In what way are Outbreak Narratives connected with Medical Humanities as displayed in the two texts?

Pandemic Fiction and Outbreak Narratives

'Pandemic fiction' is a genre of science fiction tackling diseases that impose dystopian scenarios and highlight the apocalyptic and postapocalyptic potentials. Pandemic fiction has been given extreme focus with the outbreak of Covid 19 and people's increasing interest to read stories which can either "assuage or verify their fears" (Doherty and Giordano 1). Since science fiction is a horizon to foresee what might happen, it provides people with awareness of the nature of epidemics/pandemics and the steps to be taken to overcome them (Parrider 166). This view of science fiction prompts a number of questions concerning epidemic/pandemic narrative in its relationship with Medical Humanities. This reflects how narratives can tackle medical issues and in what way Outbreak Narratives depict epidemics/pandemics and the characteristics of such Outbreak Narratives.

Throughout literary history, epidemics have been utilized as fresh and fertile material for gripping plots presenting human beings fighting for survival, as well as penetrating the essence of humanity and the cultural construct. Epidemics are apocalyptic/postapocalyptic events that have inspired many writers to chronicle them in fictional and non-fictional works. Epidemics cast their influence through the different epochs of humanity's development and they have been interpreted differently. Epidemics such as plagues are considered the consequence of transgressing "god's displeasure" as in *Oedipus Rex* (Wald, *Contagious Cultures* 11). In addition, epidemics are estimated as the outcome of the disruption of ecological balance resulting from man's transgression against the environment (Rosen 5). Albert Camus's *The Plague* (1947) is one of the most popular and inspiring epidemic narratives that exhibits a number of subtexts about human condition. Robin Cook's *Outbreak* (1987) is a

medical thriller that tackles the spread of Ebola virus in the United States. José Saramago's *Blindness* (1995) is an exotic epidemic novel manifesting blindness as besetting the dwellers of an unnamed city and exposing the anarchy and moral corruption divulged. *Pain Killer* (2018) is an epidemic narrative by Barry Meier, the *New York Times* reporter. Meier's novel depicts the social impact of a plague on family relationships and businesses.

Epidemics depicted in literary works expose the fragmented society and its politics. This fragmentation is reflected in the narrative which is indicative of the overwhelming disease and the fighting within the human body. According to Steven Marcus, "[i]llness amounts at least in part to suffering from incoherent story or an inadequate account of oneself" (277). Metaphors of the body's struggle with the virus show the body as a battlefield where the virus and the immunity system within the body fight. This fight is one of anxiety that makes the reader/viewer grasp to see the end. Furthermore, the representation of the virus creates an interplay between the factual and the imaginary. 'Epidemic/pandemic' fiction, consequently, partakes on the characteristics of Outbreak Narratives. Notably, the representation of 'epidemics/pandemics' Outbreak Narratives can help humanity survive through highlighting the effects of epidemics/pandemics on whole communities (Stovall). In other words, Human beings' behaviour and life style determine human being's survival and healing from epidemics and this underscores the power of literature to support them.

Outbreak Narratives are indispensably connected with the emergence of epidemics/pandemics and with the globalized transformations brought by them. Outbreak Narratives depicting plagues/epidemics and pandemics rivet the world-wide attention. As described by Wald, Ebola, SARS and HIV have been considered as "emerging infections" that "arise from primeval

murk in Africa and Asia to infiltrate developed societies.” These diseases spread widely by “transgression that is intrinsic to their contagion—wanton or deviant sexuality, uncleanness, illicit drug use, moral profligacy” (*Contagious Cultures* 5). Outbreak Narratives have become apocalyptic/postapocalyptic critiques manifesting the socioeconomic and ecological factors reflecting the disparity between the developed and underdeveloped societies. Therefore, Outbreak Narratives are deconstructive frame narratives disclosing the intricate links among Medical Humanities, science, politics, culture and literature. The depictions of such diseases as Ebola, Cholera, and Coronavirus can be viewed as “sensations texts” as they highlight the effects of contagion on bodies as well as “bodily sensations from viewers [readers]” (Albertini 444). These narratives simultaneously display the imminent threat regionally and globally; which in turn shapes the myth of the contemporary epoch.

Whether factual or imaginary, Outbreak Narratives are a genre of science fiction exploring epidemic/pandemic calamities. Outbreak Narratives, starting with the emergence of a disease and closing with its containment, exhibit distinctive characteristics such as frame narratives/ subtexts, open-ended plots, anxiety, epidemiological discourse and above all, interconnections with Medical Humanities.

‘Medical Humanities’ is an interdisciplinary field of study that tackles medicine’s relationships with sociology, anthropology, politics, literature and other varied disciplines (Aull). Medical Humanities fits as a critical perspective that gains “coherence from its concern with understanding what it is to be “fully human” (Greaves and Evans 1). Interlinked with virus outbreaks, Medical Humanities enlightens our perception of human beings, whether infected victims or medical specialists confronting and coping with medical disasters. The integration of fiction in the

medical scene is to reconfigure and embody the disastrous situation in a factual rather than fictional delineation. Clearly manifested, Outbreak Narratives penetrate the interlinkings between Medical Humanities and literature as both scrutinize human beings' reaction (individually and collectively) to the emergence of epidemics/pandemics. Accordingly, Medical Humanities and literature are collided in asserting man's humanity amidst medical calamities which may attack abruptly and violently such as Ebola virus and the contemporary Covid 19.

David Greaves and Martyn Evans maintain that the interlinking of Medical Humanities and art [literature] is an ambitious view that "entails that the experiential nature of suffering be brought within the scope of medicine's explanatory models, if necessary by reappraising those models" ("Exploring" 1216). Greaves and Evans's view underscores the reciprocal relationship between medicine and literature and how literature can be instrumental in providing medical practitioners with innovative and unconventional techniques of dealing with patients as well as of an outlet relief source in time of disasters. Hence, Art in general and Literature in particular can soothe patients' suffering and alleviate practitioners from the heavy burden they carry. In this way, Medical Humanities perennially and thoroughly asserts medicine as a self-exploration method where bodily tissues and personal values integrate in shaping the experiences of illness and suffering (Toulmin 231-49). The integration between Medical Humanities and literature penetrates profoundly into the epidemic/pandemic outbreaks and the diverse ways people react to them. Therefore, a thorough understanding of the patients/infected victims' physical and psychotic symptoms can be understood in the light of the variant factors causing epidemics/pandemic.

Connected with Medical Humanities is Critical Medical Humanities which has varied valences—“urgent, skeptical, evaluative, and mobilizing the long philosophical and political traditions of critique.... to explore what [Medical Humanities] capable of doing” (Viney et al 2). Medical Humanities is an influential tool that addresses not only the histo-cultural contexts of health and illness, but also “their very production, concrescence and dispersal across. The precarious, unequal and environmentally degraded societies in which we live” (2). In Critical Medical Humanities, a broad perspective of disease can be provided through exploring the entangled bio-psycho-socio factors that control the life and death of human beings. Dependingly, medical knowledge is conditioned by the bio-politics as well as social, cultural and environmental contexts in which people live. Critical Medical Humanities reveals hierarchies of power and modes of dominance in one society where medical knowledge is either profuse or meager, which in turn, enhances people’s perception of viruses and procedures of encountering them. If Medical Humanities defines the human body in its relationship with medicine, Outbreak Narratives are entangled with different disciplines, including Medical Humanities and reflect the ideological, cultural and epidemiological paradigms. Therefore, both Outbreak Narratives and Medical Humanities define the human body and its relationship with varied disciplines. Accordingly, the literary representation of Ebola virus (or viruses in general) provides a mirror of the infected body, the patient’s anxiety, the medical readiness of the governmental system, the narratability of pain as well as the humanistic content.

