

SIGNIFICANCE OF CONTACTS IN THE MANIFESTATION OF TUBERCULOSIS AS AN INFECTIOUS DISEASE

Lj. Simonovska, M.Trajcevska

Institute for Lung Diseases and
Tuberculosis, Skopje, Macedonia

INTRODUCTION

After more than one decade of the epoch making discovery of the tuberculosis agent and more than fifty years of the introduction of the efficient antituberculosics, tuberculosis is still the leading agent for the mortality among adults all around the world (nearly 3 millions death yearly).

The estimated 8.8 million new cases every year, correspond to 52 000 deaths per week or more than 7000 each day, which translates into more than 1000 new cases every hour.

In R. Macedonia, tuberculosis still has been relevant medical and social problem, although the number of registered patients with tuberculosis in the last years constantly has been decreasing. In 2012 year notification rate was **17 / 100 000**.

The most important measures in the NTP for control of the tuberculosis is contact tracing and source case finding.

PATIENTS AND METHODES

The purpose of this study is to evaluate the importance of contact in the manifestation of tuberculosis, ie to answer the question: what age, which forms manifest tuberculosis in this category of patients and what is the connection with the source of infection, ie which is the period from the contact to the manifestation of tuberculosis as an infectious disease.

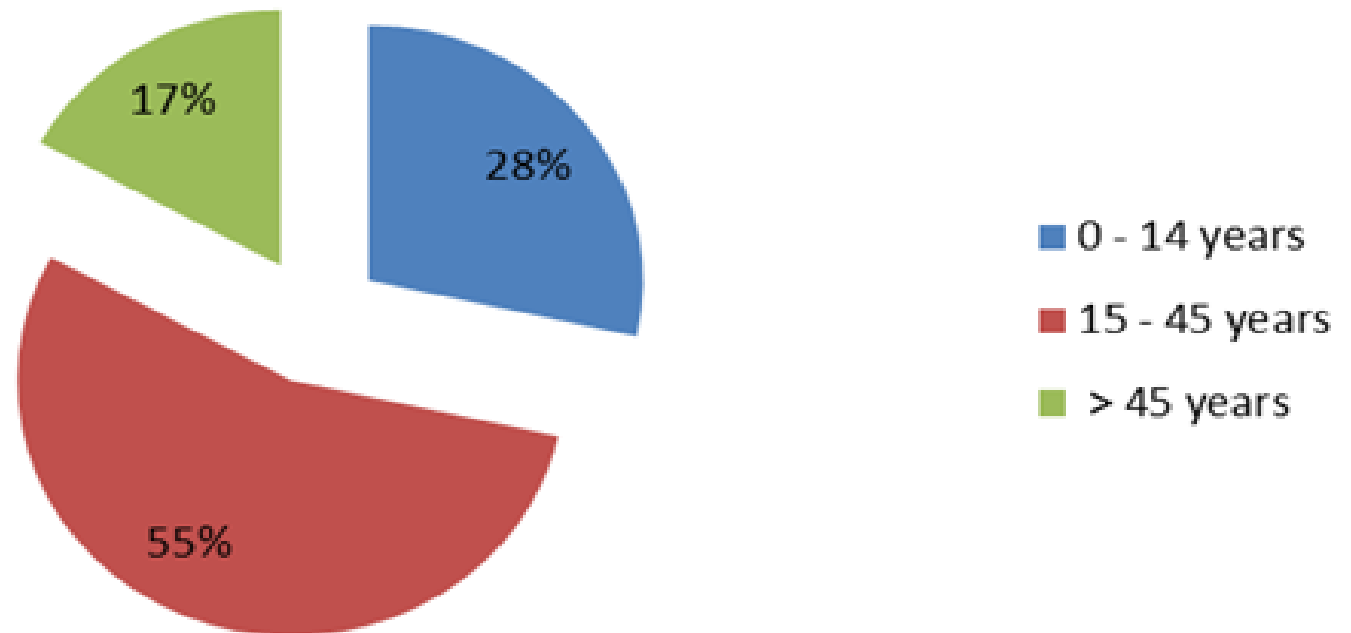
The number of patients with tuberculosis who were in contact accounted for 7.5% of the total number of registered patients (1177). 42 (47.7%) were male and 46 (52.28%) were female.

