A Source Analysis of Summers, Thomas Osmond's "Yellow Fever. Nashville, Tennessee, USA: Wheeler Brothers, 1879, 54 – 'The Death Rate'."

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Abstract

Yellow fever, a devastating disease, swept through the Lower Mississippi Valley in 1878, leaving a trail of death and despair. This study delves into the clinical history of this epidemic, drawing insights from the firsthand account of Dr. Thomas Osmond Summers, a seasoned medical professional. Our analysis reveals intriguing facets of the outbreak, shedding light on both medical practices and societal perceptions.

Summers' meticulous observations provide a glimpse into the grim reality faced by physicians during this crisis. His assertion that not all deaths were accurately recorded underscores the challenges in assessing the true mortality rate. Despite his flawed understanding of contagion, Summers' work reflects prevailing beliefs of the time. The blame placed on frontline practitioners for inadequate reporting highlights the complexities of data collection during an epidemic.

Interestingly, Summers avoids overt religious references, distancing his scientific account from personal faith. His focus on symptoms, diagnosis, and the disease's progression offers valuable insights into the lived experience of yellow fever victims. The absence of class-based differences in mortality rates challenges assumptions about social stratification's impact on disease susceptibility.

In this historical puzzle, Summers' account serves as a critical piece, allowing us to reconstruct the medical landscape and societal responses during a catastrophic epidemic. As we piece together this mosaic, we gain a deeper appreciation for the resilience of communities and the tireless efforts of medical professionals in the face of a relentless foe.

This abstract encapsulates the epidemic's nuances, emphasizing the interplay between science, society, and individual experiences. Further research can build upon Summers' account to unravel additional layers of this compelling historical narrative.

Key Words

#YellowFever, #Epidemic, #ClinicalHistory, #History, #MortalityRate #Contagion, #MedicalProfessionals, #Mississippi, #DiseaseBehavior, #Symptoms, #Diagnosis, #SocialContext, #NewOrleans, #Memphis, #WorkingClasses, #Methodology, #Sequelae, #MedicalPractices, #HistoricalPandemic, #ControversialTheories, #InfectiousDiseases, #SocialStratification, #Resilience, #EyewitnessAccount, #PublicHealth, #ThomasSummers, #1879

THE DEATH RATE

of Yellow Fever is for various reasons very difficult to determine accurately. During an epidemic such as that of 1878, very many cases are not reported. I enjoyed an excellent opportunity at Memphis to observe this fact, being almost daily in the rooms of the Board of Health, and though that body used every exertion to obtain accurate reports, the physicians, in most instances, neglected it, and in others, absolutely refused to do so, even when threatened with the penalties of the law. As far as I could gather, however, the death rate was about 1 to 4 in Memphis. It was greater in Grenada and Martin, and less in the other places visited by the epidemic. There seemed to be but little difference between the higher and lower classes of society, or in the various localities of the city, when once the fever had taken hold.

Figure 1: Summers, Thomas Osmond's "Yellow Fever. Nashville, Tennessee, USA: Wheeler Brothers, 1879, 54 – 'The Death Rate'."

The Author

The source is an extract from a 70-page book by Thomas Osmond Summers, a graduate of the University of Nashville in 1871. And son of a Vanderbilt University co-founder and prominent Methodist Professor of Theology there. Summers was Chairman of Anatomy from 1875 at the Nashville and Vanderbilt through their joint medical program. Regarded as an expert on yellow fever through his work in Memphis during the outbreak, practising in Jacksonville, Chicago, New York, and St. Louis. In St. Louis, he became a professor of anatomy at the St. Louis College of Physicians and Surgeons. He also served as a surgeon with the rank of Major in the 1898 Spanish-American war.[1] He committed suicide in 1899, leaving several suicide letters. It was speculated at the time that he was depressed over the governmental lack of appreciation due to his service in Cuba.[2]

Summers' preface says he feels it is his '... duty to set forth, as best [he] can, the experience which I so richly enjoyed during the Epidemic of 1878.' Suggesting he's a fascinated scientist. His preface describes Yellow Fever as being of 'momentous consequences', and the book is '... to the Profession at work upon [Yellow Fever]' and 'his brethren'. The primary audience appears to be medical professionals. The author sees beyond purely science and values human life [3] - most plainly seen in the dedication of the book, where he writes, 'These records are tenderly dedicated...' and the dedication list of three colleagues and former students who all 'fell in the great epidemic of 1878.'[4] We learn from the preface and dedication this is a 'record' of events, with the goal of being plain, concise, and honest.[5] We can conclude that the book was written to inform and enlighten medical professionals. As it was written by a medical professional and expert on yellow fever, we can assume that it should be accurate, as well as detailed but not with superfluous details. The author's previous life as a Methodist preacher,[6] leads us to expect discussion of theological or religious concepts in relation to yellow fever and suffering.

