



(Poster)

## Role of Tobacco with Different Activities on Human Health

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**INTRODUCTION:** One of the first factors known to cause lung cancer is radiation of tobacco. Tobacco contain lead 210 ( $\beta$ emitter) and Polonium 210 ( $\alpha$  emitter). Public exposed by different radiation environmentally. Smokers receive so much radiation from tobacco and other carcinogen agents which exist in tobacco and cigarette. Smokers who died due to lung cancer exposed by 1600 rem radiation dose. Activity of tobacco varies in the different areas. It is important that we be aware about activity and exposure rate of tobacco to estimate lung cancer risk. The main aim of this study is to review tobacco activity in different regions to reduce affecting risk to lung cancer.

**MATERIAL & METHODS:** This review obtained by information from other sites related to medical physics and radiation protection.

**RESULTS:** Results of current review indicated that activity lead 210 was 7.3-18mBq and 11.9-30.2 mBq in tobacco of Greece and Brazil, respectively. Activity of polonium 210 was 10.9-37.4 and 3.6-17 mBq in tobacco of Greece and Brazil, respectively. Also activity of polonium 210 was 0.09pci/gr and 0.516pci/gr in India and America tobacco, respectively.

**CONCLUSION:** Radioactive materials absorbed by root of tobacco. Its concentration varies by ground natural activity and natural nuclear decay and PH of ground. Risk of tobacco carcinogenesis directly depends on activity of tobacco and exposure rate. Warning of kinds of tobacco with different activities could restrict use of tobacco and reduce lung cancer risk.