

EVOLUTION OF EPIDEMIOLOGICAL INDICATORS IN ENDEMIC ILLNESS CAUSED BY PULMONARY TUBERCULOSIS IN ARAD COUNTY

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ABSTRACT. The research topic is the dynamics of the epidemiological indicators in tuberculosis endemy in Arad County in the past three years, in comparison to national levels, as result of the work carried out in the division of clinical Pneumoftiziology Arad.

The objective of the study was acknowledging the extent of tuberculosis endemy in Arad county and an evaluation of the treatment results for patients enrolled in 2010-2012.

The novelty lies in the fact that due to the imposition of the DOT strategy, the indicators point to a substantial fall in tuberculosis cases.

INTRODUCTION

Starting with 2007, Romania takes part, along side 17 other countries, in the plan to put an end to tuberculosis, plan which was initiated by WHO Regional Office for Europe. The 18 countries are regarded as a priority by WHO, and the plan is due to be completed in 2015, the total cost of which is estimated at 14.8 billion dollars. With an incidence rate of more than 100 cases of tuberculosis per 100,000 inhabitants, Romania places among the top European countries in regard to this illness. In Romania around 50 people get sick daily of tuberculosis. In the past few years remarkable progress has been made in decreasing of tuberculosis cases, but the disease remains a major concern both at a national level and at a global level. The incidence rate of this disease in Arad county has been consistently above the country's average - 137‰ inhabitants, in 2010. 107‰ inhabitants in 2011 and 99,3 ‰ inhabitants in 2012.

OBJECTIVES

The objectives are as defined in the agreement with MDG and aim to achieve the specifics established by StopTB Partnership:

- Maintain 100% DOTS coverage of the population affected by tuberculosis
- Maintaining detection of at least 70% of the total existing cases of tuberculosis
- Achieving and maintaining a therapeutic success rate of at least 85 % of the total new cases confirmed bacterially as pulmonary tuberculosis.

MATERIAL AND METHOD

The statistics of Arad county have been analyzed in comparison with the national statistics in regard to the illness during the following period from 2010 to 2012.

The statistics under analysis have been carried out in accordance with national strategy for control of

tuberculosis which is based on directions laid down by the Global WHO plan to put an end to tuberculosis, framework plan of action in the fight against tuberculosis in the European Union, drawn by ECDC.

Arad County has been carrying out its work for the fight against TB by applying the DOTS strategy since the year 2000.

Incidence of TB cases in Arad county, as compared to the rest of the country, is higher, but it has been declining over the period 2010 - 2011 – 2012.

The incidence rate of this illness in Arad county has been consistently above the country's average - 137‰ inhabitants, in 2010. 107‰ inhabitants in 2011 and 99,3 ‰ inhabitants in 2012.

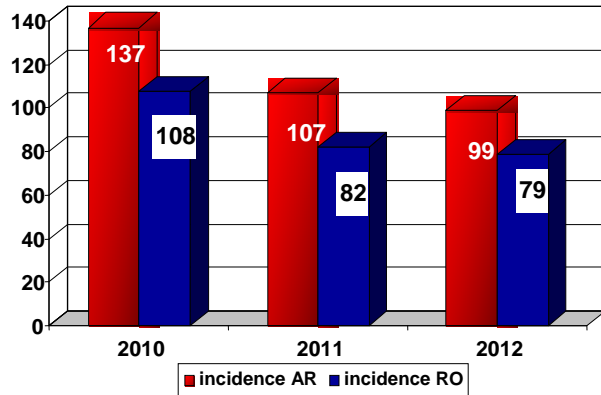


Diagram 1. Incidence of TB cases in Arad county, as compared to the rest of the country, is higher, but it has been declining over the period 2010 - 2011 – 2012.

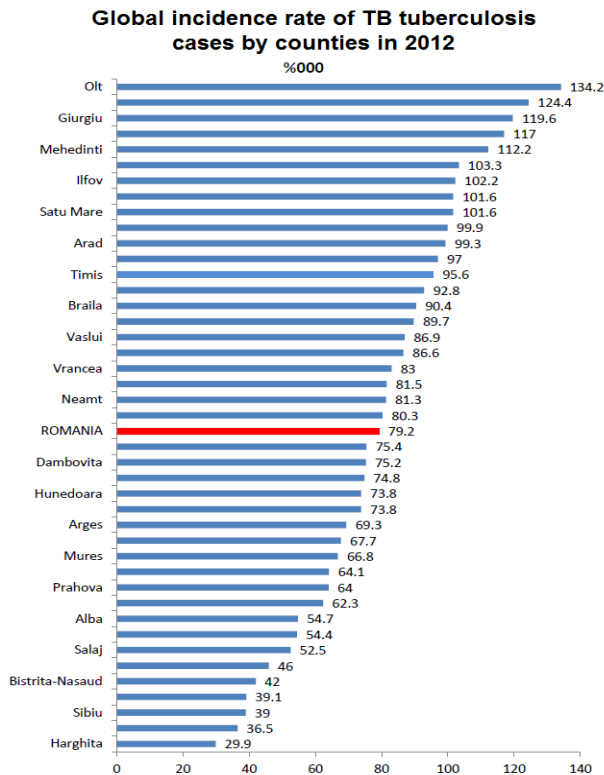


Diagram 2 Source: PNCT- National TB Register of Romania

New TB cases for the years 2010 – 2011 – 2012.