Delving deep into Outbreak Narratives reveals the tendency of blaming contagious diseases on racial reasons prompted by “sexually irresponsible” or “untrustworthy figures located outside

bourgeois social codes” (Wald, *Contagious Cultures* 58). Wald’s opinion locates the emergence of contagion on racial terms, and this view harmonizes with Foucault’s concept of Biopower. Biopower is concerned with life itself and it reflects the cultural, social, political and technological array of powers which seek what Foucault calls “docile bodies” (*Discipline* 135-169). Contagion in the light of Biopower involves a reversal in colonial discourse. Donna J. Haraway maintains that with the emergence of “disease genocides’, accompanying European penetration of the globe, “the colored body of the colonized was constructed as the dark source of infection, pollution, disorder and so on that threatens to overwhelm the white manhood” (233). The human body and its representation in Outbreak Narratives is a frame narrative which is open to different interpretation (Leach et al 371). It is a transdisciplinary issue that is influenced by the entangled relationships among the different disciplines and asserts the interlinkings among literature, Medical Humanities, Biopolitics represented in Biopower, and epidemiology. These interconnections are reflected on the framing of the Outbreak Narratives, where not only the bodily and social dimensions of diseases can be understood but also their implications (Williams and Calnan; Leach and Fairhead). Simon J. Williams and Michael Calnan tackle the existential parameters of life in late modernity and contemporary world (1609-1620). Melissa Leach and James Fairhead highlight the dichotomy between the developed North and the developing East (15-22). They explore the integration of bodily, social, political and cultural dimensions in examining diseases and vaccines in a globalized world. In the case of Ebola Outbreak narratives, in particular, the narrative focuses on “the indigenous cultural models of disease causation” (Leach and Dry 15). In other words, the Outbreak narratives of Ebola implicate

the cultural factors that contribute to the wide spread of Ebola on a large scale.

Outbreak Narratives underline the integration of medical and epidemiological knowledge with the social, political and cultural contexts to penetrate the complexity of epidemic disasters, underpinning governmental preparedness and people's awareness. Therefore, epidemics "implicate a diversity of spatial scales---from the individual diseased body to the globe" (Leach and Dry 12). Outbreak Narratives, accordingly, are framed narratives open to multiple forms of interpretation. These forms can be regarded as the varied contexts through which the text can be decoded. The Outbreak Narratives of Ebola can be considered to some extent "localized" as they focuses on "narrative interplay in ways shaped by politics and power" (Leach and Dry 5). Appropriately, Outbreak Narratives of Ebola exhibit a plethora of subtext frames which show Ebola as an emerging virus that starts regionally and becomes a global threat with its appearance in the North. Structurally, Outbreak Narratives probe "the causes of inequity and disease vulnerability amongst popular populations" (Wald, *Contagious Cultures* 2).

Contextualizing *The Hot Zone* and *Ebola* 76

Before exploring the context of the two selected texts, it is necessary to contextualize Ebola virus. Ebola is an emerging hemorrhagic disease whose outbreak is "tied to regional trade networks and to other evolving social systems" (Farmer 262). According to the World Health Organization (WHO, 2021), the first outbreak of Ebola was in the Democratic Republic of the Congo (formerly Zaire) and Sudan in 1976. The second outbreak took place between 2014-2016, and this time it started in West Africa, from which it spread to other countries. Within few months, Ebola became a global threat which ravaged urban areas. The outbreak of Ebola between 2014-2016 attacked several

countries (among which Guinea, Sierra Leone, Liberia and other 7 countries) and Ebola was qualified as a pandemic (Wadman). By its emergence in the Democratic Republic of the Congo in August, 2018, the WHO declared Ebola as a pandemic (Shultz, et al 78). Ebola started in Africa and became a global threat with its appearance in some Western countries--- that it became a plague (Lynch 233). Symbolically, Ebola “spread like wildfire—as a danger potentially without limit” (Farmer 262). This image of the spread of Ebola underscores the severity of its outbreaks as well as the gravity of its symptoms. The transmission of Ebola from Africa to the West shows travel as a powerful force in the spread of the pathogens of Ebola (Wilson 45; Tatem et al 293).

The Hot Zone (1994) and *Ebola 76* (2012) integrate fictional representation of Ebola virus with medical knowledge. On the one hand, Richard Preston’s *The Hot Zone* is a non-fiction book that teems with fictional elements that made Liza Lynch consider it a novel (236). *The Hot Zone* has been a subject to a number of book reviews and articles which focused mainly on the book as an apocalyptic documentary narrative which uses a journalistic style and predicts the reversal of Ebola from an epidemic to a pandemic (Lynch; Gerlach, 2016; Belling).⁽²⁾ Preston is a journalist who traces the spread of Ebola from Zaire to the United States, especially in Virginia in the late 1980s. Preston’s text presents Ebola as a global pandemic and he asserts the credibility of the story from the very beginning as the subtitle of the book is: *A Terrifying True Story*. This subtitle shows *The Hot Zone* as a horror story depicting actual disaster. Preston confesses: “The dialogue comes from recollections of the participants” (1). *The Hot Zone* is divided into four sections. The first section examines Ebola outbreaks in Africa between 1970s and 1980s, and the search for the cause of the mysterious viral epidemic in Kitum Cave in Mount Elgon, Kenyan region. The second and third

sections tackle the emergence of Ebola among monkeys in Reston facility in Virginia and the intensive search to contain its spread. The fourth section is Preston's visit to Kitum Cave to gather information from what is thought to be the original home of Ebola. The events of *The Hot Zone* start in Kenya in 1980s where Charles Monet, a French expatriate, is infected by the Marburg virus⁽³⁾. Throughout the narration, Preston shows the severe bodily symptoms Monet suffers from. Preston goes on chronicling the outbreaks of the virus, its Sudanese strain as well as the horrific spread of the virus in Zaire. He continues on his narration and shifts the focus from Ebola virus outbreaks to a group of American scientists experimenting on a new strain of virus appeared in Reston facility. This group works under the collaboration of the United States Army and the Centers of Disease Control (USACDC). These scientists prepare a secret plan to contain the virus before it becomes a disaster.

The Reston facility is marked as "a hot zone" where euthanized monkeys are kept and SWAT (Special Weapons and Tactics) team experiment and collect blood and tissue samples for research. A member of the team, Nancy Jaax, has a malfunctioning space suit and while she is in a contaminated room working on blood samples of infected monkey, drops of blood seep into the hole, but Jaax does not get infection. In a more scary scene, an infected monkey escapes from its cage and bites one of the scientists. Moreover, two scientists on the team at the Facility, Peter Jahrling and Tom Geisbert, are exposed to infection when sniffing through contaminated flasks containing Ebola virus samples. However, they do not have any symptoms. As it is revealed in *The Hot one*, the Reston Facility Ebola strain is symptomless in humans and humans get infected, the symptoms are not severe as it happened with Milton Frantig. Frantig is infected, but he has mere symptoms of bad flu. It is

obvious that Preston believes in the African monkeys as the main source of infection. The monkeys die while human beings survive having symptoms of flu. The team of scientists manages to kill all the monkeys in the facility. By the end of *The Hot Zone*, a scientific expedition visits Kitum Cave in Kenya to explore the potential causes and sources of Ebola virus.

