

A prospective study of factors that facilitate or inhibit treatment for Tuberculosis (TB) among seniors in Singapore

Chua, O. T. T., Lum, E. G. L., Ong, J. L. T., & Woo, I. M. H.

Department of Care & Counselling, Tan Tock Seng Hospital

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Presented by: Edmund Lum, Senior Medical Social Worker

[Edmund Guan Liang LUM@ttsh.com.sg](mailto:LUM@ttsh.com.sg)

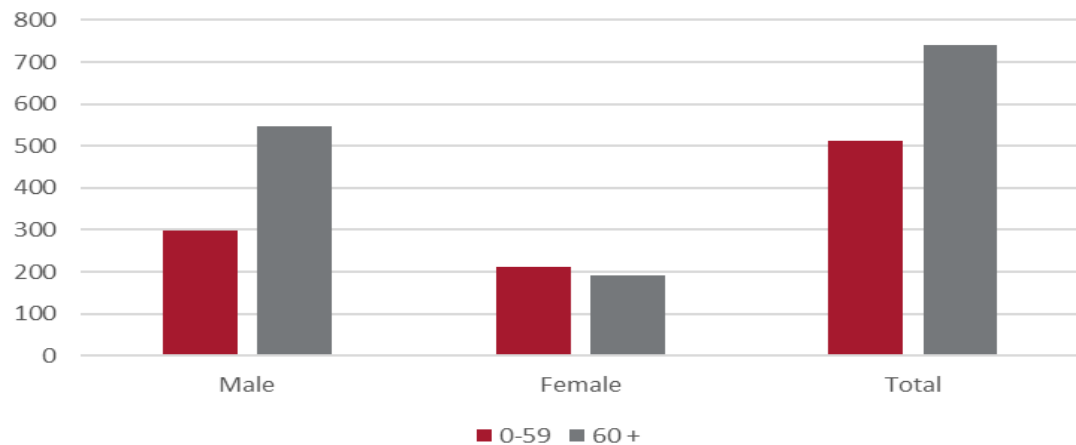


What is Tuberculosis (TB)?

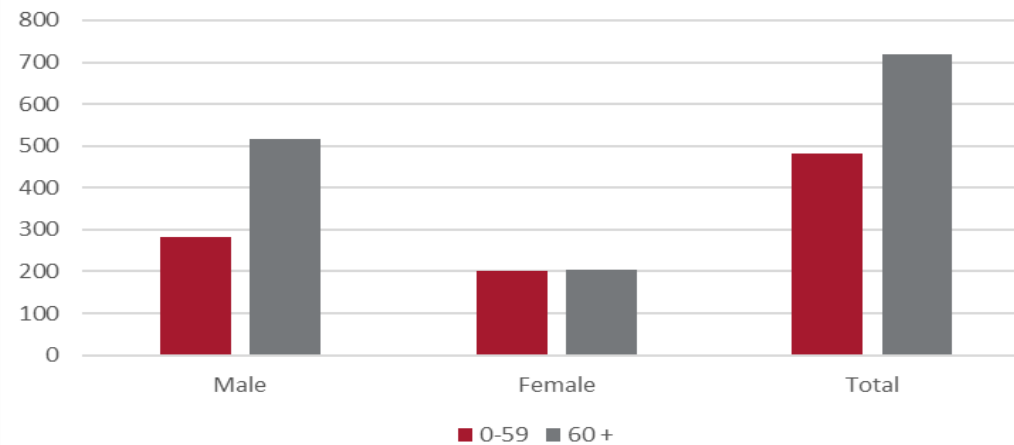
- What is it
 - A **treatable endemic disease** in Singapore.
 - **Bacteria** (Mycobacterium tuberculosis), **Develops resistant easily.**
 - **BCG is a vaccine for TB** and is given during infancy. Its **effect wane as you mature.**
 - Usually infects lungs, **spread via air.**
- Stage of infection
 - **Latent phase:** From Initial infection. **Non-infectious at this stage.** Can last from weeks to years.
 - **Active phase:** Transition can be spontaneous or due to disease progression of comorbidity. **Infectious at this stage.** Usually undetected by the person until symptoms are of concerns or discovered by job/health screening or hospitalization.
- Comorbidity
 - Diabetes, Malnourishment, chronic lung disease (COPD, Bronchitis, etc.), Renal disease and Cancer.
- Recommended treatment method
 - **DOT** (Direct Observe Therapy, Active Phase only): The individual **goes to a designated clinic (Polyclinic) for supervised medication consumption** by the nurses.
- Non-adherence
 - **Mandated treatment by law which can escalate to confinement to complete treatment**

