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SHORT REPORT

Literature “‘magistra vitae’”: What literature teaches about society’s reactions to pandemic outbreaks

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Summary
Introduction. — COVID-19 put out many interesting aspects of society’s responses to an epidemic. Epidemics have a long-standing history in literature. We want to analyze if society’s responses to the epidemic have changed over time, and what literature can teach about the society’s reaction to an epidemic.

Material and methods. — We searched and discussed the references to the social effects of the epidemic that are provided in three famous works of European literature providing descriptions about society’s reactions to an epidemic throughout the centuries have been selected: “The Decameron” by Giovanni Boccaccio, “The Betrothed” by Alessandro Manzoni, and “The Plague” by Albert Camus.

Results. — Literature teaches us that: the epidemic’s spread is often preceded and favoured by a phase of negation or under evaluation of the problem; restrictive measures are the most efficient for containing the virus’ spread; some people have difficulties in being compliant with these measures; infodemia may accompany an epidemic, feeding chaos and fear among the people.

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Introduction

COVID-19 put out many interesting aspects of society’s responses to an epidemic. The main difficulty is the natural fear that people have of the unknown and invisible enemy, especially if they do not have an understanding of microbiology and immunology. Attempts to halt the virus’ transmission, by restrictive measures, has had a major impact on people’s lives, causing some to have difficulty following them. The media bombing about COVID-19, risked triggering a “social psychosis”.

Epidemics have a long-standing history in literature. It is interesting to know if society’s responses to the epidemic have changed over time, and what literature can teach about the society’s reaction to an epidemic.

Materials and methods

For this purpose, we selected three famous works of European literature, written in different centuries, and providing descriptions about society’s reactions to an epidemic throughout the centuries: “The Decameron” (ca. 1349–1353) by Giovanni Boccaccio, “The Betrothed” (1827) by Alessandro Manzoni, and “The Plague” (1947) by Albert Camus.

We searched and discussed the references to the social effects of the epidemic that are provided in these literary works.

Results

The Decameron

One of the most important exponents of Renaissance Humanism, the Italian writer and poet Giovanni Boccaccio (1313–1375) provided an extraordinary description of the social effects of the plague’s epidemic, also known as the “Black Death”, and spread throughout Italy and Mediterranean Europe during the 14th Century in his collection of novels The Decameron. This is a novel containing 100 tales told by seven young women and three young men who took refuge in a secluded villa outside Florence to escape the “Black Death”.

According to the culture and beliefs of the Middle Ages, Boccaccio considered it as a divine punishment. The poet described in detail the measures which were used to counteract that epidemic: the city was purged of many impurities by officers deputed to that end and it was forbidden unto any sick person to enter therein and many were the counsels given for the preservation of health [1]. Unfortunately, then as today, some people had difficulty to accepting and following these measures. Indeed, some people lived removed from every other and shut themselves up in those houses where none had been sick and where living was best... Others, inclining to the contrary opinion... going about day and night, now to this tavern, now to that, drinking without stint or measure [1].

Further extracts from The Decameron highlight two phenomena that are common to all epidemics: the fear of contagion, and the stigmatization of those who were infected (townsman avoided townsman and that well nigh no neighbour took thought unto other... this tribulation had stricken such terror to the hearts of all.) [1] with the consequent omission of some moral duties (that brother forsook brother, uncle nephew and sister brother and oftentimes wife husband; nay fathers and mothers refused to visit or tend their very children) [1]. Interestingly, Boccaccio noted the existence of untrained self-proclaimed medical experts: the physicians of whom, over and above the men of art, the number, both men and women, who had never had any teaching of medicine, was become exceeding great [1].

The excessive amount of information concerning a problem can make the solution more difficult, mainly if the sources are unreliable. This phenomenon is known as “infodemic”, and, as Boccaccio’s quote showed, it has always accompanied epidemics.

The Betrothed

About five centuries after Boccaccio’s work, another Italian poet and novelist, Alessandro Manzoni (1785–1873), in his historical novel ”The Betrothed” (first published in 1827) describes similar social effects of an epidemic. Manzoni’s novel is set in Lombardia (Italy) in 1628 during the Spanish rule (however, it is a veiled attack on the Austrian Empire which controlled the region at the time the novel was written). Based on historical sources [2], Manzoni provides an extraordinary and detailed description of the plague’s epidemic that struck the city of Milan in 1630. The novelist points out the people’s different reactions to the epidemic: the initial indifference and negation of the danger that favoured the spread of plague (”They heard with a smile of incredulity and contempt any who hazarded a word on the danger, or who even mentioned the plague.”) [3], and, afterwards, a kind of “wickedness” and “insanity” leading...
the people to be afraid of the contagion, and to stigmatise infected people.

Lockdown, and quarantine of the infected people’s offspring and contacts at home or in the ‘quarantine stations (lazzaretti) were initially successfully implemented to slow down the plague’s spread, but afterwards were nullified by the people’s paradoxical reaction: the rarity of the occurrence diminished the suspicion of the plague, and confirmed the multitude in their disbelief of its existence [3]. The fear of quarantine in the ‘lazzaretti’ and the danger’s negation led the people to hiding and not reporting who were sick. This further encouraged the spread of the plague. As a result of the fear and chaos that was so spread, the physicians yielded to the popular belief, and attributed to poison and diabolical conjurations the ordinary symptoms of the malady [3].