On the other hand, *Ebola 76* (2012), a short novel by the acclaimed Sudanese physician and writer, Amir Tag Elsir, is a profound representation of the spread of Ebola from the Democratic Republic of the Congo to Southern Sudan and beyond. *Ebola 76* was first published in Arabic in 2012, and it was translated into English in 2015. It can be regarded as a prophecy of the return of the virus, which actually became true in 2014. Therefore, the novel can be considered the literary delineation of a physician's perspective foreseeing the outbreak of Ebola again. *Ebola 76* is described as the story of "diseased blood coursing through our hearts" (Roberge). The novel is black humour tackling not only bodily disintegration but also the exposure of the whole fabric of society at Nzara. The two studies which examined *Ebola 76*, along other book reviews, tackled man's survival amidst crumbling and deteriorating conditions created by the Ebola Virus epidemic/pandemic (Adel; As'ad Hamzeh). The novel displays a picture of a postcolonial society suffering from corruption, deteriorating economic and social conditions as well as the failure of the medical sector to provide treatments to the infected victims.

Tag Elsir narrates the story of Lewis Nawa, the irresponsible and morally corrupt textile factory worker in Nzara. The narrative presents Nawa's ex-marital love affairs which cause his infection by the unknown virus, and he consequently infects his wife, Tina, and he becomes the culprit of carrying the virus to Nzara. Ironically, Nawa brings the virus to the whole country, but he

himself recovers. The novel touches upon the declining conditions in which people live as reflected in their houses if compared with compounds of the expatriates.

Due to the lack of medical supplies and hospitals in Nzara, treatment is provided to people in a square called “Ebola Square” where infected people are attended by only one doctor and his assistant, as one of the two doctors in the town got infected and died. By the end of the novel, a helicopter hovers over the ‘Ebola Square’—with people’s assumption that they will be rescued by the medical aids carried on the helicopter. Pathetically, the helicopter lands on one expatriate’s back garden “on a so-called humanitarian mission,” leaving people in utter despair of survival(129).

The Monstrosity of the Virus and the Human Body

The Hot Zone and *Ebola 76* enact the crisis of infection on the body in thick descriptive passages that highlight the interconnectedness and the hidden meanings that can be unearthed from both texts. As coined by the anthropologist and ethnographer, Clifford Geertz, ‘thick description,’ is concerned mainly with penetrating the cultural and social entanglements in a given context (3-30). Thick description provides profound display of the complex cultural factors undermining scenarios of epidemics: emergence, infection and attempts of containment. The description of Ebola in *The Hot Zone* is “chilling There are paragraphs here that could of themselves produce cold sweats and shortness of breath” (Trachtman). Images of the monstrosity of Ebola are a recurrent motif in *The Hot Zone*. The use of metaphors of monstrosity is a way of “making disease comprehensible and to understand its relations to the self and the other” (Willis et al 65). As depicted by Preston, the virus is a “a motive without a mind, compact, hard, logical, totally selfish” (85). The virus has an astonishing ability of multiplying and

making copies of itself (Preston 138). The human body, therefore, is beset with overwhelming threats to its immune system that tries to prove its humanity in its battle with the monstrous virus. The human body becomes a “metaphor for the fate of the human in the informate age” (Dougherty 10). After being infected, Preston’s body disintegrates and “collapses into outside” that “no longer functions to demarcate the condition of the possibility of the inside” (8). Instead of being a unique individual, Monet deteriorates into the process, which Preston calls “depersonalization, in which the distinctive features of the individual “vanish”(19). This image of the ‘depersonalization’ of the human body is the disintegration of human subjectivity, reflecting the anxiety of “postmodern body” (8). As it disintegrates, Monet’s body is objectified as it becomes like “the village infected, babbling computer hacker, in Neal Stephenson’s Snow Crash-an automation” (Preston 19). Connected with this gruesome image also is the delineation of the body as “a city under siege with its gates thrown open and hostile armies pouring in, camping in public squares and setting everything in fire” (46-47). These images of infected village and besieged city demonstrate the vulnerability and the openness of the immune system to endless infections.

Notably, the ‘thick description’ in *The Hot Zone* ensures not only the monstrosity of Ebola body, but also the “biocontainment lab” as a symbol of “contained danger” (Albertini 452). The title of the book itself is indicative of biocontainment laboratory as it undermines a barrier that separates the area. The biocontainment lab/the hot zone functions not only as “a site of mastery over illness,” but also “a site for anxiety” (451). This view is analogous with what Ann Larabee estimates as the significance of the biocontainment lab: “a system in need of its own protection—a condensed version of that same technoculture” (36). The

biocontainment lab to Larabee resembles a thinking lifeboat that modifies and highlights how epidemics/pandemics are encountered in Outbreak Narratives. Preston describes the precautions taken in the quarantine ‘hot zone’ where researchers conduct their research on Ebola in a series of descriptive images: “tall vent pipes on the wall,” which help discharge exhaust air (54). The window “was made of heavy glass, like that in an aquarium”; in addition, the walls were painted with “thick, gobby epoxy paint, and all the electrical outlets were plugged around the edges with a hooey material. This was to seal any cracks and holes, so that a hot agent could not escape by drifting through hollow electrical conduits” (60). Such series of thick descriptive images of the biocontainment laboratory as a lifeboat and an aquarium highlight its symbolic function as an attempt to contain the fatal pathogens and emphasize how the quarantine is instrumental in minimizing the spread of viruses, which is compatible with the current scene of Covid 19. To heighten the readers’ anxiety, Preston involves the readers in the narrative by making them follow the movement of the researcher Nancy Jaax as she heads from a “Biosafety Level 0... for a level 4 biocontainment area... that had been set up as a research lab for Ebola virus” (59). Her entering into the ‘biocontainment lab’ is a nerve-shaking experience as fear threatens to overwhelm her. Jaax, a veterinarian and pathologist, is about to catch Ebola infection due to a rip in her space suit, but she survives infection (64). In contrast to the precautions taken at the biocontainment lab which is ‘the hot zone’ in Preston’s book, anarchy and chaos dominate the scene at the hospital of Nzara in Tag Elsir’s novel. The laboratory spatial containment is paralleled with the spatial scenes at *Ebola 76*; namely the Zumbie street and the hospital at Nzara.⁽⁴⁾ The safety represented by the space suits at the biocontainment lab is contrasted with the corpses of the dead and

the bodies of the dying at Zumbie street. If the hospital is the ‘hot zone’, it does not have the minimum safety procedures. The doctors and the medical team at the hospital of Nzara are working without masks which are in short supply. Such atmosphere of shortage of medical equipment exposes the population to an embedded and imminent disaster (Tag Elsir 67). Thus, the spatiality of Zumbie street and the hospital at Nzara adds to the deteriorating conditions people suffer from. Moreover, Tag Elsir provokes readers’ fears by making an analogy between Zumbie street and the rebels’ square where “corpses, syringes,, decay” (71). This horrific sight made Darina’s heart “pound painfully against her ribs” (71). To compensate the lack of hospitals in Nzara, thousands of mattresses “packed with straw, cotton and sand” had been scattered in the Zumbie square (40). The deficiency of the government to handle the crisis at Nzara is disgusting and exposes the entire social and cultural structure as well as demonstrating the disparity between the West and the East. Firstly, the lack of medical and epidemiological facilities portends a calamity with the absence of the West’s claims of human rights and the global threat of diseases. Secondly, the failure of the government in postcolonial Nzara is due to the corruption of governors manifested in their dereliction in providing medical and epidemiological strategies to encounter the mysterious disease.

