**PP-194** The effect of initial smear grading among tuberculosis patients on their treatment outcome

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**Background:** The incidence rate of smear positive tuberculosis in the in 2010 was about 7 in the hundred thousand populations. Cure rate and failure rate have great importance in preventing the resistant tuberculosis. This study surveyed Relationship between initial smear grading with cure rate.

**Methods:** All new smear positive cases registered from March 2005 to May 2010 were analysed for cure and conversion to negative smear related to initial smear grading.

**Results:** From 354 Sm+ patients 276 (78%) at the end of second month of treatment were Sm− and 52 (14/7%) were Sm+, at the end of treatment cure rate was 79/7% and Relationship between initial smear grading with cure rate and conversion to negative smear in new Sm+ patients was statistically significant. In multivariate analysis, lower cure rate was significantly associated with age >45y and Initial smear 2+ and 3+ and remain smear positive at the end of the second month of treatment.

**Conclusion:** The more treatment failure and death from TB or emergence of resistant TB related to less negative smear rate at the end of two months of starting treatment and more patients that have initial smear 2+ & 3+, are from this group. This reiterates the need to pay more attention in motivating these patients to return to regular treatment and sustained commitment in the control of tuberculosis.

**PP-195** Surveying the reasons of the low notification rate of positive smear tuberculosis in Central province in Iran

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**Introduction:** In Central province notification rate of positive smear tuberculosis always been less than of other site of the Iran country (68%) and the WHO expected rate (70%), we decided to survey the reasons of positive smear tuberculosis low notification rate in Markazi province, based on the individual in depth interview and focus groups discussion.

**Methods and Materials:** This survey is a qualitative research and the information were collected with focus groups discussions (FGD) and individual in depth interviews which contains 4 groups of people who were taught and acknowledged about tuberculosis, physician, health coordinators and the tuberculosis laboratories.

**Results:** All the people who joined the in depth interviews and focusing group discussions mentioned that the periodic instructions are essential for all diagnosing, caring and treating tuberculosis groups. The most effect could be done by face to face instructions by the health coordinators. Most of the doctors believed that the family doctor system should be used more in villages and it should be expanded in the cities. All the group of doctors and critics said that one of the most important ways of increasing the notification rate is the cooperation between the private and the governmental parts. Most of the tuberculosis laboratories’ critics believed that beside the high importance of scientific instruction periods, the critics’ stability in the laboratories is so important.

**Conclusion:** By collecting the results of all the 4 surveyed groups for increasing the positive smear tuberculosis notification rate, must be: Inform the society and the physicians and laboratories; More cooperation between inside and outside parts of the health care centers and private; Stabilize tuberculosis health care workers; More practical instructions for the health communicators and the school instructors.

**PP-196** Epidemiology of tuberculous infection rate in Yazd, a Central Province of Iran

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**Background:** About one out of three people in the world have TB infection. It can have a varied presentation, frequently mimicking other common and rare diseases. The clinician must look for tuberculosis, and confirm or exclude this treatable malady in any patient. The purpose of this study was to investigate the rate of tuberculosis in the Yazd province, Iran.

**Methods:** During the study period (2009–2010), 2054 suspected tuberculosis patients who had been referred to the Yazd referral polyclinic were investigated by Ziehl Neelsen staining and culture method and questionnaire was completed for each subject. Then, collected data were analyzed by statistical package for social science (SPSS) and chi-square program.

**Results:** The results show that, of the total suspected tuberculosis, 178 cases were found to be positive for tuberculosis. The average annual rate of tuberculosis was 22.2 cases per 100000 population (13.5/100000 males and 10/100000 females). The highest and lowest rates of tuberculosis were observed among age group ≥ 50 years old, respectively. The average annual rates of pulmonary and extra-pulmonary tuberculosis in Yazd province were 125 cases and 53 cases, respectively.

**Conclusion:** It seems that, despite the efforts, which have been done for prevention, diagnosis and treatment of patients with tuberculosis, it is still considered as a threat for health in the Yazd province, Iran.

**PP-197** Pyrazinamide-mediated alterations in male rats DNA fragmentation processes, bone collagen amino acid composition, reproductive capability and postertity antenatal and postnatal development

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**Objectives:** Current therapeutic regimens with first-line antitubercular agents are associated to a high rate of adverse effects which can lead to therapeutic failure. The aim of present study was to investigate pyrazinamide potential effects on male rats DNA fragmentation, amino acid composition of bone collagen, reproductive capability and their posternity antenatal and postnatal development.

**Methods:** Wistar albino male rats (160–200 g b.w.) were divided into three groups: I – received pyrazinamide per os at a dose of 1000 mg/kg b.w./day, II – at a dose of 2000 mg/kg b.w./day, in both group it was given for 60 days; III – control. After 60 days of the experiment, rats were mated with intact virgin females. The amino acids contents of male rat bone collagens were determined.