Effect of sputum collection instructions on screening rates among TB suspects in Kinshasa / R.D. Congo Effect des instructions de collecte des expectorations sur les taux de dépistage chez les suspects de tuberculose à Kinshasa/RD Congo

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Summary

Background and objective. Microscopy after ZN staining remains the reference tool in the diagnosis and monitoring of treatment of TB patients. In Democratic Republic of Congo, tuberculosis detection rate remains below the threshold set by WHO because of the low sensitivity of this method, especially in the context of immunosuppression. The objective of this study is to determine the effect of additional instructions about the collection of sputum on screening rates among TB patients infected or not with HIV in Kinshasa.

Methods. A randomized interventional study was conducted on suspected TB patients. A sample of sputum was collected in all patients after instruction of 5 to 10 minutes on sampling and monitoring of microscopic examination after ZN staining. Blood sample was also collected and analyzed for HIV infection by ELISA. The expected result was an increase in TB screening rate.

Results. 263 suspected TB patients were included in the intervention group and 264 in the control group.

The average age was 41 years with minimum of 15 and maximum of 86 years. 27% (72/264) of suspected TB in the control group showed a smear-positive against 23.2% (61/263) in the intervention group. 26/235 (11.2%) of the suspected TB in the intervention group were HIV positive, including a patient with co- infection (4%). In the control group, 28/114 (24.5%) patients were positive, including 4 subjects (14 %) with a co- infection.

Conclusion. The instructions do not show any effect on the TB screening rate. However, other factors such as frequency of tuberculosis and the age range of patients should be taken into account in interpreting the results in future studies.

Key words: Tuberculosis, Screening, Instructions, Ziehl, HIV