

Noncompliance to anti-tuberculosis medication in Pohnpei, Micronesia

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Introduction

Drug treatment for tuberculosis (Tb) in both a personal and public health measure. Patient non-compliance is a major barrier to the control of Tb, treatment of individual patients, and in the development of drug resistance.^{1,2} Studies have also described the impact of culture or local beliefs in the compliance to treatment.³ The reasons for poor compliance are complex, ranging from characteristics of individual patients to qualities of social and economic environment of the patient and the health service.⁴

Tb is one of the common chronic infectious diseases in Pohnpei, Federated States of Micronesia (FSM) that needs to be addressed immediately. This descriptive study was to identify factors that would assist in the control of Tb. It examined the factors that lead to patient non-compliance to anti-Tb medication, identified the defaulters, and determined the reasons for defaulting from anti-Tb medication.

Methods

This descriptive study examined non-compliance and the independent variables were the risk factors for defaulting.

The target population were those defaulters from anti-Tb medication from Nett and Uh Municipality in Pohnpei, 1992-1993. Defaulters were those people diagnosed with Tb and who did not complete the nine month regimen for anti-Tb medications. A questionnaire was administered to Tb patients about the reasons for defaulting. The interviewers were

trained in a small workshop. The target population was identified by having the following:

- Positive PPD or sputum smear or culture.
- Anyone with clinically confirmed Pulmonary Tb.
- Anyone with confirmed extrapulmonary Tb.
- A resident of Nett and Uh Municipality.

The children who were in the study population were not able to provide information for themselves so information were obtained from the parents and primary care givers.

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Participants were informed in detail of the study and were given opportunity to ask questions about the study. The participants were made aware that the results of the study were to be given to the policy makers and health care workers so that establishment of health cri-

teria establishment of programs and appropriate funding allocation could be made for the control and prevention of Tb.

Results

Thirty-one (42%) Tb patients fitted the criteria for non-compliance with anti-Tb medication. The most frequent reasons given were feeling better after few months of being on anti-Tb medication and the side-effects of anti-Tb medication.

Out of 31 participants that defaulted from anti-Tb medication, 11 claimed that they felt better after taking anti-Tb medication for a few months so they stopped. Thirteen patients were non-compliant because of medication side-effects.

Six patients stated that their main reason for defaulting from anti-Tb medication was lack of transportation to Public Health Department at Pohnpei State Hospital to refill their medications. Only one claimed that the length of treatment was the reason for defaulting. All 31 participants claimed that they were on INH and Rifampin and none taking PZA or Vitamin B6.

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Discussion

Noncompliance to anti-Tb medication is the major barrier to the control and elimination of TB in the State of Pohnpei. The study showed that the most common causes of defaulting from anti-Tb medication in the Municipalities of Nett and Uh were anti-Tb medication side-effects, feeling better after they were on anti-Tb medication for a few months, lack of transportation to Public Health Department for refill of anti-Tb medication, and length of treatment. Other studies have shown that side effects of medications has been the major cause of non-compliance anti-Tb medications. Other studies have shown that culture was an important factor in causing non-compliance but this factor was not looked at in this study.

Most participants in the study claimed to have been placed on only two anti-Tb medications which were INH and Rifampin. From chart review at the Public Health Records, it showed that most participants were placed on INH, Rifampin, and PZA for the first two months then PZA was discontinued by the Public Health Department. Most participants referred to the anti-Tb medication not by name but by the color of the medications. Further study is needed to look at the association between level of education and non-compliance.

There was no association between socioeconomic status and non-compliance. This study did not find any association between non-compliance with being well-off economically, occupation, and subsistence living.

This study indicates that the patients may not be well informed about the disease and the side-effects of Tb medication. Therefore, there is a need to educate, reassure and remind patients at each visit to discuss and refill medications. Health education on Tb and anti-Tb medication be given to patients during each visit. The patients that are noncompliant be on Direct Observed Therapy (DOT).

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Decay and disease are often beautiful, like the pearly tear
of the shellfish and the hectic glow of consumption.

H. D. Thoreau (1852)