Both Preston and Tag Elsir manipulate clinical images in characterizing Ebola virus. Preston describes the dissolution of Monet’s body in clinical terms that assert the shadowing of human subjectivity at the supremacy of information age. The virus is a small capsule made of membranes and proteins. The capsule one or two strands of DNA or RNA—the material that had made the genetic code of every organism in the history of the

planet.... [T]he virus contained the software—the genetic code—for the making of itself and that was all. (97)

Preston makes a correlation between the Marburg virus and the computer virus as hackers that attack. This ontological affinity blurs the borders not only between fantasy and reality but also between human beings and computers. Most significantly, Preston explicitly depicts the virus as a predator that has a revengeful nature. This predator is invisible to its prey. It is the hot virus that roams in the savannah grass and pounces on its prey imperceptibly and abruptly. In describing the Ebola virus as a predator, Preston conjures it as an originally African virus. Preston reveals:

Some of the predators that feed on humans have lived on the earth for a long time, far longer than the human race, and their origins go back, it seems to the formation of the planet. When a human being is fed upon and consumed by them especially in Africa, the event is telescoped against horizons of space and time, and takes on a feeling of immense antiquity. (137)

In stressing the predatory nature of Ebola, Preston makes it an elusive representation of a forceful power within Africa “able to shift its shape, able to mutate and become a new thing” (100). In ascribing the predatory nature of the Virus, Preston stresses the Virus’s evil intent to attack the developed West. The attribution of the origin of the virus to Africa perpetuates the binary opposition between the enlightened West and the primitive East. Preston shows how modern science is manipulated as a forceful biopower that replaces territorial occupation. It also demonstrates how viruses can be directed to wreak havoc and chaos into Africa –the Other. In diving into the analysis of the origin of Ebola, Preston’s *The Hot Zone* melds postapocalyptic, racist and postcolonial discourse.

If Preston depicts the virus as a computer hacker that infects the human body and a predator that lurks invisibly in the savannahs, Tag Elsir presents the Ebola virus in a series of thick descriptions that expose its monstrosity. The virus is a vengeful, vindictive magician as seen by the debauched, morally loose anti-hero, Lewis Nawa (4). The Ebola Virus killed Nawa's mistress, Elaine, who had contracted the disease from a man who visited her during Nawa's absence (4). Ebola spreads through personal-to-personal direct contact. According to the World Health Organization, it transmits via "bodily fluids of infected people and with surfaces and materials (e.g. bedding, clothing) contaminated with these fluids" (2021). This idea is emphasized in both *The Hot Zone* and *Ebola* 76. Preston asserts that Ebola travelled through direct contact, blood as well as slimes emanating from corpses (221). Moreover, Preston reveals that the situation in Africa is worse due to the Africans' traditional burial rituals as they kiss and embrace the dead bodies...within few days they break with Ebola (225).

The human body becomes not only a signifier but also a signified. In *The Hot Zone*, the virus jumps quickly through Mayinga, a nurse who contracted Ebola in Nairobi hospital due to the hospital's act of reusing dirty needles. Mayinga has sought treatment in two hospitals away from Nairobi where she spent two days seeking medication around a city of two million people (175). In the same vein, Nawa's body becomes a metaphor of a border to Ebola's cross-infection. The moral degradation may be considered the objective correlative of the physical disintegration as it is manifested in the thick description of the debauchery of Nawa and Kanini:

Hovering nearby, Ebola broke into a grin as Kanini sidled seductively up and pressed herself against Lewis. It watched as she brought her lips close to his scarred face, cackling with

glee as Lewis left with the young girl whose blood it had infected the previous day. Ebola sidled after them as if they stumbled through filthy, deserted alleyways until finally reaching their destination, a low building whose walls reverberated with shrieks of raucous laughter. (15)

In such thick description, the Ebola virus is considered a predator that hovers and attacks mercilessly. The description of the virus in the above passage shows that the immoral love relationship of Kanini and Nawa is the objective correlative of bodily decline. Both Kanini and Ebola move furtively towards Nawa, asserting the correlation between moral and physical deterioration; in other words, immoral demeanor is one of the factors of getting infected. A significant embedded message in *The Hot Zone* and *Ebola 76* is that contagion has a close connection with ethical and moral principles. This is glaringly represented in Mayinga's denial of contracting Ebola lest it should obstruct her travel to Europe on a scholarship (165). This ethical deterioration parallels the immoral degradation of Lewis Nawa.

Similar to the subjectification of the human body in Preston's *The Hot Zone*, Nawa's body is subjectified and it becomes under the control of two ghouls: Kanini, the symbol of his forbidden pleasure; and Ebola which multiplied into millions into his bloodstream (Tag Elsir 19). Ebola in Tag Elsir's novel becomes not only a magician but also a sarcastic one as it laughs when it penetrates the body of Lewis's wife (34).

Preston and Tag El sir describe the virus and its symptoms in clinical terms, showing how gradual bodily disintegration takes place. As Monet collapses, "[h]is eyes are the color of rubies, and his face is an expressionless mass of bruises.... The muscles of his face droop. The connective tissue in his face is dissolving, and his face appears to hang from the underlying bone, as if the face is detaching from the skull" (18). This is a highly disgusting

description illuminating the power of the virus and the cessation of Monet's body to exist as an integrated essence—the body to be. Likewise, Tag Elsir, the physician, gives an alluring and more accurate description of the virus's invasion to Nawa's body and his role as a border to infection:

The dull pain behind his eyes had extended to his whole head, his knees were stiff and his nose was running. He was also shivering slightly and one of his hands had broken out in red spots.... Lewis laughed and Ebola laughed with him, having penetrated smoothly into the body of his wife, whose armoury of seductive charms had stood no chance against it.(33-4)

The description of Monet and Nawa's faces graphically shows the extent of their suffering. Monet and Nawa look like *zombies* and this description is masterfully delineated to reflect the two works as Outbreak Narratives. A *zombie* is a recurrent metaphor in Outbreak Narratives showing extreme horrors such as “racial sublimation, atomic construction, communism, mass contagion, globalism. It is a horrific sight to see the bowels of Monet open and blood spouts, streams and mixes with intestines” (Preston 19). This ghastly scene asserts that the virus can cause “mental derangement, psychosis, depersonalization, even *zombie-like* behavior” as Preston holds (19, emphasis added). Monet's consciousness capabilities deteriorate where “the *who* of Charles Monet has already died, while the *what* of Charles Monet continues to live... Monet has been transformed into a human virus bomb” (18, emphasis added). This transformation from the *who* to *what* is the process which Preston calls ‘depersonalization.’ This process reflects the dehumanization and obliteration of Monet's personality as the virus becomes “a sentient, vengeful force bent on wreaking havoc on the civilized West” (Lynch 237).

In a similar vein, the influence of the Ebola Virus on mental capacities is clearly manifested in Tag's Elsir's *Ebola 76* in Nawa's losing sense of reason and propriety (86). Nawa under the influence of the virus resembles a *zombie-like figure*. Tina, Nawa's wife, visits him at the hospital and feels that Nawa is different: "His dark skin was not its usual colour and his sweat had a decidedly unhealthy sheen (50). Anami, a victim of Ebola in Tag Elsir's novel, also looks like a *zombie-figure* with his running nose, aching knees and bleeding throat and skin (57). The infected body as a *zombie* has become a "metaphor for infectious diseases and the emergence of new literature describing apocalyptic disease" is a manifestation of the influence of fiction in unearthing the disentanglements of pandemics (Verran and Reyes 1774). Therefore, the transdisciplinary critical approach is instrumental in penetrating the representation of epidemics/pandemics in literature. It enhances better understanding of diseases rather than the scientific facts about diseases. The transdisciplinary approach presents the interconnections of the Virus with the varied disciplines in literary 'thick' descriptive passages that widen our understanding of the nature of the factors that prompt the emergence of the Virus.

