Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
The Spanish flu, COVID-19 and Malta’s reactions: Contrasts and similarities

ABSTRACT

The historical seriousness of the challenge of the Spanish flu and COVID-19 is well documented as both diseases, then and now, spread indiscriminately across the planet. A century apart, these two pandemics have devastated the world. The advances in health and science over the past hundred years have proved only partially effective against the current pandemic. At the moment, the therapeutic strategies to deal with the infection are only supportive and prevention is aimed at reducing transmission in the community. This outbreak is more than an intensive care phenomenon, rather it is a public health and humanitarian crisis. Western health care systems have been built around the concept of patient-centred care but a pandemic requires a change of perspective toward a concept of community-centred care. Malta has painfully learned this the hard way. This paper examines the sources of variability during both pandemics in shaping the morbidity experience of the Maltese islands which in turn allows for a better understanding of how developments of isolation, exposure, history and physical distancing could play important roles in shaping the epidemic experience.

1. Introduction

In order to cause a pandemic a virus must meet three criteria: little or no pre-existing population immunity, the ability to cause illness in humans and efficient transmissibility between humans [1]. The H1N1 virus which caused the 1918 influenza pandemic, and the latest novel coronavirus, SAR-COV-2 which is the cause of the COVID-19 pandemic met all three criteria. A century apart, these two pandemics wreaked havoc and death at a global level. The world was then and now, thrown in a battle against an invisible adversary, and humanity had to ignore past conflicts and collectively seek to make sense of unprecedented circumstances through the language of war. This metaphor illustrates the historic seriousness of the challenge of both pandemics as both diseases spread indiscriminately across the planet.

Understanding epidemics in human populations is a central theme in the study of novel and re-emerging pathogens. This paper examines the sources of variability during both pandemics in shaping the morbidity experience of the Maltese islands which in turn allows for a better understanding of how developments of isolation, exposure, history and physical distancing could play important roles in shaping the epidemic experience.

2. The Maltese Islands

Malta, a Southern European island country is an archipelago in the Mediterranean Sea. With a population of 493,000 over an area of 316km², Malta is the world’s tenth smallest country in area and fifth most densely populated sovereign country. Its strategic location has historically given it importance as a naval base. Malta became a British colony in 1813, serving as a way station for ships and the headquarters for the Mediterranean Fleet. The country gained independence in 1964 and became a republic in 1974. Malta joined the European Union in 2004.

Malta had a good reputation for preventing epidemics, having a lazaretto with quarantine facilities to house people and store goods until deemed safe for entry into the country. These facilities date back to the days of the Knights of St John (1530 to 1798). The British reinforced the island’s repute by creating a post of Superintendent of Quarantine, its first office holder being William Eton [2]. Nowadays, a robust health service is dealing effectively with the current COVID-19 pandemic.

3. 1918 pandemic in Malta

The 1917–19 pandemic, which is also commonly known as the Spanish flu, made its appearance in Malta around June 1918 and persisted until June 1919 [3]. The 1918–19 epidemic affected the Maltese population in three phases. The first phase of the infection lasted about three months and was relatively mild with 93 cases reported and two fatalities. The first wave was quickly followed by a second more severely contagious phase. During the subsequent two months of September–October 1918, the total number of cases in the civilian population amounted to 10,281 cases (8846 in Malta and 1435 in Gozo) and 402 deaths (case fatality rate: 3.9%). A number of cases had severe pulmonary complications and in most the disease was abrupt in onset. The epidemic appeared to subside in the subsequent months, only to be followed by a resurgence in March 1919 when a total of 4507 cases were registered. This third wave of the epidemic rose rapidly to its culminating point in the mid-March, falling rapidly in April to be almost over by May 1919 [4].

In response, the Department of Health undertook a number of precautionary measures in order to attempt to control the spread of infection. General prophylactic measures included the prevention of overcrowding in public places while ensuring that these localities were kept clean, well aerated; the disinfection of public spaces including...
The first case of COVID-19 in Malta was reported on March 7, 2020. By the end of April 2020, Malta had 458 active cases. Out of the total cases, there were only 4 deaths, 151 active cases and 303 cases which were fully recovered. During this time, Malta has demonstrated a robust health service and adopted stringent measures to combat a significant outbreak on the islands. Within weeks, government blocked all flights and closed all non-essential shops, non-essential services, bars, restaurants and gyms. Meanwhile, all schools and educational establishments will remain closed at least until the next scholastic year. People over the age of 65 years, pregnant women and people with chronic illnesses were instructed to shelter at home as a preventative measure.

