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Research Article

**TO DETERMINE VITAMIN-D LEVELS IN PATIENTS OF ACTIVE
TUBERCULOSIS**¹Rishma Nadeem, ²Dr Khawaja Faizan Ejaz, ³Dr Kiran Arbab¹Allama Iqbal Memorial Teaching Hospital Sialkot, ²Azad Jammu Kashmir Medical College Muzaffarabad, ³Doctors Hospital and Medical Center.**Article Received:** October 2019 **Accepted:** November 2019 **Published:** December 2019**Abstract:****Aim:** To examine pre-treatment vitamin D serum levels in active tuberculosis patients and their family members.**Method:** Prior to treatment, serum vitamin D levels were measured in 50 patients with active tuberculosis and 50 healthy subjects.**Study Design:** A Prospective Study.**Place and Duration:** In the Department of Chest medicine, Services Hospital Lahore for Six month duration from January 2019 to June 2019.**Results:** There was a statistically substantial variance in serum vitamin D concentration between patients and their families. Significantly more patients have much less concentration than their families. Dietary intake was similar for patients and relatives and exposed to same time to sunlight.**Conclusion:** Patients with active tuberculosis have a lower serum vitamin D concentration compared to similar ethnic and social background with similar diet intake and sun exposure. Sun exposure contributes to vitamin D deficiency in active tuberculosis, which is why public health education emphasizes the need for adequate vitamin D intake in all sensitive groups, but it is necessary to study the potential part of vitamin D supplementation in the treatment of tuberculosis.**Keywords:** Vit. D deficiency, tuberculosis,**Corresponding author:****Rishma Nadeem,**

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INTRODUCTION:

There is upward tendency for vitamin D deficiency in Pakistan, where the incidence of tuberculosis is very high. A study was conducted to assess serum vitamin D levels in patients with active tuberculosis and their families before treatment. Kelech E. Nnoaham and Aleen Clark published the study on November 13, 2007, assessing articles published in 1980-2006 examining the relationship between low serum vitamin D levels and the risk of active tuberculosis. This study was conducted to determine whether there was a relationship between active Tb and low serum vitamin D levels. There are many factors that affect Factor D serum levels, but diet and exposure to sunlight are particularly important. In this study, we measured serum vitamin D levels during presentations and after three and six months of treatment. As is known, several factors affect hydroxycholeiferol. Women over the age of fifty, large smokers and patients with co-morbid conditions such as cancer, diabetes and kidney disease were excluded.

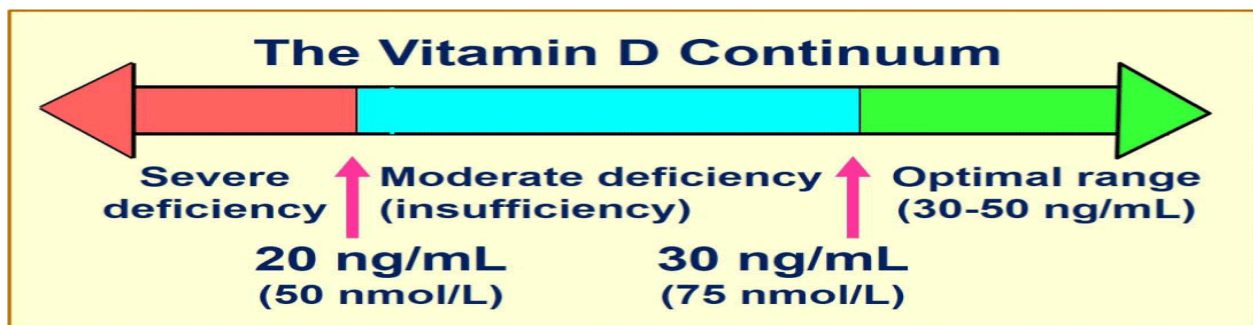
METHODS:

This Prospective Study was held in the Department of Chest medicine, Services Hospital Lahore for Six month duration from January 2019 to June 2019.

Serum vitamin D has been defined as 25 levels of hydroxyvitamin D₃. The study population was TB patients who had a positive pulmonary smear to start treatment. The controls were healthy people representing the population from which cases were removed. Questionnaires to assess the participation of 50 patients to determine the role of diet and 50 family contacts were well-dated the frequency of meals and exposure to sunlight. Reuse table for diets that naturally contain vitamin D (mainly oily fish, egg yolks and liver). To maintain adequate vitamin D levels all year, face, arms and legs must be visible to the sun for an hour a day in summer.

