

Poverty and Pathogens in 19th Century Rochester, New York; Poorhouses and other Public Housing

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Introduction

Legislation in the early 19th century resulted in the construction of public housing in the form of poorhouses and orphanages by many states to provide housing for those in need (Huddleson 2012). Reports on the conditions of these facilities within New York State show that many of them lacked adequate sources of water for washing, proper ventilation, and sanitary conditions for the inmates (Stuhler 2013). These conditions, along with crowding in many of the facilities led to the increased spread of pathogen borne diseases such as measles, typhoid fever, tuberculosis (consumption), and pneumonia.

Objectives

By analyzing the death records from inmates of the Monroe County Poorhouse, the Rochester Orphan Asylum, and from Mt. Hope Cemetery and other sources, this study will compare mortality rates from these diseases in these Rochester area facilities and the general population of Rochester. It is predicted that mortality rates from infectious diseases will be higher in the public housing facilities

Methods

Death records from the Mt. Hope Cemetery were accessed through the University of Rochester River Campus Libraries in a time range from 1837 from to 1930 and were transcribed from photographs of their initial pages in the files to an excel spreadsheet. This allowed the data to be easily searched and categorized. In total, 14,151 death records were transcribed into a master document. Of this total, 9,923 fall within the 18th century, making up 70.12% of the total transcribed death records. From this master document, data was collected to show the prevalence of measles, typhoid fever, tuberculosis, and pneumonia within the general population of Rochester in the 19th century. This general population was determined based upon the address listed as the residence in the death records. This data was then compared with records of the prevalence of those same illnesses in Rochester area poorhouses and the Rochester Orphan Asylum.

Results

The results of the data analysis show that in the general population of Rochester, the disease with the highest mortality rate was tuberculosis making up 10.175% of the total deaths shown in the Mt. Hope Cemetery death records. This is followed by typhoid fever, which makes up 1.823% of the population, then pneumonia, which makes up 1.548%, with measles making up the smallest percent of deaths, at .652%. For the poorhouse population that was represented in the Mt Hope Cemetery records, the disease with the highest mortality rate was also tuberculosis, making up 13.333% of the population. This is followed by pneumonia, which makes up 9.524% of the deaths, then typhoid fever with .952% of deaths. For this given population there were 0 measles deaths, meaning that measles deaths makeup 0% of the overall deaths for the poorhouse population displayed in the Mt Hope Cemetery records. For the Rochester Orphanage Asylum, measles, tuberculosis, and pneumonia all had the same mortality rate in this population, with each of them making up 6.333% of the total deaths. Compared to this, typhoid fever only made up 1.688% of the deaths in this population.

	Total deaths	Typhoid Fever Deaths	Measles Deaths	Tuberculosis deaths	Pneumonia Deaths
Rochester Orphan Asylum	237	4	15	15	15
Mt Hope Cemetery full list	9,818	179	64	999	152
Mt Hope Cemetary Poorhouse population	105	1	0	14	10

Figure 1: The full populations of the three sites used in this study, and the proportions of each population that had died as a result of tuberculosis, measles, typhoid fever, and pneumonia.

	Typhoid Fever Mortality Rate	Measles Mortality Rate	Tuberculosis Mortality Rate	Pnumonia Mortality Rate
Rochester Orphan Asylum	1.69%	6.33%	6.33%	6.33%
Mt Hope Cemetery full list	1.82%	0.65%	10.18%	1.55%
Mt Hope Cemetary Poorhouse	0.95%	0%	13.33%	9.52%

Figure 2: The calculated mortality rates for each of the presented diseases at each of the three sites using the data from figure 1.

Conclusions and Discussion

For both the general population and the poorhouse population, tuberculosis had the highest mortality rate at 10.175% and 13.333% respectively, which aligns with medical records of the time that show that tuberculosis was often the disease with the highest mortality rate. The mortality rate for tuberculosis was also higher in the poorhouse population than in the general population, which may be due to the condition that individuals were exposed to within the poorhouses allowing for contagious diseases to spread more rapidly. This point is further supported by the mortality rates displayed in both populations for pneumonia, being 1.548 for the general population and 9.524% for the poor house population. In addition to this, the mortality rate for pneumonia is also higher in the Rochester orphan asylum, with a mortality rate of 6.33%. The mortality rates for typhoid fever in all three of these populations fell within a +/- range of .871, which shows that the rates were consistent regardless of the location. The mortality rate for measles was shown to be significantly higher in the Rochester orphan asylum than in the general population, being 6.333% as opposed to 1.823%. The mortality rate of measles in the poorhouse population was shown to be 0%, which may be due to the disease being the most lethal towards children. This is further supported as the population of the poorhouses was relatively older, with an age range from 17 to 88 with the average age being 57.5. To further this study, other poorhouse and orphanage populations can be compared with the general population of Rochester to determine if this trade appears across all public housing systems.

References

Huddleston, D. M. (2012). "The Poorhouse: Institutionalization of the Poor". Department of History Capstone paper, Western Oregon University. Accessed from <https://digitalcommons.wou.edu/cgi/viewcontent.cgi?article=1000&context=his>

Stuhler, L.S. (2013). New York State county poor houses. Accessed from <https://socialwelfare.library.vcu.edu/issues/new-york-states-county-poor-houses-1864/>

Halsey, R. T. (2010). Burial records of the ROCHESTER Orphan Asylum (1838 - 1905). Retrieved April 16, 2021, from <https://mcnygenealogy.com/cem/roa-book-13.htm#:~:text=The%20Rochester%20Orphan%20Asylum%20began,that%20died%20at%20the%20Asylum>

Panguis, W. G., Grefenstette, J., Jung, S. Y. (2015). Contagious Diseases in the United States from 1888 to the Present. *The New England Journal of Medicine*, 369(22). Accessed from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4175560/>

Cooksley, F. A. (1935) Rochester, The Flower City. *Bulletin of the Medical Library Association*, 23(4), 164-166.

<https://rbscp.lib.rochester.edu/mthope/results>