For this purpose, the histories of 88 cases of tuberculosis in persons who have been in contact with sick from tuberculosis, for the period 2010-2012, retrospectively were analyzed.

The number of patients with tuberculosis who were in contact accounted for 7.5% of the total number of registered patients (1177). 42 (47.7%) were

Distribution among age group

Distribution among age group

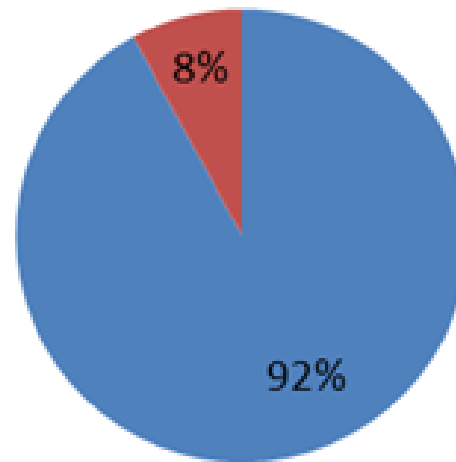


RESULTS

Location of the tubercuolsis

Location of tuberculosis

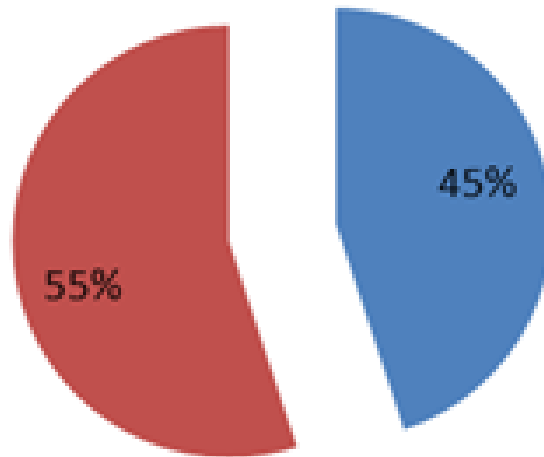
■ Pulmonary ■ Extrapulmonary



MICORBIOLOGICAL STATUS OF INDEX CASES

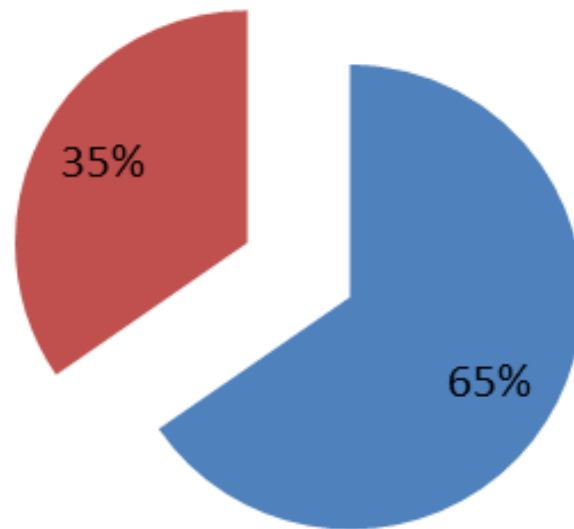
Results of sputum (smear)

