

# Investigation of Prevalence of Tuberculosis Infection Outcome in Two Government Owned Hospitals in Port Harcourt, Niger Delta

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although it fully took c in 2003. As of 2009, there were 3,459 DOTS centers with each LGA having at least two centers. It is strongly believed that Acid-Fast Bacilli (AFB) diagnosis had been made easy since 2009 with 1,025 facilities which included laboratories with high-powered microscopes being provided [1]. Nevertheless, it is further opined that one critical reason for its increased prevalence and persistent infection among the vulnerable or susceptible groups have been said to be drug resistance fallout to two main fghline drugs, which are rifampicin and isoniazid [5]. However, most of its prevention and control programmes are based on early diagnosis as well as ]Xbh] W]cb of the drug resistant strains outcome [8].

Sadly, despite the implementation of the DOTS strategy across Nigeria states cum regions, TB is still regarded as a potential public health concern in Nigeria with far reaching clinical consequences.

i g]it is therefore very expedient that its prevalence be determined at every point in time, as this will help to evaluate how far the [ \h against its spread has been achieved over time. Secondly, this will also help in the formulation of government guidelines and policies on TB control and diagnostic strategy in the country. It is strongly believed that the study was aimed at determining the prevalence of TB scourge epidemic in two government owned hospitals in Port Harcourt which is located in Rivers State; one of the richest oil states in the Niger Delta cum Nigeria at large.

## Materials and Methods

### Study area

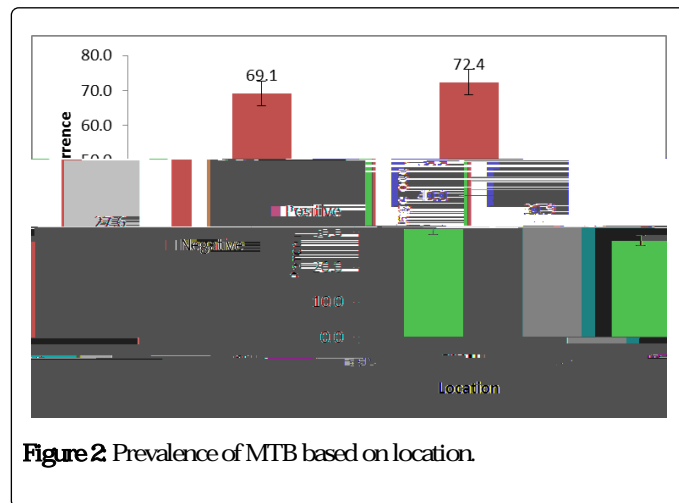
Y location of this study was Port Harcourt. Subjects were drawn from the Braithwaite Memorial Specialist Hospital (BMSH) and the University of Port Harcourt Teaching Hospital (UPTH) respectively. UPTH is a federal government owned hospital located in East-West Road. Y hospital commenced operation in 1980 but it was commissioned in 1985, it is also a tertiary health care teaching and research centre in the State, as well as the oil-rich Niger Delta region. Presently, it has about 500 beds.

BMSH is a state owned hospital located in the old Government Residential Area (GRA) and was named U Yf a British Doctor and pioneer surgeon in Rivers State, Eldred Curwen Braithwaite. It was established in 1925 and named Braithwaite Memorial Hospital and was initially meant for senior civil servants. It boasts of 375 licensed beds and 731 medical gU "

