# Abstract of Master's Dissertation

Course	International Health Development (MPH)	Name	Sachiko Namba
Thesis Title	Social and Behavioral Factors Sudan	Associate	ed with the Severity of Mycetoma in

### Background:

Mycetoma is one of neglected tropical diseases (NTDs) and a major health problem in many tropical and subtropical areas. Mycetoma is a granulomatous inflammatory disease that has a devastating impact on individuals, causing disfigurement and stigmatization. Basic information on mycetoma is still lacking and which risk factors predispose individuals to disease susceptibility have not been well studied. Currently, the most appropriate approach is aggressive case detection with early diagnosis and treatment. Hence, identifying factors related to the severity of mycetoma and effectively using them in countermeasures may reduce the burden of the disease.

### **Objective**:

The main objective of this study is to identify social and behavioral factors associated with late stage among patients visited at the Mycetoma Research Center (MRC), University of Khartoum, Sudan. Specific objectives are to describe social and behavioral characteristics among mycetoma patients, to evaluate the social and behavioral factors associated with late stage of mycetoma, and to assess the social and behavioral factors associated with late presentation.

## Method:

A descriptive cross-sectional study was conducted enrolling 256 participants at MRC. Interviews using a structured questionnaire were conducted on all outpatients who accepted to participate in the study during the study period. The primary outcome variable was the severity and secondary outcome variables was total duration. Univariable and multivariable logistic analysis were applied to identify the factors associated with the late stage of mycetoma and late presentation.

<sup>\*</sup> The abstract, containing the objective, method, result and conclusion should not exceed 300-500words and printed double sided on A4 paper)

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#### Result:

Firstly, factors associated with late stage of mycetoma were identified. In multivariable logistic regression, type of mycetoma and site of largest lesion were identified as factors associated with late stage. Actinomycetoma and lesion on leg and knee had high risks. Secondly, factors associated with total duration were identified. In multivariable logistic regression, wealth index and number of healthcare providers prior to MRC were identified as associated factors with late presentation. Poor group had a high risk and the participants who visited 2 or more healthcare providers tended to have a high risk. In univariable logistic regression, household head had a high risk and the participants who first visited private clinic had a low risk of late presentation.

## Conclusion:

This study was conducted to identify the social and behavioral factors associated with late stage among mycetoma patients in Sudan. Type of mycetoma and site of largest lesion were identified as factors associated with late stage. Wealth index and number of healthcare providers prior to MRC were identified as associated factors with late presentation. It is necessary to focus on the above factors in order to increase the number of patients who will be treated at MRC in early stage. However, this study was conducted at MRC and the effect of patients who could visit MRC should be considered. Hence, further community-based studies are required to investigate factors associated with the severity in endemic areas to develop more effective measures to promote early diagnosis and treatment. (476 words)

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