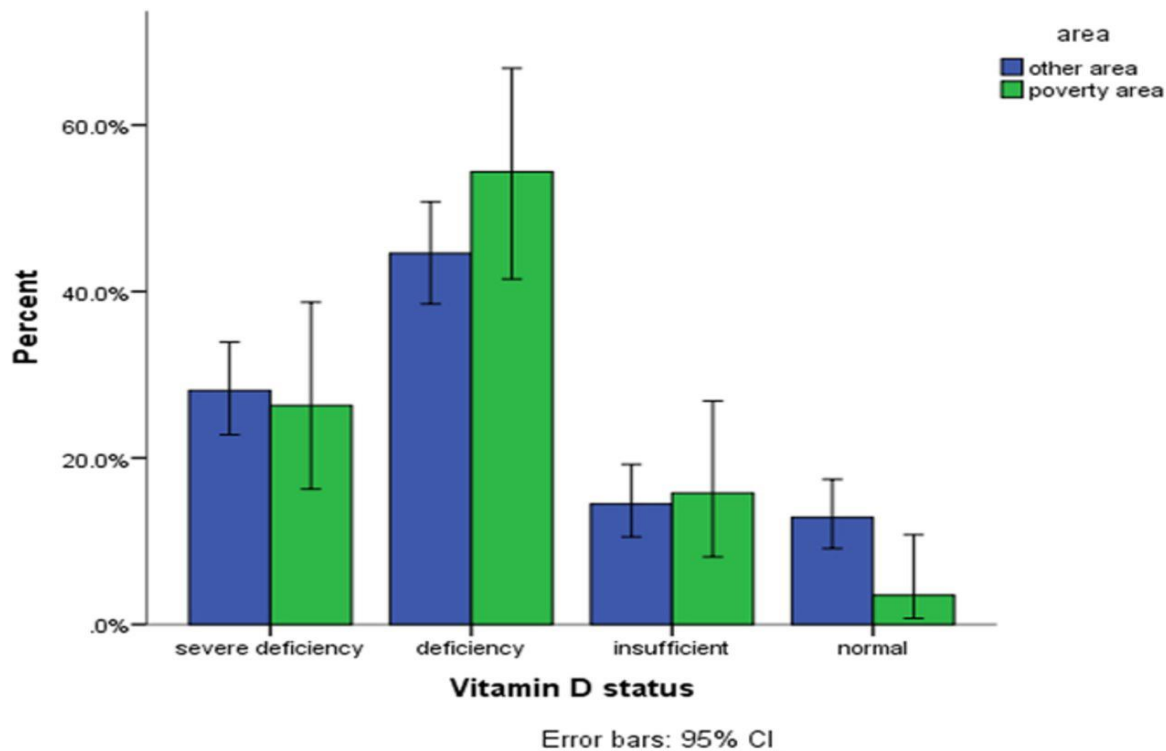
RESULT AND DISCUSSION:

The study showed that serum D levels of TB patients were on average lower than in healthy controls. While there is evidence that a decrease in serum vitamin D levels disrupts cellular resistance and leads to the activation of dormant tuberculosis, it is also possible that low serum vitamin D levels are caused by tuberculosis itself.



Much is known about the relative effects of sunlight and diet on vitamin D levels. Indonesian studies in Indonesia suggest that people can maintain adequate vitamin levels in a good population of sunlight throughout the year. Although the diet is poor, serum

D. However, a similar study in India showed low vitamin D levels in the study population despite exposure to sufficient sunlight and found that diet was the most important factor.



The relationship between vitamin D deficiency and tuberculosis is twice as important. First, already low levels of vitamin D may decrease in patients with tuberculosis at the start of treatment. Extra drops can damage other vitamin D deficiency situations.

CONCLUSION:

Active TB patients have lower serum vitamin D levels than similar diet and sun exposure, and similar ethnic and social background, indicating they are patients with TB factors other than diet and exposure. While the sun contributes to vitamin D deficiency, health education emphasizes the need for adequate vitamin D intake in all sensitive groups, it is necessary to study the potential role of vitamin D supplementation. Treatment of tuberculosis.

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