The Cultural and Social Context

The focus is the 1878 Yellow Fever Outbreak in the Lower Mississippi Valley. Carrigan writes that 'From 1796 through 1905 yellow fever was an almost annual summer visitor in Louisiana.'[7] New Orleans residents had '... fairly early in the nineteenth century... come to accept the disease as a customary foe.'[8] Because of regular outbreaks in New Orleans, many residents believed themselves 'immune'; those outside of the city were not so fortunate, as outbreaks were irregular. Some saw yellow fever as a 'check' on rampant immigration.[9] It is interesting to note the economic impact of this continuous epidemic. Infected locations became cut off from the outside world during an outbreak, and trade suffered – leading to starvation and distress, especially amongst the working classes.[10]

Southern states were likely still smarting from the end of the American Civil War in 1865. In 1877, the Louisiana State Health Board re-appointed their former pre-war president, Samuel P. Choppin. He had been the medical inspector general for the Confederate Army, and was considered an 'outstanding surgeon'. He subscribed to the contagionist theory of yellow fever causation and its prevention. Along with him, two new medical officers were appointed to the Mississippi Quarantine Station south of New Orleans – Dr P.S. Carrington, who was 'honest and well-intentioned but professionally incompetent' – his assistant, Dr G. Farrar Patton, was 'capable' but 'inexperienced'.[11] The Mississippi Quarantine Station, from January to April 1878, cleared 504 vessels bound to New Orleans. In February, reports stated yellow fever was in Santos and Rio de Janeiro, and in March, a 'virulent form' was evidenced in Havana, Cuba. Ships arriving at the Quarantine Station were to be detained, fumigated, disinfected, inspected; symptomatic individuals were to be hospitalised at the station infirmary, and everyone on board placed in observation and all personal property was to effectively be deep cleaned. None are sure when Yellow Fever entered New Orleans in 1878. Ship detainment was at the discretion of Dr Choppin, and he allowed various fruit trading vessels through in April, without vetting. Uniform inspection did not occur until May 15th. The Ten Years' War in Cuba ended in 1878, bringing refugees to New Orleans; many arrived prior to the implementation of uniform inspection.[12]

The extract comes on page 54 near the end of the third chapter titled 'Clinical History'. Chapter one is titled 'Etiology' and deals with causes; whilst Chapter Two – 'Pathology' deals with disease behaviour. The final fourth chapter deals with the treatment and prevention of yellow fever and is titled 'Treatment and Prophylaxis'.

That the extract comes under 'clinical history' and near the end of this is significant. It follows lengthy descriptions and discussions on symptoms. Firstly order of symptoms [13] followed by an in-depth discussion of specific symptoms - the effect on the tongue[14] and odour.[15] The author then discusses diagnosis and diagnostic methods, including a comparison with malaria.[16] Page 53 discusses the end of life – simply called 'The Termination', culminating with our extract. The last section within the chapter is about the Sequelae (subsequent medical conditions resulting from yellow fever), perhaps an appeal to hope, as these victims still live.[17] Our extract is about the end of life, specifically the morbidity rate.

The Extract Content

The extract is six sentences long, or one paragraph, and includes the heading as part of the first sentence – The Death Rate. Directly, the author writes that not all deaths are recorded during epidemics such as that of 1878, suggesting that the death rate cannot be accurate. However, it is surmised that it was about 1 in 4 in Memphis, whilst greater in other places. As the author suggests, this lack of reporting is perhaps common in epidemics like this, but does place blame on frontline medical practitioners, as the board of

health worked to obtain the data, saying '... the physicians, in most instances, neglected it, and in others, absolutely refused to do so, even when threatened with the penalties of the law.' The other element of interest mentioned at the end of the extract is the seemingly (at first) irrelevant information that yellow fever struck down the rich and poor alike with no prejudice and with the same tenacity in whichever city or locality the fever spread to. This tells us about the social construction of society and the understanding that separation between classes was considered a factor. It doesn't tell us if the author presumed that the higher classes were materially different from the lower classes, or whether an acknowledgement that standards of living, such as overcrowding, may contribute to the transmission and ability to fight diseases, as well as hygiene and cleanliness. Its inclusion suggests it was considered medically important, and whilst true that it has a bearing, that there was no significant difference in the death rate, it suggests that these things perhaps were not issues, at least in the eyes of the author.