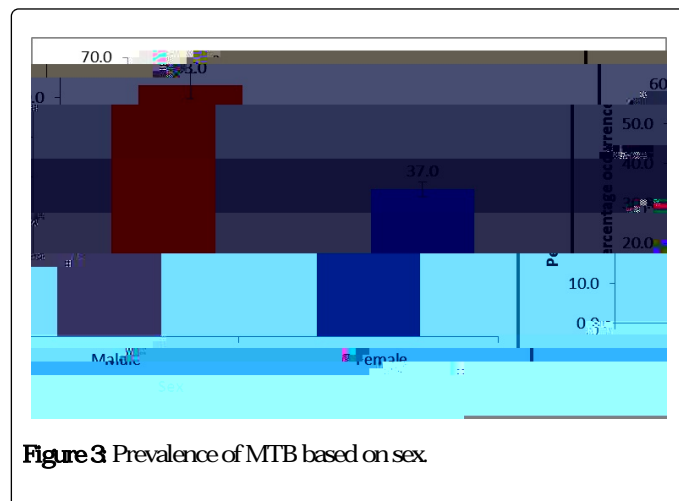
### Study population

Inhabitants of this area are mainly civil servants. However, few others engage in oil exploration, trading farming and g.]b[ activities.

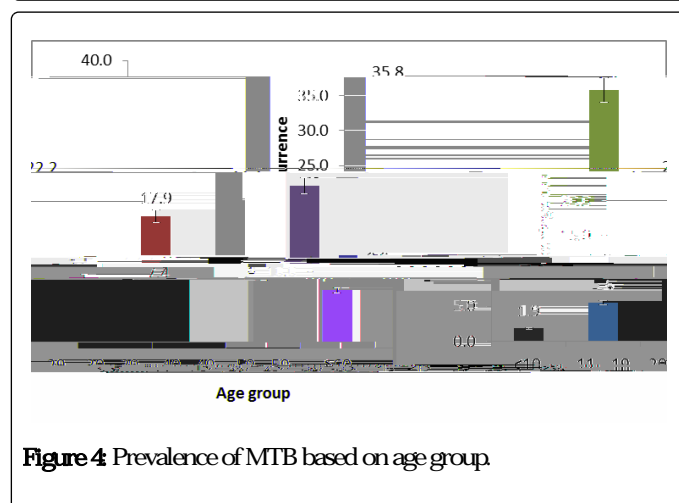
total prevalence. Y results are represented with charts as shown below for clarity purposes (Figures 1-4).



**Figure 2** Prevalence of MTB based on location.



**Figure 3** Prevalence of MTB based on sex.



**Figure 4** Prevalence of MTB based on age group.

## Discussion

Tuberculosis is a respiratory tract illness and has for a while been regarded as a public health concern owing to its increased prevalence

and spread through air droplets. Its treatment is usually done using antibiotics such as rifampicin and isoniazid. However, in recent times, resistance to these drugs has been recorded. It is thus, important that regular surveillance be carried out to determine its prevalence at any point in time especially in endemic areas such as Nigeria with increasing trend of evidence based weak health infrastructure, coupled with expounding indices of risk factors, such as poverty and poor personal hygiene outcome, that favors the spread of the scourge in our remote communities.

This study which was carried out on TB from the Braithwaite Memorial Specialist Hospital (BMSH) and the University of Port Harcourt Teaching Hospital (UPTH) recorded a prevalence rate of 29.2% from a sample size of 555 in overall. This is close to that recorded by Nwachukwu and Peter (21.6%) in Abia State, Nigeria [10], but higher than that recorded by Azuonwu et al. in their study carried out in Bayelsa State, Nigeria where they recorded a prevalence of 10.3% [11]. This increase in prevalence may be attributed to the increased sample in this study and also the fact that Port Harcourt is densely populated when compared to Yenagoa side by side where the previous study was carried out.

Males and females made up 63% and 37% of the total prevalence respectively. This gender distribution was also reported by Jumbo et al. in their study carried out between 2003 and 2012 at a DOTS centre at Igbogene, Yenagoa [4]. It was observed that males accounted for 61.4% of the total prevalence while females accounted for 38.6% within the same period. Similar studies by Okonko et al. [12] Obiora et al. [13] and Akpaka et al. [14] also recorded a higher prevalence among males. Nwachukwu and Peter also recorded a higher TB infection rate among males [10]. A study by Azuonwu et al. however was not in agreement with this study as females made up a higher percentage (55.7%) of the total prevalence than males [11]. Although the reason for this gender distribution was not investigated, Diwan et al. suggested that immunological and biological factors may be responsible.