Statistics

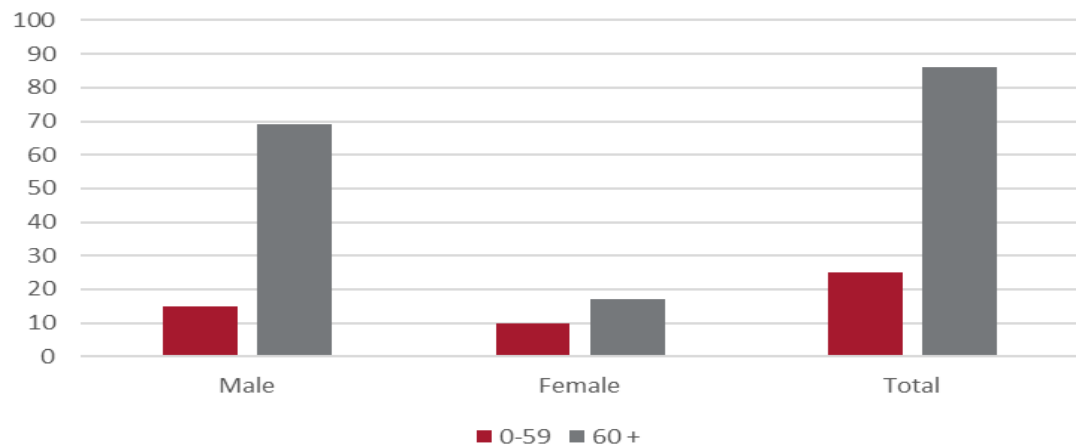
2022 New cases



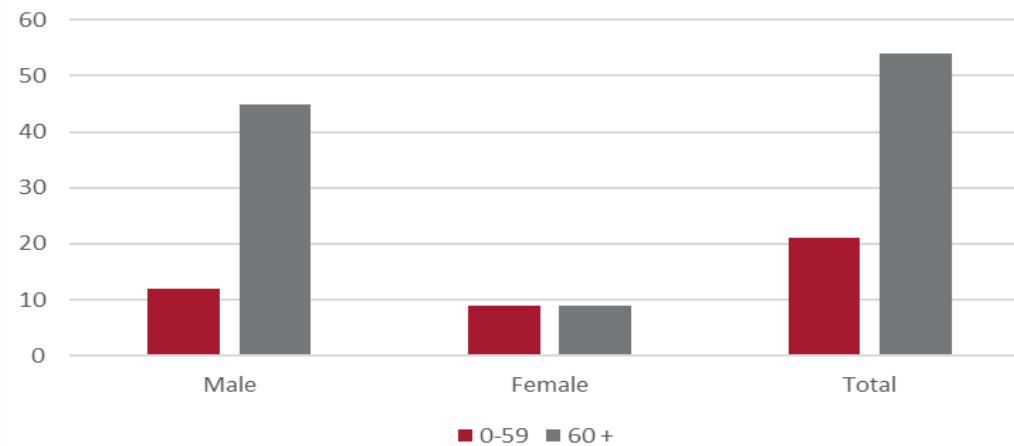
2023 New cases



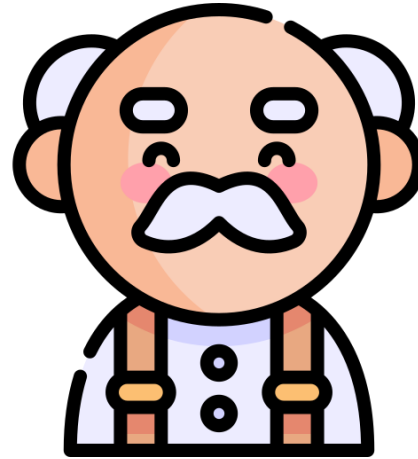
2022 Relapse Case



2023 Relapse cases



Observation



Senior

- Physically weaker
- Financial less stable
- More isolated
- Less motivation to seek help or receive treatment

Observation

- Densely populated
- Aging population (Median age 42.8 years)



News

Mandatory TB screening in Bukit Merah after emergence of more cases linked to 2022 cluster

The screening will be mandatory for those who live and work in Blocks 1 and 3 Jalan Bukit Merah, employees at ABC Brickworks Market and Food Centre, as well as clients and staff of the senior activity centre in Block 3 Jalan Bukit Merah.

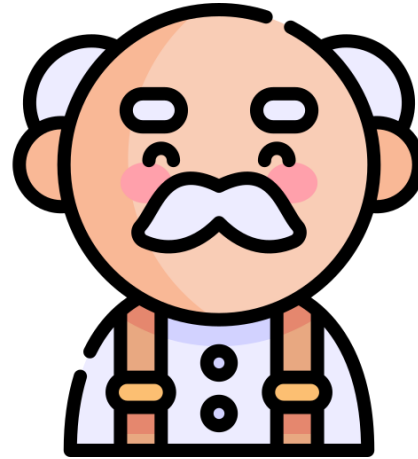


Bukit Merah tuberculosis screening concludes, with 2 infectious cases detected

The Ministry of Health has assessed that there is no need to further expand tuberculosis screening in the area.



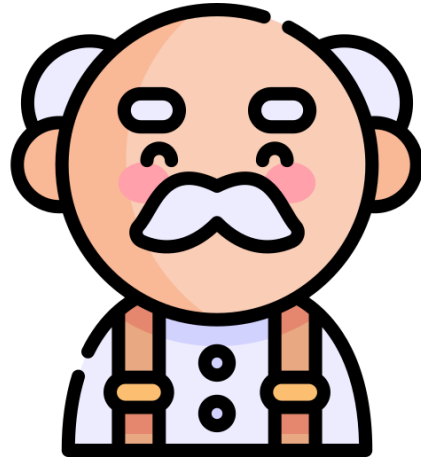
Observation



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Current intervention by Social Workers



Current schemes

- SATA DOT and SHOP incentives (only DOT)
- TBCU Transport Assistance Fund

Additional support

- Engaging with community partners
- Speaking with employers

Problem statement

“What are some of the factors that are facilitating or inhibiting our seniors from adhering to TB treatment?”

Scope

- Inclusion criteria
 - 60 years old and above
 - Retired / not working
 - Diagnosed with active Pulmonary TB and started treatment
- Exclusion criteria
 - Diagnosed with cognitive impairment

Methods - Research design

- Prospective research study
 - Minimize recall bias
 - Using Professor Michael Marmot's Social determinants of health to craft our Survey questionnaire.
- Administered at different time points

Methods - Research design

- Social determinants of health (Marmot & Wilkinson, 2005)
 - Healthy and sustainable environments
 - Social support and social cohesion
 - Access to healthcare
 - Financial security
 - Lifelong learning
 - Physical activity and nutrition

Implications for practice

- A more targeted approach towards the appropriate domains of the social determinants of health to uplift, empower and include the vulnerable (Seniors) in our society
 - As we connect digitally, unlike physical interaction in the past
 - As their social circle shrinks
 - As Singapore embraces technology and AI innovations
 - As living cost increase faster than what the senior can cope
 - As new understanding of diseases emerge
 - As our seniors weaken physically

Thank You 



References

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