■ Smear positive ■ Smear negative

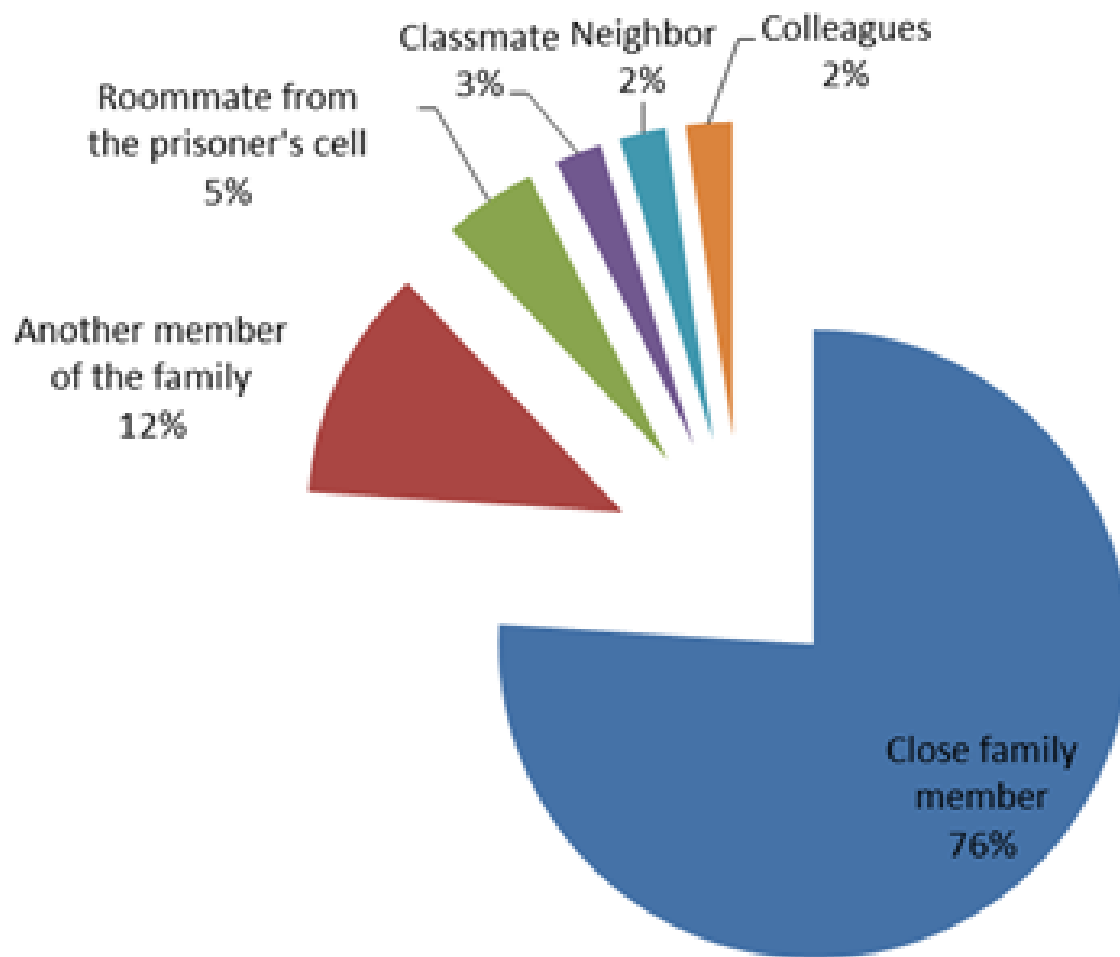


Results of sputum (culture)

