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**COMPARATIVE ANALYSIS OF AGE AND SEX DISTRIBUTION
OF TUBERCULOSIS IN SRI LANKA AND BELARUS**

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Relevance. Tuberculosis ranks as the second leading infectious cause of death globally, after COVID-19. In 2022, approximately 10.6 million people worldwide contracted TB. The number of new TB diagnoses globally reached a high of 7.5 million in 2022, the highest reported since 1995. TB claimed 1.6 million lives in 2021. Children (0-14 years) accounted for 11% of TB cases in 2022. The South-East Asia Region carries the largest TB burden, accounting for 46% of global cases in 2022.

Aim: to analyze the variation of distribution of the prominent factors such as age and sex in tuberculosis epidemiology.

Materials and methods. An analysis of patient case findings was collected from Chest clinic of Vavuniya district of Sri Lanka to analyze the district distribution of tuberculosis with age and sex. The nationwide data also collected to analyze the total incidence of distribution in Sri Lanka. The information regarding the age and sex distribution of Belarus was collected from the Department of Pulmonology, Phthysiology, Allergology and occupational pathology with advance training and retraining course. Other supporting factors with relapse and correlated diseases and total incidence rate were clarified from the database submitted to the Global TB report of WHO by the respective countries.

Results and discussion. According to the data which has been collected the distribution of tuberculosis in male is relatively higher than female in the age category more than 24 years according to the statistical report of Sri Lanka in 2024. Meanwhile below the age of 24 years females have more incidence than male. In the total population of 23 million in Sri Lanka the number of males with age range > 15 years with incidence of TB is relatively in the range starting from 5800 to 13000. Meanwhile the incidence in the females with age range > 15 years is relatively in the range from 2800 to 6500. The incidence in number of children with the age range of 0-14 years relatively ranged from 490-940. The absolute number of male children (0-14 years) is in the range of 100-150 and female children (0-14 years) is in the range of 100-120. The percentage of males' incidence to TB for the total population is about 0.04% and the females' incidence is 0.02% approximately. The total TB incidence is relatively in the range of 10000-19000. According to the analysis the most prominent age group to TB incidence is 35-65 years in the adults, more specifically in the age group of 55-64 years with males' population dominating it by more than 2 times of females' incidence in the above specified age group category. For the Belarus with total population 9,5 million the total TB incidence in the gender of male with the age category >15 years is relatively in the range of 1200-2400 and in the females with same classification it is in the range of 450-920. The gender specified range of the number of children from 0-14 years is not collected but as a general range of the children in specified age category of under 17 is around 16-20. The percentage of male population to the total population is 0.02% and the females are 0.0076%. The analysis of collected data agrees to the universal proved data of males having higher incidence than females in both countries.

Conclusion. In both Sri Lanka and Belarus, males generally exhibit a higher TB incidence than females, aligning with global trends. However, in Sri Lanka the women in working sectors and being exposed to huge crowds is relatively lesser compared to males but in Belarus women are dominating in many work sectors even though the statistics remains same as male having higher incidence. This could be of gender and age based physiological factors could be contributing to infection and the epidemiology of TB, with further research it should be studied.