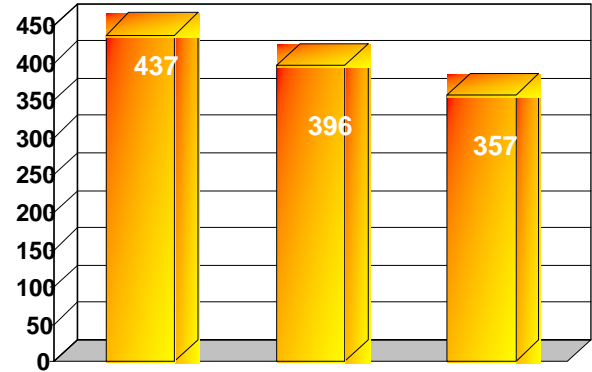


Diagram 3. We can observe a noticeable drop in new cases of pulmonary tuberculosis

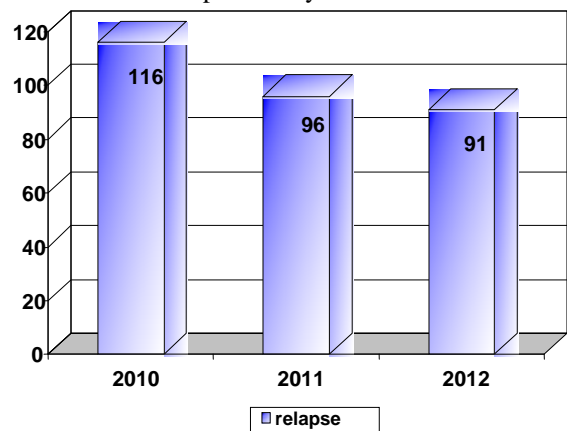


Diagram 4. A substantial drop can be observed in the cases of pulmonary tuberculosis relapse.

Incidence rate of new and relapse cases of tuberculosis in Arad County

(elderly, the unemployed, the homeless, etc.) remains a priority as a measures for the control of tuberculosis in the area.

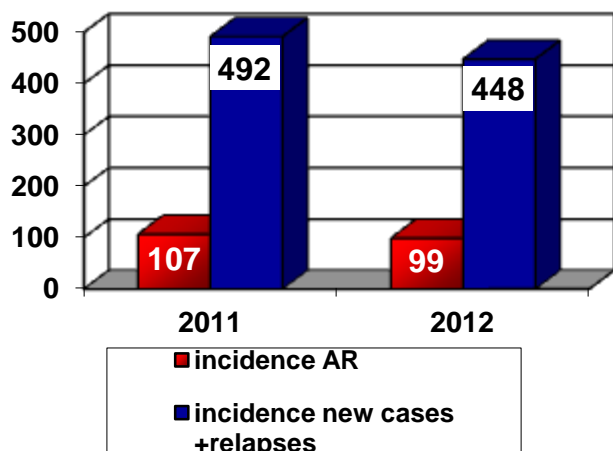


Diagram 5. There's a slight drop in regard to new cases of tuberculosis in Arad county, relapse and new cases of TB are also slightly dropping in Arad County.

CONCLUSION

Incidence rate maintains a downward trend as observed since 2002. The results in treatment of new cases are in the optimum levels as required by the PNCT.

Perseverance in developing and implementing of the antituberculosis program is an assurance for a realistic permanent control of tuberculosis

Reducing tuberculosis incidence in Arad county depends on the efficiency of DOTS strategy.

Incidence of TB cases in Arad county, as compared to the rest of the country, is higher, but it has been declining over the period 2010 - 2011 – 2012.

The number of cases of negative tuberculosis declared in Romania was high, decreasing in 2012, compared with 2010 - 2011.

There are significant differences between counties and their „contribution” to the total number of cases tuberculosis.

Antituberculos treatment results represents one of the most important indicators of effectiveness in the program to control tuberculosis.

Although all the main indicators regarding the evolution of tuberculosis endemy in Arad county are favorable, mainly due to DOT strategy imposition, involvement of vulnerable categories of the population

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