



## CHALLENGES AND OUTCOMES OF VIDEO-ASSISTED TREATMENT IN PATIENTS WITH PULMONARY TUBERCULOSIS

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### Introduction

According to the updated national policy, the patients with tuberculosis may benefit from the following treatment options: 1. Community or home-based DOT when the treatment is delivered in the community close to the patient's home or work.

2. DOT administered by specialized healthcare providers in hospitals or specialized services.

3. Video-assisted treatment (VAT). VAT in patients with pulmonary tuberculosis (TBP) involves monitoring of the administration of the anti-tuberculosis drugs by a trained medical worker using an electronic device.

### Keywords

Tuberculosis, video-assisted treatment, risk factors

### Purpose

To identify the barriers in implementation of VAT in patients with PTB and to evaluate the therapeutic outcomes.

### Material and methods

A prospective case-control study which included 114 patients with PTB treated VA, distributed in the study group 1 (SG1) – 26 cases treated using the complete VA regimen and the study group 2 (SG2) – 88 cases treated VA only in the continuation phase in the period 2019-2022 in Chisinau was conducted. Statistical analysis was performed by SPSS Statistics 23.0 software, using Fisher exact test, Odds Ratio (OR) and Confidence Interval (CI).

### Results

Distribution according to sex: men/women rate=1,4 in SG1 vs 2,7 in SG2, and age between 18 and 44 years 15 (58%) vs. 61 (69%) cases, respectively. Detected by symptomatic screening were 8 (31%) vs. 42 (48%), including 24 (92%) new cases vs. 82 (93%) and 2 (8%) vs. 6 (7%) relapses, respectively. The established risk factors were: socially vulnerable status, OR=2.7 (CI95: 1.6-2.9); low level of education, OR=2.5 (CI95: 1.8-3.4); vagrancy, OR=9.2 (CI95: 2.6-12.4); migration, OR=3.5 (CI95: 2.4-4.2); comorbid state, OR=1.9 (CI95: 2.4-4.2). Therapeutic success was established in 24 (92%) vs. 78 (89%) cases, died 1 (2%) patient in SG1 and 1 (1.3%) continued the treatment in SG1 vs. 10 (11%) in SG2

### Conclusions

Barriers in implementation of VAT identified in patients with PTB were: social risk factors, migration and comorbidities. The rate of therapeutic success was high and similar in both groups.