Considerably, the thick description of the symptoms of Ebola on Monet's and Lewis's body intermingles epidemiological and medical description with the feelings of the dying Monet and the dissolute Lewis who indulges himself in forbidden sexual relations. Ergo, the human body becomes the border through which the virus spreads. Wald's analysis of Outbreak Narratives hinges the spread of pandemics on racial reasons prompted by "sexually irresponsible" or "untrustworthy figures.... located outside bourgeois social codes" (*Contagious Cultures* 58). Wald's view is analogous to Foucault's concept of "bio-power." 'Bio-

power' is a process which "defines human grouping" (Foucault, *The History*, 143). This idea of grouping is demonstrated by Wald as he identifies certain groups as virus carriers (*Contagious Cultures* 21-22). In this way, Outbreak Narratives, validate epidemiological and medical preparedness and "implicate a diversity of spatial scales—from the individual diseased body to the globe" (1).

'Bio-power' is concerned with life and reflects an array of cultural, social, technological powers that seek to produce what Foucault calls "docile bodies" (*Discipline* 135-69). By 'docile bodies', Foucault means the body that may be "subjected, used, transformed and improved" (136). Under the influence of Ebola, the infected body is in the grip of an invisible power that imposes its laws and restrictions. Accordingly, the coercion imposed by the colonial Empire parallels the dominance of the virus on the human body. The disciplinary power of the Empire resembles the cellular power of the virus. In other words, Bio-power and Medical Humanities are interlinked in their focus on the human body.

Bio-power and Medical Humanities can be considered as a subtext frame in both Preston's *The Hot zone and Tag Elsir's Ebola* 76. 'Bio-power' is a more intriguing form of power divergent from power of sovereignty. This form of power applies to the human body rather than to lands (Foucault, *Society* 35). 'Bio-power' represents a shift in the concept of power from armed and territorial power to the knowledge-power that dominates the human body and consequently humanity's survival. This shift in the mechanisms of power has underlying implications. Firstly, man's biological environment determines and works inside human historicity (Foucault, *The History*, 143). Secondly, 'bio-power' supports "the action of the norm, at the expense of the juridical system of the law" (144). If law is armed by a sword,

bio-power is fostered by continuous regulatory and constructive techniques that implement concepts of normalcy. De facto, the development of 'bio-power' in this way perpetuates supremacy of one race as it "qualifies, measures, appraises, and hierarchizes rather than displaying life in its murderous splendor" (144).

The outburst of diseases necessitates sufficient degree of epidemiological awareness that reveals the gulf between the racial and sexual minorities who are more liable to infection and those enlightened with hygienic perception. In the Film *Outbreak*, infection is presently legible as a result of the racist interactions between African bodies and animals. Preston's *The Hot Zone* advocates the same racist attitude as his book generates "a racist, paranoid tale of Africanized germs" (Lynch 236). It is apparent that medical discourse in the postmodern era shows aggression against non-whites as carriers of viruses and in this way endanger humanity. Haraway believes that "[T]he residue of the history of colonial tropical medicine and natural history in late twentieth century immune discourse should not be underestimated" (293). Significantly, the notion of 'contagion' itself involves a reversal in colonial discourse. The postmodern colonization is not territorial but ideological, epidemiological and cultural which again asserts the supremacy of the Western developed countries and their right to survive.

On the one hand, Preston's *The Hot Zone* conjures of an imperialist nostalgia where the medical expedition hosted by the Kenyan government has its headquarters at the Mount Elgon Lodge, a base that was established during the colonization of Kenya. Preston describes the Mount Elgon Lodge as a "monument to the incomplete failure of the British Empire, which carried on automatically.... in the provincial backwaters of Africa long after it had died at the core" (146). The imperialist nostalgia shifts from territorial occupation to cultural, ideological and

technological supremacy asserting that [bacteriology serve[s].... imperialist ideology” (Otis 5). The Western ideology develops the loathing conception of the Eastern people as virus carriers and disease prone people. Abertini underscores the connection between epidemics/pandemics and racist interaction as well as African bodies and animals (444). However, this idea is not totally acceptable as epidemics do not only result from racism but from interlinked factors ranging from sexual to social, cultural, economic and political factors.

On the other hand, the representation of Ebola in Tag Elsir’s novel reveals his understanding of ‘bio-power’ and how it is deployed in such time of infection and the failure of government to provide medical services to all infected victims. Part of the government’s deficiency is due to the superstitious beliefs deeply-rooted among the people of Nzara. Consequently, the primitive practices undermine the temporal and spatial frames that show the contradiction between such practices and modernity: “[d]isplacing the problem of poverty onto the danger of “primitive practices...poses modernization as a promised solution to...“emerging infections” (Wald, *Contagious Cultures* 8). Contagion is not a mere epidemiological fact, but it is interlinked with varied factors encompassing social, religious and cultural ones. Accordingly, Outbreak Narratives are paradigmatic stories exhibiting the interlinkings of manifold disciplines within epidemiology.

Analogous to the imperialist strategy of manipulating bio-power, Riyyak, the former ex-rebel and oppressive factory owner in Nzara, is an embodiment of bio-power in *Ebola* 67. Riyyak employs many workers and is hated by his employees. As a cruel and brutish employer, he always quarrels with his employees and exploits them, especially Lewis Nawa. Riyyak incarnates colonial greed and racial exploitation. He considers his employees as

“hungry wretches crouching before him for a bite to eat” (36). This image of the workers in Nzara is reminiscent of the objective correlative of the description of the black people in Joseph Conrad’s *Heart of Darkness*. Both Riyyak’s employees and Conrad’s black people are starving and dehumanized. Therefore, any form of oppression is a means of imposing hegemony and supremacy over another.

Outbreak Narratives as characterized in *The Hot Zone* and *Ebola 76* penetrate how contagion dynamics are connected with bio-power and bio-politics in their attempt to investigate “the autonomous, self-contained, sealed-off-self” (Otis 7). Specifically, Outbreak Narratives reveal the Western perception of contagion and the African—the Other as the cause of contagion. Contagion has developed from its literal meaning to a more figurative concept that “co-evolved with its understanding and biomedicine” (Servitje and Nixon 10). The African region is considered unhygienic zone from which viruses emerge. Figuratively, the Westerners are intimidated when “the cultures, peoples, diseases they had engulfed began diffusing throw now their now permeable membranes back toward the imperial cell bodies” (Otis 5). From the Western perspective, the world is threatened by the Africans. The emerging Ebola virus defines “who we are as human beings” (Thacker 51). The Africans are not seen as human beings but primitive savages. Consequently, the emerging virus heightens the We/Us, Self/Other, Healthy/Unhealthy, West/East binary opposition. This binary opposition displays the biologization of Africa. This idea is deeply encoded and profoundly rooted in the Western culture from inside and this metaphoric perception is transmitted with Ebola having become a pandemic with its outbreak in 2014 (Belling 12).

Ebola as an emerging virus knows no country (Krause vii). *With the shattering of borders* in modern age, the world has become a global village that is exposed to the contagion of ‘emerging viruses’ that arise in any corner of the globe. This is masterly delineated in *The Hot Zone* when a man suffering from the Marburg virus boards a plane where “[a] hot virus in the rain forest lives within a twenty-four-hour plane flight from every city on earth” (18).