Source Assessment

What impact that source had on medical professionals is difficult to ascertain. We know that his medical assessment was not exactly correct - he said yellow fever wasn't contagious, despite evidence seeming to suggest the opposite, though he does say it is infectious – as its transmission is dependent upon the right weather conditions. [18] It seems that his not exactly correct assessment was the majority view at the time [19] and therefore, it's difficult to assess how impactful the actual source itself was at the time. Despite the expectation that we would see some evidence of religious faith in the text, the words 'God', 'Jesus', 'religion', 'faith', 'prayer' and 'church' do not appear, nor do phrases such as 'devil', 'cult', or 'sin' - these kinds of phrases would be expected from a Methodist preacher, and their absence suggests that the author was deliberately avoiding and distancing his faith from the science. The whole source goes into great depth about what the author saw on the ground, but primarily through recounting facts rather than events. The extract is a factual presentation of lived experience – that is, the author was reporting facts they witnessed an eyewitness account as secondary evidence to the 'numbers' he provides. John Ellis writes that 'Altogether, according to estimates, there were around 120,000 cases of yellow fever and approximately 20,000 deaths.'[20] Which is 2 deaths in every 12 cases or 17%; rather than 1 to 4 (1 death in every 4 cases or 25%); whilst Henry reported a figure of 31 deaths out of 243 or 13% in 1873, a previous severe epidemic. [21] Summer's estimate may be slightly higher than what would normally have been expected (Henry) in an epidemic at the time, though this was to be the worst yellow fever epidemic in Mississippi, [22] as well as what we estimate the actual number is today, but it is an estimation given in the thick of it, rather than with hindsight.

This extract doesn't tell us much beyond the facts of the situation as seen by one medical professional at the time, it is too short to provide much indepth analysis, though the whole source could provide more details. Wider reading provided a more contextual understanding of enforced lockdowns, the number of deaths, and the effects of the epidemic on New Orleans, Memphis, and the other parts of the Lower Mississippi valley. This extract is, therefore, part of a larger jigsaw that helps us begin to piece together life and medical practice amid a historic pandemic.

Citations

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- [3] Thomas Osmond Summers, Yellow Fever (Nashville, Tennessee, USA: Wheeler Brothers, 1879), 5.
- [4] Summers, 3.
- [5] Summers, 5.
- [6] The Tennessean, "Death of Dr. Thomas Osmond Summers Newspapers.Com."
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- [8] Carrigan, 6.
- [9] Carrigan, 7.
- [10] Carrigan, 10.
- [11] John H Ellis, Yellow Fever and Public Health in the New South: Origins, Philosophy, and Theology (Lexington, UNITED STATES: University Press of Kentucky, 1992), 38, http://ebookcentral.proquest.com/lib/stir/detail.action?docID=1915358.
- [12] Ellis, 38.
- [13] Summers, Yellow Fever, 41–49.
- [14] 49.
- [15] 49–50.
- [16] 50–53.
- [17] 55–56.
- [18] Kyle Winston, "Yellow Jack's Wrath: The 1878 Yellow Fever Epidemic and Public Health in Mississippi," Journal of the Southern Association for the History of Medicine and Science 2, no. 1 (2020): 23–24; Summers, Yellow Fever, 14. I would say that Winston was actually a little unfair on Summers, mischaracterising Summer's words, out of context.
- [19] Winston, "Yellow Jack's Wrath: The 1878 Yellow Fever Epidemic and Public Health in Mississippi," 27.
- [20] Ellis, Yellow Fever and Public Health in the New South: Origins, Philosophy, and Theology, 57.
- [21] Henry Smith et al., "Yellow Fever Epidemic of 1873," 1874, 9–10.
- [22] Deanne Stephens Nuwer, "The 1878 Yellow Fever Epidemic in Mississippi" (University of Southern Mississippi, 1996), 51.

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