

Abstract Form

Program Affiliation:	Olive View-UCLA Internal Medicine
Presenter Name (Last, First):	Sidhu, Sabrin MD
Co-Authors:	Ciavolella, Massimo PhD
Project Title:	The Urban Exodus: What the Italian Black Death Teaches Us About Public Health and Modern Pandemics

Research Category (please check one):

<input checked="" type="checkbox"/> Original Research	<input type="checkbox"/> Clinical Vignette	<input type="checkbox"/> Quality Improvement	<input type="checkbox"/> Medical Education Innovation
--	---	---	--

Abstract

Introduction

The Black Death swept through Eurasia over several hundred years and led to millions of deaths globally. *Yersinia pestis*, the causative agent of the Black Death, typically claimed victims rapidly and the several years during which the plague spread were characterized by insufficient health infrastructures and a high number of fatalities globally. In recent years, there has been a renewed interest in the bubonic plague and its associated history given the COVID-19 pandemic. Striking parallels exist across time between the two diseases and the goal of this work is to elucidate how the Black Death informs us about modern public health.

Methods

Historical records and literature from Italy from the relevant time period (1300 AD to 1600 AD) were reviewed. This included fictional works, autobiographical documents, political documents, public health postings, and medical documents. More specifically, the works of Niccolo Machiavelli and Giovanni Boccaccio (*The Decameron*) were of particular focus.

Results

Review of the literature consistently reveals a common theme of the urban exodus. Machiavelli encapsulates the general attitude and response of society to the bubonic plague which led to the poor being trapped in cities and the rich escaping to the countryside. In fact, several contemporaries during the Black Death era adopt a similar tone and seek to document how “the neat and beautiful streets, which used to be bursting with rich and noble citizens...[began] swarming with the poor”. This particular fact and the subsequent responses observed in Italian society is the basis for several instructive public health lessons.

Conclusions

Writings from the Black Death era reveal several key points that can be of use to modern clinicians, hospital systems, and public health infrastructures. It is evident that a stark dichotomy between the wealthy and the poor existed during the bubonic plague which led to wealthy citizens often escaping to the isolated countryside and leaving the poor sequestered in dirty, ill-maintained cities with failing infrastructures. This exodus is the reason that makeshift hospitals and physicians in city centers were particularly stressed during the bubonic plague, a phenomenon similar to what safety net hospitals face in modern times during pandemic. By tracking the response of various Italian cities to both the acute, initial plague outbreak and subsequent chronic levels of plague over several hundreds of years, we learn three key instructive points that can be applied to modern public health: 1) since cities undoubtedly become centers for disease spread and often concentrate those of low socioeconomic status, citywide hygiene is a mechanism for reducing burden on hospitals 2) preventative medicine focused in city centers before times of pandemic is critical to reducing subsequent illness/hospitalization rates during times of pandemic and 3) inter-city communication and contact tracing especially within large counties such as Los Angeles is important to coordinating and preventing disease outbreak.