In his docu-fiction, journalistic style and representational description, Preston penetrates the politics of contagion and how it involves the imperialist policy or supremacy and power. Preston describes how the shipment of infected monkeys “was loaded into an overnight flight to London, and from where it was flown to Germany where the virus broke out of the monkeys and “attempted” to establish itself in the human population” (225). It is discovered that the sick monkeys were infected with Ebola Zaire virus. The Army Medical Research Institute enthralls all the monkeys in the same room: sick and sound ones asserting “bad epidemiology, but good politics” (Preston 231). Simultaneously, the chieftains of Mount Elgon report that people are suffering from bleeding death; in addition, monkeys have the same symptoms (236). Preston stresses throughout his documentary narrative the Western assumptions of the Africans as virus carriers. He refers to Ebola alongside other viruses. He reveals that the AIDS virus has killed the largest portion of the inhabitants of the village of Kasensee and other villages along the shore of Lake Victoria. These villages were wiped out of the map due to AIDS. Preston claims that “AIDS originally came from African primates, from monkeys and apes; and then transmitted from animals into human beings (241). In narrating Monet’s death, Preston proposes that the Ebola virus has originally emanated from Africa: “When a human being is fed upon and

consumed by them, *especially in Africa*, the event is telescoped against horizons of space and time and, and takes on a feeling of immense antiquity” (137, emphasis added). Therefore, *The Hot Zone* stigmatizes the Africans as primitives, uncivilized and most importantly virus carriers. Wald considers Outbreak Narratives as “consequential” as they disperse information about certain pandemics/epidemics and in a sense decrease the racialization of a specific disease through defaming certain region or nation (*Contagious Cultures* 2).

Notwithstanding, Tag Elsir focuses on the emergence of the virus via Nawa’s body. The narrative shows how the virus crosses the borders asserting the conception that “an infection may be endemic to an impoverished area, but it emerges when it appears—or threatens to appear—in a metropolitan center of the North” (Wald, *Contagious Cultures* 34). Ebola Virus moves from Africa in Tag Elsir’s novel to the North of the world in *The Hot Zone*; thus, giving world-wide implications to the virus and its threat to humanity. This idea is demonstrated in Wald’s *Contagious Cultures*, *Carriers*, *And The Outbreak Narrative*. Wald advocates the idea of Virus transmission “from the primordial rainforests of the impoverished developing world to the metropolitan centers of commerce and capital” (43). Subsequently, Stephen Morse emphasizes travel as a means of viral transmission, or what he designates as “viral traffic” (17). Most importantly, Morse and Wald’s views maintain the discrepancy between the developed North and the developing South.

As an Outbreak Narrative, *Ebola 76* fuses myth with postcolonial anarchy and the imperialist mentality in a way that maps global spaces as viruses are not confined to a specific region. As depicted in *The Hot Zone* and *Ebola 76*, Ebola as an Outbreak Narrative is “a powerful story of ecological danger and

epidemiological belonging, and as it entangles analyses of disease emergence and changing social and political formations, it affects the experience of both” (Wald, *Contagious Cultures* 33). Ebola Virus is an ecological incursion to the social and epidemiological structure as well an exploration of people and governments’ divergent reactions to it.

Ebola and the Affective Frame

Contagion reflects a replication of threat to health, behaviour, emotion and social bonds (Servitje and Nixon 7). Pandemics and epidemics shake not only the disintegration of the human body, but they also expose the infrastructure, the culture of the society and the emotional preparedness of its people to confront the detrimental disease. Here some points should be clarified. Firstly, pandemic culture is the catalyst of overcoming the ravaging virus. Pandemic culture is defined as “the shared experience of living in a society where we are regularly advised by trusted institutions and experts that we discriminately vulnerable to the viral spread of disease” (Gerlach and Hamilton 5). From Neil Gerlach and Sheryl N. Hamilton’s perspective, pandemics are not only medical phenomena but they are exciting stories exemplifying communication means during “imagined potential pandemics” such as “Ebola, West Nile Virus, SARS, Avian Flu, H1N1, H5N1, H7N9 and Coronavirus” (5). Mika Aaltola agrees with Gerlach and Hamilton and views ‘potential pandemics’ as “pandemic scares” that probe the entire social and epidemiological structure. These “pandemic scares” have a symbolic as well as affective dimension represented in a world hit by a mysterious fatal disease that “instantiates fleeting influence” (38). Secondly, this ‘affective dimension’ is the anxiety that is regarded as the unexpected suspense to a “threatening but a vague event” (Aaltola 40).

As an unanticipated reaction, anxiety becomes “a symbolic form of culture representing a state of mind and emotion by which we are to be convinced that we are in a situation of threatening uncertainty” (Wilkinson 17). Pandemic culture, therefore, exhibits our perception of the mode of life amidst abrupt ravaging pandemics/epidemics. A particularity of the life in the 21st century is the changing nature of pandemic threats as they manifest indeterminate potentiality. Since the threat of the pandemic is potential, it may remain indeterminate and unanchored (Massumi). Thirdly, anxiety over Ebola is interlinked with worldwide vulnerability as “it is this anxious climate of global insecurity, stemming from vanishing borders that pandemic scares have been epochally comprehensible” (Aaltola 45).

The context of Outbreak Narratives is characterized by its ambient anxiety prompted by the emergence of epidemic/pandemic, gravity of its symptoms, bodily disintegration and the challenge of the existing medical and epidemiological systems. Both *The Hot Zone* and *Ebola 76* depict a lot of macabre spectacles that evoke people’s anxiety and horror. “Fearbola” is a term coined by the CNN commentator, Mel Robbins when he describes Ebola as a “contagious disease that victims have contracted.... by simply seeing images. ‘Fearbola’ attacks the part of the brain responsible for rational thinking....(Parag. 3). According to Samantha Allen Wright, the 2014-2016 outbreak of Ebola in the American society caused a panic crisis that underscores the issues of “medical bias and racial discrimination in contemporary America” (117). Panic is caused by the anxiety of infection. Anxiety, therefore, becomes a salient feature of Outbreak Narratives.

As a telling story of contagion, *The Hot Zone* depicts a very blood curdling scene; specifically, the body’s liquefaction where the virus “leaves the victims to die in the mess and the loved ones

witness it” (Garza). The liquefaction of the infected body’s insides is a recurrent motif in Outbreak Narratives. The horrendous depiction of the insides of Monet’s and Nawa’s bodies is a spectacle of anxiety undermining Outbreak Narratives as a representation of the invisible that reflects the ultimate bodily disintegration as well as moral degradation with the West’s failure to overcome its precedent classification of the Africans. The previous West mastery is called semiotically “the defilement of the human body” (Kristeva 73). Julia Kristeva defines ‘defilement’ as “the translinguistic spoor of the most archaic boundaries of the self’s clean and proper body” (73). Such defilement is the subjective horror or abjection where one is faced with the reality of corporality. The description of the Ebola victims’ insides reveals immense abjection and horror the virus elicits. It is apparent that Preston’s *The Hot Zone* accomplishes a “terrifying materialization of the effects of the physical (and psychotic) refusal to invest any narcissistic libido in the body image” (Dougherty 8).