■ Culture positive ■ Culture negative



Distribution of source of infection

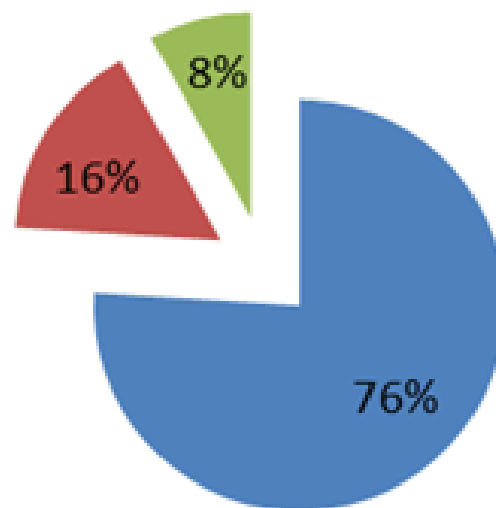


Distribution of source infection

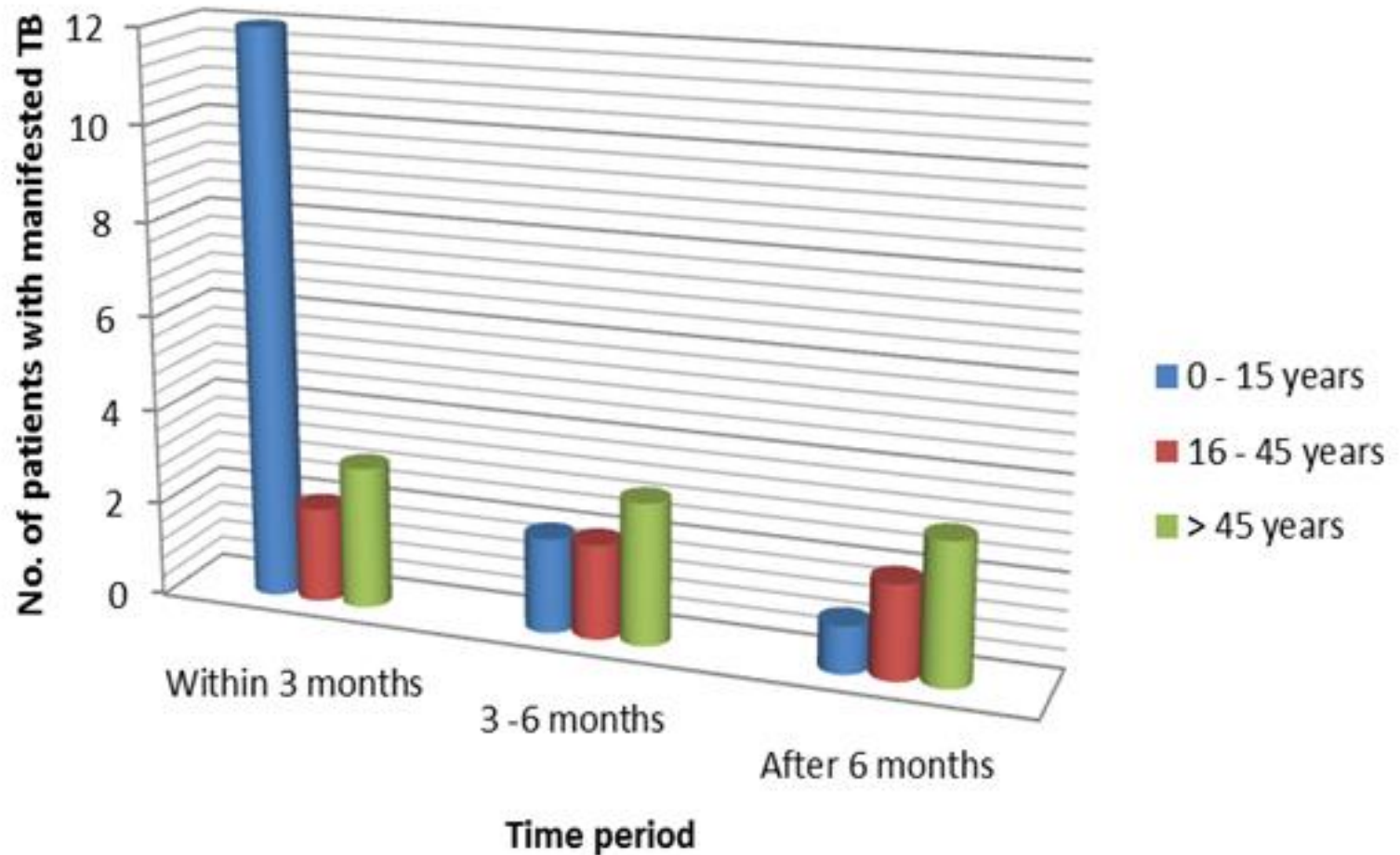
Distribution of the source among close family members

Distribution of the source among family members

■ Parents ■ Brothers or sisters ■ Spouses



Distribution of the time period of manifestation of tuberculosis after contact among age groups

