TB Knowledge among Healthcare Workers and Ancillary Staff in an Underserved Medical Institution

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BACKGROUND

- Clinical and ancillary healthcare workers in underserved clinical settings are at an increased risk of Tuberculosis (TB) compared to the general population.
- There is variation in TB knowledge in TB endemic and non-endemic countries, as well as variation in TB-related training and clinical experience among clinical providers and non-clinical health care workers (ancillary staff) worldwide.
- OSHA has identified TB as an occupational hazard due to delayed diagnosis, poor safety practices, infection control, and pre-existing medical conditions among healthcare workers

OBJECTIVES

- To assess and compare TB knowledge of clinical and ancillary healthcare workers in an underserved medical institution in Tennessee
- Identify predictors of TB knowledge

METHODS

- Cross-sectional study
- Validated 10-question survey emailed via REDCap® to eligible employees
- Inclusion criteria: Clinical workers: physicians, residents, students, mid-level providers, etc.
  Ancillary staff: technicians, aides, office administrators, clerks, custodians
- Exclusion criteria: non-employees of the health care center
- Participants who answered 9/10 of questions correctly were considered to have “excellent knowledge” (>75th percentile)
- Differences in TB knowledge and predictors of TB knowledge were assessed through Chi square analysis and Logistic Regression Model
- SPSS v. 25 was employed for data analysis

RESULTS

- Majority of participants were female (60.4%), age 26-34 (53.8%), black (73.1%), U.S. born (71.8%), Internists (26.8%), and students (42.0%) (Table 1 & Figure 1).
- Physicians and residents demonstrated greater knowledge of TB (higher percentage) than other participants (mid-levels, nurses, students, etc.)
- Clinical healthcare workers demonstrated greater knowledge of TB signs/symptoms, modes of transmission, understanding of DOTs than ancillary staff (Table 2)
- No difference in TB knowledge between attendings and residents in training (Table 3)
- Predictor of TB knowledge among all participants: clinical professional status (Table 4)

CONCLUSION

- Knowledge gaps exist among all healthcare workers and ancillary staff.
- Clinical healthcare workers were more knowledgeable of TB than ancillary staff.
- Ancillary staff and other clinical healthcare workers (nurses, mid-level’s, technicians) were less likely to demonstrate knowledge of TB transmission, diagnosis and clinical features than physicians and residents.
- Comprehensive knowledge of TB is important for providers to accurately diagnose, manage and prevent TB and to reduce the risk of nosocomial transmission of TB.
- The findings from this study will guide the development of educational programs targeting all clinical healthcare workers and ancillary staff in similar settings.

REFERENCES


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