Likewise, Tag Elsir’s novel evokes abjection as Ebola is described as an “anthropomorphized as a gleeful, wily baddie. Like a medieval danse macabre, Ebola leads a parade of wretches to the grave” (Housham). Tag Elsir displays scenes of shared angst that mirror people’s anxiety. Tag Elsir depicts a number of tableaux of mounting abjection. The utmost horror is at the borders where “fugitives from Congo had gathered” (88). Jamadi Ahmed, a magician with diminishing fame, was in a hysterical state because of his failure to cross the borders. At the Ebola Square “the dead and the half dead were piled high” (93). In this Square, the “air is quivered with anxiety” with the victims’ groans of pain. In such extreme fear, the musician Ruwadi Monti, the blind guitarist known as ‘The Needle’ feels the virus wreaking havoc in “every cell of his body” as the invisible enemy is

“dancing gleefully all around” (92). The macabre scenes of the dead and the dying at the Ebola Square made people in a state of mindless abjection that should be confronted as Tag El Sir suggested with art—“Fight Fear with Art” (107).

To encounter anxiety, the workers at Riyyak’s factory indulge themselves in comic whispers. One of these whispers is the claim of the appearance of a mysterious disease among monkeys; anyone who caught it “must therefore be a monkey” (61). To distract their growing panic and alleviate their fears of this unknown disease, they checked their behinds and claimed that Lewis Nawa and other victims of the mysterious disease had a tail and ate bananas like monkeys. [This asserts monkeys as virus carriers and undermines Africa as the origin of the Ebola virus, which is also a recurrent motif in Preston’s *The Hot Zone*. Above all, amidst anxiety people try to find outlets to their anxiety by inventing comic episodes about the mysterious disease, but the bodily disintegration of Ebola virus is morbid and horrendous.

As Monet starts vomiting and bleeding from inside, Preston’s narrative animates Ebola and creates empathy with Monet. In displaying Monet’s disintegration, Preston describes his coughing into an airsickness bag and how the bag is filled with “vomito negro, or the black vomit” (15). Again Preston asserts the imperial mentality of ascribing whatever derogatory to Africa and its people as inferior, filthy as well as being virus carriers. Within Monet’s body, the motif of liquefaction is stressed as “a great deal of liquefying flesh mixed with virus” (16). This liquefaction is a hybrid version of the animal and virus. The virus inside Monet is presented figuratively as not only his luggage, but it is a timed bomb (18, 21). This image asserts the significance of the transdisciplinary approach in analyzing Outbreak Narratives as the image echoes the integration of biology, politics, culture and literature. Rather than the recounting of scientific data, the

transdisciplinary approach provides a literary manifold image of Ebola Virus. The explosion of the human bomb inside Monet parallels the collapse of his body. The final scene of the disintegration of Monet's body has given an "attribution of all epidemic diseases to some form of bio-warfare or terrorism, whether the perpetrator is imagined as global capitalism or postcolonialism or vengeful nature" (Belling 57). *In The Hot Zone*, the situation is highly entangled. One can say that Nature takes vengeance from the West because of its discriminatory and imperialist desires. Moreover, in 21st century war is not one with armed forces but one which manipulates biopower and the supremacy of science which is an attribute to western countries.

The last spectacle of the decomposition of Monet's body is when the body voids its organs which means utter collapse. In such graphic spectacular scene "the sound of his bowels opening and venting blood from the anus. the blood is mixed with intestinal lining. He has sloughed his gut" (21). This is an extremely scary scene asserting the power of Outbreak Narratives to create macabre scenes that are more convincing than reality. With the disintegration of Monet's body, Ebola has become "corps Sans organs" "a Body without Organs" (BwO) (Deleuze and Guattari 149-166). The 'Body without Organs' is introduced by Gilles Deleuze in his book, *The Logic of Sense*, and developed by Gilles Deleuze and Félix Guattari in their analysis of the genesis of the schizophrenic person in their book, *A Thousand Plateaus*. The Body without Organs (BwO) is an image of the body devoid from any organization. As Deleuze and Guattari clarify, 'The Body without Organs' "is not empty body stripped of organs, but a body upon which that which serves as organs... is distributed according to crowd phenomena" (28). BwO is reminiscent of the imperialist ideology to have power and supremacy as BwO is not "a dead body but a living body all the

more alive and teeming once it has blown apart the organism and its organization. The full body without organs is a body populated by multiplicities.” (28). BwO is a symbolic metaphor of anarchy and disintegration.

As ‘a body without organs, the Ebola body has spatial, temporal and linguistic tropes. It is not a literal meaning but a body that is disassembled, one without organization: “a body that breaks free from its socially articulated, disciplined, semioticized and subjectified state (as an ‘organism’), to become disarticulated, dismantled, deterritorialized, and hence able to be reconstituted in new ways” (Best and Kellner 90-1). Significantly, this motif of BwO is reminiscent of imperialist ideology to “map, manage and contain” as it is not a “dead body but a living body all the more alive and teeming once it has blown apart the organism and its organization” (Deleuze and Guattari 28). The BwO causes horror and anxiety elicited from its horrible multiplicity. This horror excites not only the individual but also influences human culture where “everything falls back... everything falls back again into the primary order which grumbles beneath the secondary organization of sense” (Deleuze 125)

BwO motif is manifest in the description of Monet’s body where his body collapses; everything goes wrong inside him. Drastically, Monet’s liver “turned into pudding, the intestines full of blood” (26). The total fulmination of Monet’s liver reflects the falling apart of Monet’s body as “words, categories, or language” fail to describe the disintegration of Monet’s body (26). In other words, the Ebola body has become resistant to all words and language itself fails to describe such horrible and fast-sweeping experience. What is amazing about the Ebola body in *The Hot Zone* is the ambivalent feeling it evokes after being microscopically magnified. Under microscopic examination, the virus particles “were the face of Nature herself, the obscene

goddess revealed naked. This life form thing was breathtakingly beautiful. As he stared at it, he found himself being pulled out of the human world [to one] where moral boundaries blur and finally dissolve completely (Preston 195). This asserts 'BwO' as one "full of gaiety, ecstasy, and dance?" (Deleuze and Guattari 150) Therefore, this visualization of Ebola intermingles emotions of horror and beauty as well as liberating the individual from ethical responsibilities.

Comparably, BwO motif can be traced in Ebola 76, but not intensively described as in Preston's *The Hot Zone*. Tag Elsir draws descriptive tableaux of Nawa's body under the influence of infection. Nawa's vomiting is bloody and his "hands and feet were covered in gruesome lesions and the pain in his knees was crippling (41). Tina, Nawa's wife, suffered extremely as she was bleeding acutely from her intestines and kidneys in addition to the worse pain in her knees (43, 48). Likewise, the Kenyan Anami Okiyano is bleeding from his insides, throat, skin and scalp (57). At this moment, Anami feels as if a child "wrenched from his mother's womb only to perish before it could even reach her nipple" (57).

What is noticeable in the BwO metaphor in both texts is the stress on the bloody vomiting. The bleeding of the body is a recurrent motif that asserts the power of Ebola on the human body. Blood is a symbol of life and death. One of the implications of blood in Gothic literature is that it is a metaphor of the breakdown of the whole body (Hughes, et al 73). This metaphor supports the concept of BwO as a body which lacks essence, integrity and organization.

The circular pattern of the narrative is manifest in both texts. *The Hot Zone* ends where it begins, with a journey back to Kitum Cave to explore the causes of Ebola virus. Preston, in closing his

book at the cave, suggests that the cave is “alive, perhaps itself the infected carrier of Ebola” (Lynch 241). Preston reveals: “As you look into someone’s mouth, you see the tongue lying under the roof of the mouth, and you see the tongue curling backward and down the throat. That is what’s Kitum Cave looked like. Say ‘Ay,’ Kitum Cave. Do you have Ebola?” (402). The return back to the cave perpetuates the colonial desires which take a new turn in the twenty first century with the advancement in medicine and the threat of emerging pandemics. Therefore, Ebola can be seen as “the metaphor for the bleeding of the Third World into the First” (Lynch 241). The binary opposition between the Third world and the First world is everlasting, but it takes different phases with the changes affecting the world on a large scale.

