Barriers to Tuberculosis Detection in Portuguese Prisons

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Abstract : Background: Prison establishments constitute high-risk environments for the transmission and spread of tuberculosis (TB), given their epidemiological context and the difficulty of implementing preventive and control measures. Guidelines for control and prevention of tuberculosis in prisons have been described as incomplete and heterogeneous internationally, due to several identified obstacles, for example scarcity of human resources and funding of prisoner health services. In Portugal, a protocol was created in 2014 with the aim to define and standardize procedures of detection and prevention of tuberculosis within prisons. Objective: The main objective of this study was to identify and describe barriers to tuberculosis detection in prisons of Porto and Lisbon districts in Portugal. Methods: A cross-sectional study was conducted from 2nd January 2018 till 30th June 2018. Semi-structured questionnaires were applied to health care professionals working in the prisons of the districts of Porto (n=6) and Lisbon (n=8). As inclusion criteria we considered having work experience in the area of tuberculosis (either in diagnosis, treatment, or follow up). The questionnaires were self-administered, in paper format. Descriptive analyses of the questionnaire variables were made using frequencies and median. Afterwards, a hierarchical agglomerative clusters analysis was performed. After obtaining the clusters, the chi-square test was applied to study the association between the variables collected and the clusters. The level of significance considered was 0.05. Results: From the total of 186 health professionals, 139 met the criteria of inclusion and 82 health professionals were interviewed (62,2% of participation). Most were female, nurses, with a median age of 34 years, with term employment contract. From the cluster analysis, two groups were identified with different characteristics and behaviors for the procedures of this protocol. Statistically significant results were found in: elements of cluster 1 (78% of the total participants) work in prisons for a longer time (p=0.003), 45,3% work > 4 years while 50% of the elements of cluster 2 work for less than a year, and more frequently answered they know and apply the procedures of the protocol (p=0.000). Both clusters answered frequently the need of having theoretical-practical training for TB (p=0.000), especially in the areas of diagnosis, treatment and prevention and that there is scarcity of funding to prisoner health services (p=0.000). Regarding procedures for TB screening (periodic and contact screening) and procedures for transferring a prisoner with this disease, cluster 1 also answered more frequently to perform them (p=0.000). They also referred that the material/equipment for TB screening is accessible and available (p=0.000). From this clusters we identified as barriers scarcity of human resources, the need to theoretical-practical training for tuberculosis, inexperience in working in health services prisons and limited knowledge of protocol procedures. Conclusions: The barriers found in this study are the same described internationally. This protocol is mostly being applied in portuguese prisons. The study also showed the need to invest in human and material resources. This investigation bridged gaps in knowledge that could help prison health services optimize the care provided for early detection and adherence of prisoners to treatment of tuberculosis.

Keywords : barriers, health care professionals, prisons, protocol, tuberculosis
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