The Plague

A more recent literary description of an epidemic is reported in The Plague by the French writer Albert Camus (1913–1960), published in 1947. Although set in the 1940’s, the novel is based on the cholera epidemic in the Algerian city Oran in 1849 following French colonisation. It represents an allegory of French resistance to Nazi-domination during the Second World War. The characters are doctors, holidaymakers, and fugitives. It shows the plague’s effects on them. Camus reminds us that, although epidemics periodically recur, they always catch the population unprepared: everybody knows that pestilences have a way of recurring in the world, yet somehow we find it hard to believe in ones that crash down on our heads from a blue sky. There have been as many plagues as wars in history, yet always plagues and wars take people equally by surprise [4]. When an epidemic occurs, people live with the hope of waking up from this nightmare (We tell ourselves that pestilence is a mere bogey of the mind, a bad dream that will pass away. But it doesn’t always pass away and, from one bad dream to another, it is men who pass away) [4], and have common feelings (No longer were there individual destinies; only a collective destiny, made of plague and emotions shared by all) [4].

As for the previous literary works, we can observe an initial phase of under evaluation of the problem in Camus’ description of epidemic’s early stage. Indeed, the epidemic started causing the death of thousands of rats, and afterwards it began to affect the people. Dr. Rieux, the main character, and his colleagues instinctively understood that a plague was spreading in the town. The town authorities imposed control measures, however they underestimated the situation, showing excessive optimism. Indeed, they opened a “special ward” in the hospital, but its 80 beds are filled within three days [4].

Once again, the main measure to counteract the plague’s contagion was a quarantine. The feelings caused by this restrictive measure are well presented by Camus: a feeling normally as individual as the ache of separation from those one loves suddenly became a feeling in which all shared alike and — together with fear — the greatest affliction of the long period of exile that lay ahead […] they came to know the incorrigible sorrow of all prisoners and exiles, which is to live in company with a memory that serves no purpose [4].

A further aspect commonly described in all these literary works is the poor compliance by a part of the population in respecting the restrictive measures: many continued hoping that the epidemic would soon die out and they […] felt under no obligation to make any change in their habits, as yet […] while a good many people adapted themselves to confinement and […] there were others who rebelled and whose one idea now was to break loose from the prison-house [4].

Moreover, interestingly, Camus emphasises the pivotal role of the physicians during pandemics. Indeed, the words of doctor Rieux well represent the state of mind of doctors in front of an unknown enemy, and, above all, the moral duty that every doctor has towards the people: I have no idea what’s awaiting me, or what will happen when this all ends. For the moment I know this: there are sick people and they need curing [4].

Discussion

All phases of an epidemic that have been described in the literary works are still recognisable today and highlight the risks of inappropriate responses. Literature teaches us that the epidemic’s spread is often preceded and favoured by a phase of neglect or under evaluation of the problem. Quarantine and social distancing are still the most efficient measure for containing the virus’ spread. However, some people had and have difficulties in being compliant with these measures. An infodemia often accompanies an epidemic, feeding chaos and fear among the people. We can move beyond the fear of the unknown as we gain more knowledge of the disease. We also have treatments for the effects of the microbe on organ systems and can support these as the patient’s immune system destroys the virus. We still have the problem of overwhelmed healthcare resources, but we have the ability to find curative treatments, test who has the disease, and create vaccines for it. We also have instant communication. This means that a country’s leaders can create a pathway for recovery and control that allows for appropriate behaviours by the people.

Conclusion

Epidemics and, with a more global world, pandemics such as COVID-19, have a long-standing history in literature. Literature can provide important lessons from the past, and they should help to us to live better the present. However, looking at examples of epidemics reported in the past, including fictionalized accounts of historical epidemics, we can conclude that the current pandemic shows that the responses to an unknown disease is not changed over time, and so ‘‘there is nothing new under the sun’’ (Ecclesiastes 1:9).

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AP conceived and designed the paper, drafted the article and revised it critically; MM drafted the paper and revised it critically; AC conceived and designed the paper and revised it critically, SD designed and drafted the paper, and revised it critically.

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Disclosure of interest

The authors declare that they have no competing interest.

References

[1] Boccaccio G. The Decameron. Translated by John Payne. New York: Black WJ Inc 1986;1-9. Available on: https://www.gutenberg.org/files/23700/23700-h/23700-h.htm.(last accessed on February, 2020).
[2] Ripamonti J. Josephi Ripamontii, canoniceiscalensis, chronistae urbis Mediolani, de peste quae fuit anno 1630, Libri V. London: Richard Bentley; 1834. p. 369—400.
[3] Manzoni A. The Bedtrotted. Available on: http://www.gutenberg.org/ebooks/35155 (Last accessed on February, 2020).
[4] Camus A. The Plague. Translated by Stuart Gilbert. New York: Random House; 1948. p. 1—287 [Available at: https://archive.org/details/plague00camu_khb/page/8 (Last accessed on February, 20 2020)].