The circularity of the structure in *The Hot Zone* illuminates the narrative openness as the Ebola virus is “subsided into the forest”, but “threatens to emerge again as it is not contained” (241). The narrative ends in a mystery rather than the closure of the epidemic/pandemic. This is similarly shown in Tag Elsir’s *Ebola 76* as the text can be ended in several ways as Tag Elsir confesses (133). Tag Elsir provides a number of scenarios for the closure of his book. All the scenarios suggested assert narrative openness as “[a]t the borders, perhaps nothing would change” (134). Consequently, the circularity and the narrative openness in both texts reflect the underlying cultural, social, ideological, and medical paradigms. In other words, narrative openness is indispensable in penetrating the factors that determine the containment of epidemics/pandemics.

Conclusion

Outbreak Narratives are an emerging genre of science fiction that can explore viruses and their impact due to their ability to render a representation of life in its totality. Outbreak Narratives are an open window onto the cultural, social, political and even global dynamics that shape people's life under epidemic/pandemic outbreaks. They reveal how the medical and epidemiological factors are integrated with the social, political, historical, anthropological, and cultural ones to give a broader perspective of epidemics/pandemics and their implications. Therefore, Outbreak narratives implicate a diversity of spatial scales—from the diseased body to the globe. Outbreak Narratives are framed texts that can be subject to multiple interpretations. In addition, Outbreak Narratives can be approached as cautionary tales conveying apocalyptic and postapocalyptic messages that portend the future of man's existence and the role of science fiction in serving humanity.

Preston delineates Ebola virus as a mindless monster that attacks the human body and reduces it to a BwO through the process of depersonalization that marks the disintegration of the body's organs. Similarly, Tag Elsir presents Ebola not only as a monster but also as a magician. The Ebola virus in Tag Elsir's novel is a developmental character whose power mounts and sometimes spares its victims. Preston's *The Hot Zone*, therefore, is an intensive clinical delineation of Ebola virus, its effects, its severity, and its transformation from an epidemic to a pandemic. Preston intermingles his documentary style with his thick spectacular descriptions of the virus attempting to unearth the origin of the virus which in a way stigmatizes Africa and underscores colonial mentality. In contrast, Tag Elsir's novel displays a factual/fictional picture of the Ebola Virus through

pinpointing the deteriorating conditions in the postcolonial period, the integrated factors that assist in the emergence of the virus as well as the medical/epidemiological preparedness that reflects the failure of the government in containing the epidemic/pandemic disaster. Most importantly, Preston historicizes Ebola through the lens of a journalist while Tag Elsir presents a physician's perspective with more focus on people's attempt to release their 'fear' of the virus through art. Accordingly, Art in general can be handled as an effective tool in alleviating people's anxiety at times of epidemics/pandemics.

The representation of Ebola in *The Hot Zone* and *Ebola 76* highlights the shift in the perception of human body and what it means to be human in a world ravaged by viruses. The post-humanist reversal undermines the medical discourse in the postmodern era which condones defaming non-whites as virus carriers, and in this way they threaten humanity. The medical discourse in literary works should be given more exploration and study as it takes the world towards new types of hegemony and supremacy.

In a nutshell, the present research has touched upon the dilemma of epidemics/pandemics and how Outbreak Narratives can penetrate the social, cultural, political and epidemiological factors beyond the emergence of viruses. The factors which prompt the spread of viruses are interlinked and this reflects the significance of adopting a transdisciplinary approach which probes the realities of viruses, their literary representation and the interconnection between literature and Medical Humanities. *The Hot Zone* and *Ebola 76* reveal two disparate perspectives of Ebola that undermine cultural differences. Therefore, further researches can penetrate the literary representation of epidemics/pandemics through the lens of culture and Medical Humanities.

Endnotes

1. Epidemic and Pandemic: An epidemic is a sudden spread of a disease in a certain geographical region. But, a pandemic is an outbreak of a disease globally. It is basically an epidemic that has spread worldwide and has become an international concern. Tag Elsir shows people's anxiety with the emergence of an epidemic that crosses borders and becomes a pandemic in Preston's *The Hot Zone*. This reversal from an epidemic into a pandemic asserts human beings as culprits in the spread of viruses.

2. *The Hot Zone* is considered a pandemic narrative by Lisa Lynch and Neil Gerlach. In their analysis of *The Hot Zone* along with other works, they focused on the shift in perspective to Ebola and the turmoil happening in the biopower with this change. In a similar vein, Catherine Belling presents Ebola virus as a scary pandemic creating inscrutable space and displaying its horror on the human body as well as the resulting anxiety.

3. Marburg Virus is a disease of Filoviridae family. Both Marburg Virus and Ebola Virus belong to the same family and have similar symptoms and routes of spread. Both are characterized by excessive bleeding and bodily disintegration. *Both* Marburg and Ebola viruses cause high rates of fatality (Nyakarahuka 2).

4. Zombie generally connotes a person whose face and behaviour are expressionless and meaninglessness. But as used in science fiction, Zombie is a dead person coming to life and evoking chilling horror. the Zumbi street is analogous with the connotation of Zombie in science fiction in creating an atmosphere of macabre fear.

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قَصَص تفشي المرض والعلوم الإنسانية الطبية: نهج مقارن متباين التخصصات للتمثيل الأدبي لايبولا في " المنطقة الساخنة "لبريستون و"ايبولا ٧٦" لتاج السر"

ملخص

لقد دمر الإنسانية عدد من الأوبئة الكارثية سواء على نطاق واسع أو محدود، والتي بدورها كشفت النسيج الثقافي والاجتماعي والسياسي والصحي للمجتمعات ". قَصَص تفشي المرض " هو مصطلح صاغته Priscilla Wald لوصف نوع معين من الحكمة الروائية التي تتناول ظهور مرض فيروسي كامن ينتشر في جميع أنحاء العالم ويصبح وباءً. يحلل البحث الحالي " المنطقة الساخنة (1994) "لريتشارد بريستون و"ايبولا ٧٦ (2012) "لأمير تاج السر. يرجع اختيار كلا العاملين إلى حقيقة أن كلاهما يتعاملان مع نفس الوباء / الجائحة ، ايبولا ، بحيث يسلط استكشاف النصين الضوء على العوامل التي تسهم في اندلاع واحتواء الوباء وكذلك كيف يلعب الخيال دورًا فعالاً في اختراق حقائق الأوبئة / الجائحات. تم اختيار المنهج متباين التخصصات بسبب الطبيعة المعقدة للأوبئة. يستخدم الإطار النظري مفاهيم من الأدب والأنثروبولوجيا وعلم الأوبئة والعلوم الإنسانية الطبية. يستقضي هذا الإطار النظري الترابط والأبعاد المتعددة لجائحة ايبولا. تكشف " المنطقة الساخنة " و"ايبولا ٧٦ " عن منظورين مختلفين لايبولا يبرزان الاختلافات الثقافية ودور الأدب في اختراق حقائق الفيروسات.

الكلمات المفتاحية: قَصَص تفشي المرض ، العلوم الإنسانية الطبية ، منهج متباين التخصصات ، الوباء / الجائحة ، " المنطقة الساخنة"، " ايبولا ٧٦"