Remembering the Narrative Motions: What Tuberculosis Can Teach Us About COVID-19

THE UNIVERSITY OF ARIZONA

Introduction + A "Tidy?" History of TB

1. Introduction

COVID-19 was an unexpected global interruption to the world, but it was not without precedent. The outbreak of tuberculosis (TB) also shows parallels.

What can be learned from the outbreak TB is that the early days of a global health event are particularly important to take note of to see where metanarratives smooth over local stories, especially to account for a more diverse and equitable sample of stories of the COVID-19's impact.

A look at 5 interviews from European law enforcement officials combined with scholarship from Bowker and Star [5] help illustrate that like TB, it will be important to take note of the spaces of motion for COVID-19 .

2. Descriptions of the Disease

TB is a bacteria-caused infectious disease that attacks the lungs and other parts of the body and is spread to others through droplets from actions like coughing and sneezing. Symptoms range from coughing (to include coughing up blood or mucous), chest pain, weight loss, and fatigue. [1]

COVID-19 "is a respiratory disease caused by SARS-CoV-2, a coronavirus discovered in 2019. The virus spreads mainly from person to person through respiratory droplets produced when an infected person coughs, sneezes, or talks." [6]

3. TB Timeline

The ancient disease of TB has been said to hit its peak in the seventeenth and eighteenth century [2]. A combination of improved socioeconomic conditions and vaccinations together has been said to have aided in TB's decline.

However, this is a tidy summary. It wasn't called TB until 1839, it wasn't isolated until 1882, and the first medication wasn't widely used until 1908. [3] Further, even though TB has been referred to as "a treatable and curable disease," according to the World Health Organization, in 2019, there were still 1.4 million deaths from TB, with 95% of the cases and deaths in developing countries [4].

Finding the Complexities of Motion in TB

4. Bowker and Star on the Motions of Disease
Bowker and Star [5] advocate looking at spaces of motion in diseases like TB to unpack the tidy summary, to include:

1. **Bodies in motion**: Diseases looks different in different bodies, and different over time.

2. **Experiences in motion**: Circumstances of one with the disease varies, and context can be important.

3. **Classifications in motion**: It is hard to get uniform agreement of what constitutes as the disease.

4. **Disease in motion**: Disease goes through space and time, and how we treat it and interpret it depends on our vantage points.

5. Bowker and Star on the Motions of TB

1. **Bodies in motion**: Bowker & Star note that "each body subjected to tuberculosis is going through its own biological and physiological, historical development, and as it develops tuberculosis changes" (p. 170).

2. **Experiences in motion**: Other life experiences can impact the extent of TB recovery.

3. **Classifications in motion**: There was not always a uniform agreement (especially early on) to the causes and symptoms of a disease like TB, who has that disease, who was dying of the disease, or how to cure the disease.

4. **Disease in motion**: For TB & Bowker and Star, "disease is always local and so is it's cure." The disease has its own longevity and history and one that is not uniformly subscribed to, based on time and spaces

6. Method & Interviews

With that premise, this poster paper now highlights parallels of COVID-19 to TB through an analysis of interviews with an expert in emergency management, retired from public service and working as a consultant with government in the UK as well as four police personnel with the Dutch National Police, all interviewed in mid to late 2020.

The interviewer asked respondents how they use technology as part of their law enforcement activities, to include current pandemic activities. The interviewer identified parallels to Bowker and Star's work and put interviews into context of Bowker and Star's discussion on TB, as identified through thematic analysis. Below are quotes that illustrate the parallels between the two diseases in respect to the difficulties in the motions of bodies, experiences, classifications, and diseases for COVID-19.

COVID-19 in Motion…			
Bodies	**Experiences**	**Classifications**	**Diseases**
Interviewees brought out how different areas and people are affected in non-uniform ways. For instance, Interviewee 1 stated, "**But what we what we need to know is where the hot spots are, where the problem is. It's not it's not it's not affecting everybody, the uniform rates. So but we're still struggling**." Interviewees 4 and 5 also **noted antisocial consequences of the virus** and how some have acted upon opportunities to engage in internet fraud.	Interviewee 1 continued, "**now with emergency supplies and the Corona virus – it's about where do we where can we get this from? There's lots of stuff out there**" but one would have to map it and know where it is to begin with to get it to the right places. Interviewee 2 noted that how citizens are monitored for separation varied, too, especially from pre-pandemic ways, saying that although drones used by police, police "can be a threat**…[we] recently bought some new drones to to warn the public to keep distance for the Covid measures**."	Classifications of COVD-19 are particularly a challenge because of the relatively new appearance of this configuration of the disease. Interviewee 1 noted, "**And the data on even the data on who's dying and where they're dying is isn't isn't very good, because we've got we've got the four different countries going around Scotland and Northern Ireland, all record information slightly differently. We have data recorded from the hospitals of people that have been, that died as a result, have been tested positive for the virus. And then we have people who are certified as dying, probably from Corona, the virus. We have data that's collected from care homes that's recorded differently. It's when you read the in-formation, you can understand why it's doing that.**"	They stated, "**I think the data's got to be at the at the local level because no matter how much data you get, you need to have a human interpreting what that actually means. And predicting it at the central level, I think is good for people who don't have any local knowledge is a I think, fraught with danger**." For COVID-19, how the human was interpreting the disease and cure would be up to knowledge that was in motion without an agreed upon target. This particularly differed by location. The locations also impacted the way bodies were contained, as noted by Interviewee 3 who commented that especially for travel and borders in the summer of 2020, commenting, "**Perhaps it's, it's easier to travel now in the Netherlands than the United States**" because "**well, it's rough times. Let's, let's put it that way**."

Overall, this poster showcases the connection between the stories of TB and COVID-19 and offers ways to make sense of the pandemic. Early on, even emergency managers were struggling to identify a main narrative of the disease for both TB and COVID. As Bowker and Star admonish, though, looking at the spaces in motion will make us more conscientious to the various, situated stories of those affected by the pandemic. As we shift years from the pandemic and it becomes part of history, there may be similar compressions on time, space, and assumptions of the narrative of COVID-19's uniformity.

This article also encourages mangers, researchers, and readers from the future to step back and consider the importance of each milestone identified for a health event and its contribution to a larger explanation of the whole. Local stories make a national and historical metanarrative, but documenting the local stories where the disease is in motion makes sure we remember the messiness of the virus, the choices made in classification, and makes sure there is a more diverse sample of stories to represent the extent of the pandemic's impact.

1. American Thoratic Society. (2000). Diagnostic standards and classification of tuberculosis in adults and children. *American Journal of Respiratory and Critical Care Medicine*, *161*(4), 1376–1395.
2. Murray, J.F. (2004). A century of tuberculosis. *American Journal of Respiratory and Critical Care Medicine*, 169, 1181-1186.
3. Centers for Disease Control and Prevention. (2021, March 08) Tuberculosis (TB) - World TB Day 2021. https://www.cdc.gov/tb/worldtbday/history.htm
4. World Health Organization [WHO]. (2020, Oct. 14). Tuberculosis. https://www.who.int/news-room/fact-sheets/detail/tuberculosis
5. Bowker, G.C., & Starr, S.L. (1999). *Sorting things out.* The MIT Press.
6. Centers for Disease Control and Prevention. (2021, December 27). *Disease of the Week - COVID-19*. https://www.cdc.gov/dotw/covid-19/index.html

7. Conclusion + 8. References

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