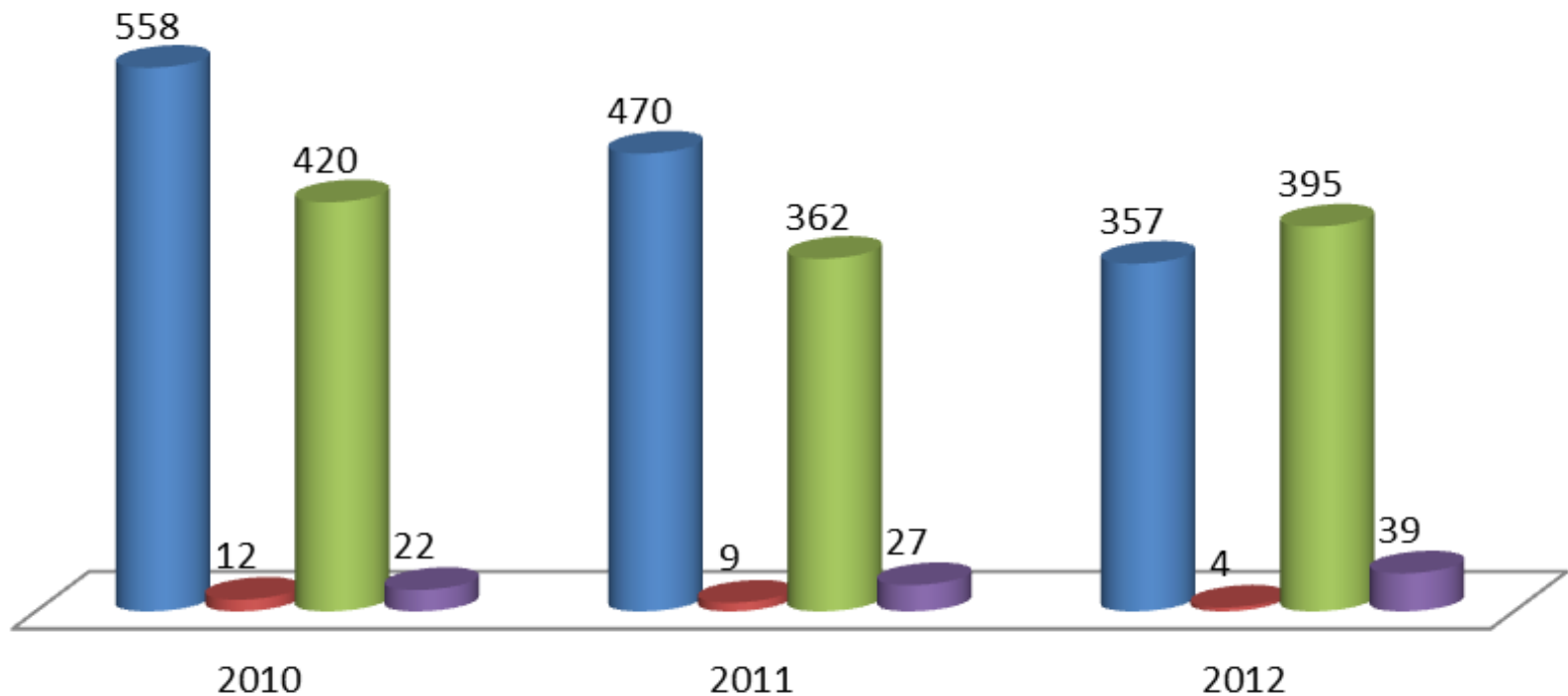


- Length of the time from contact to manifest tuberculosis, correlated with the age diseased
- 80% (12/15) of patients of age group 0- 15 manifest tuberculosis within 3 month after contact

Results from contact tracing vs source case finding (2010-2013)

Contact tracing vs source case finding

■ Number of contact tracing ■ Number of diagnosed tb ■ Index case ■ Source case



- In 7.52% of registered TB patients, contact with person suffering from tuberculosis is confirmed;
- In 76% of the cases source is in the family, and the most common source in the family is one of the parents (75.6%);
- After the contact with the source of infection, tuberculosis usually manifests in the first three months (56.7%);

- Length of the time of contact to manifest tuberculosis is correlated with the age diseased;
- 80% (12/15) of patients of age group 0-15 manifest tuberculosis within 3 month after contact;

- The fact that tuberculosis can manifest after 6 months of contact (20%), there is a need for contact tracing in an extended period of time;
- The contact tracing and source case finding. are the most important measures in the NTP for control.