At the end of March, WHO Regional Director Hans Kluge recognised Malta for its sterling effort in dealing with the current global COVID-19 pandemic [7]. Widespread testing, contact tracing and quarantine measures for those at risk of infection are considered key to control the epidemic and keep the number of cases at a minimum. The repeatedly low number of cases being reported in the fourth week of April called for a proactive approach to screen for COVID-19 within the community, including offering a coronavirus test to anyone who calls Malta’s help-line even if they are asymptomatic. The authorities are also actively looking for asymptomatic COVID-19 cases in the community in high risk groups such as migrants, health care workers, police and army officials. In the coming weeks, Malta will also start to implement as yet undisclosed measures to commence a stepwise reduction in the current soft lockdown. Since lifting restrictions could result in a resurgence of cases resulting in a second wave, the need for a staggered approach and timing is being advocated by Malta’s Public Health Superintendent Professor Charmaine Gauci. Epidemiologically positive results, health system capacity and public cooperation are three essential criteria that guide timings. A simultaneous approach of extensive testing and automated contact tracing will continue together with ongoing social distancing, health and safety measures and local authority certification. A successful exit strategy will also take into consideration business continuity, ICT readiness and remote working, as well as an acceptable physical distance between workers.

5. Conclusion

Regular pandemic outbreaks of influenza have occurred throughout the centuries causing significant morbidity and mortality. Pandemics usually occur in several waves of outbreaks with an interval of about three to nine months [3]. In both of these pandemics public health measures were paramount, and early and decisive actions taken in Malta have prevented nontrivial morbidity and mortality. Although no information has been documented on the exit strategy of quarantine measures during the local 1918 pandemic, many countries including Malta are at the time of writing envisaging an adaptation process to a new normal. A stable exit strategy that allows Malta to move carefully out of lockdown is essential. Community empowerment, community involvement and public health intervention through the use of case finding, isolation, contact tracing and quarantine measures will become the alternative to combat a resurgence of cases [8]. Having a health system that is capable of absorbing any increase in cases until the situation is once again brought under control is also paramount. A century apart, these two pandemics have devastated the world. The advances in health and science over the past hundred years have proved only partially effective against the current pandemic. At the moment, the therapeutic strategies to deal with the infection are only supportive and prevention is aimed at reducing transmission in the community. This outbreak is more than an intensive care phenomenon, rather it is a public health and humanitarian crisis [9]. Western health care systems have been built around the concept of patient-centred care but a pandemic requires a change of perspective toward a concept of community-centred care [10]. Malta has painfully learned this the hard way.

Declarations

No funding was required for this project.
There are no conflicts of interest, actual or potential.
No human subjects were involved so no ethical approval or data protection was applied for.
No consent was needed.
We give consent for publication of this article.

References

[1] Murphy Mark, Keep Deadly Virus Under Wraps, Savannah Morning News, 2012.
[2] V. Grech, COVID-19 and Malta’s Black Plague Epidemic of 1813, Hektoen International Journal, Spring, 2020.
[3] Ventura C. Savona, Past influenza pandemics and their effect in Malta, Malta Med. J. (Oct 2005) 16–19.
[4] Tripp L., Sawchuk L. A., & Saliba M. Deconstructing the 1918–1919 influenza pandemic in the Maltese Islands: a biosocial perspective. Current Anthropology. 201; 59 (1): 229–239.

[5] M. Irwin, J. McClintick, C. Costlow, M. Fortner, J. White, C.J. Gillin, Partial night sleep deprivation reduces natural killer and cellular immune response in humans, FASEB J. 10 (5) (1996) 643–653.

[6] Government of Malta, Reports on the Health of the Maltese Islands during 1918–1919, Government Printing Office, Malta, 1919.

[7] Kluge H. COVID-19 congratulations. Twitter; 2020. twitter.com/hans_kluge/status/1243940897211932595.

[8] Waterfield B. Sweden is a model for the new coronavirus normal, says WHO. The Times. 1 May 2020.

[9] A. Grasselli, M.C. Pesenti, Critical case utilization for the COVID-19 outbreak in Lombardy, Italy. JAMA Online first. March 13 (2020). https://jamanetwork.com/journals/jama/fullarticle/2763186.

[10] WHO Scientific and Technical Advisory Group for Infectious Hazards, COVID-19: what is next for public health? Lancet. 395 (2020) 542–545. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30374-3/fulltext.

Mariella Scerri*, Victor Grech
Mater Dei Hospital, Malta

* Corresponding author.

E-mail addresses: mariellascerri@hotmail.com (M. Scerri), victor.e.grech@gov.mt (V. Grech).