# Poverty and patient abandonment at Muhimbili National hospital, Tanzania

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## Abstract

**Background: Poverty is the state of having little or no money and few or no material possessions. Poverty can be caused by unemployment, low education, deprivation and homelessness**

**Objective: The aim of this study was to assess the relationship between poverty and patient abandonment (PA) in hospitals, and its impact on health care employing Muhimbili National Hospital (MNH) as a prototype and to assess the attitude of health care professionals (HCPs) towards the patient.**

**Methodology: This was a randomized cross-section study involving patients and HCPs at MNH. Nevertheless, the study targeted all patients who were abandoned at MNH and who voluntarily accepted to participate in this study under informed consent and strict confidentiality. A semi-structured interviewer-administered questionnaire was used to obtain information from the HCPs, while personalized interviews with the patient using structured and semi-structured questionnaire were conducted. Poverty assessment tools were possession of resources, level of education, money (income and expenditure per month and year), and accessibility to basic needs.**

**Findings: A total of 84 respondents who were stratified into 27 HCPs and 57 abandoned patients were involved in the research. This is the first study to be conducted in Dar es Salaam with respect to PA in hospital. Results revealed unnecessary overcrowding in wards and overwhelmingly heavy burden of patient care on the HCPs. The study also observed a correlation between poverty and PA, which was to a great extent related to the patient's level of education. The respondents strongly condemned PA as demonstration of ungodliness and immoral act.**

**Conclusion and recommendation: Poverty and PA can be alleviated by equipping the citizens with an adequate education and appropriate health care services (HCSs). The government should think of re-introducing subsidies on HCSs in order to alleviate the burden of medical expenses incurred by the low income citizens, particularly the unemployed and farmers. The study also recommends that the government should improve HCSs in regional hospitals in order to reduce/avoid travel and general patients care expenses.**

**Key words:** Poverty, patient abandonment, health care services, level of education

## Introduction

Poverty is the state of having little or no money and few or no material possessions. Poverty can be caused by unemployment, low education, deprivation and homelessness.[1-2] Lack of local health clinics and low-cost healthy foods, along with public space for physical activity, may be among the factors that contribute to poor health and even higher risk of death due to curable diseases among patients who live in poverty.[3] East Africans are some of the poorest people in the worldranking in this order: Kenya-Uganda-Tanzania.[4] Therefore, Tanzania being one of the poorest countries, her citizens face several socio-economic problems, especially for unemployed, elders and orphans. Whilst abandonment is the act of giving something up. Abandonment is a voluntary relinquishment of possession of thing by owner with intention of terminating ownership, but without vesting it in any other person. It is the relinquishing of all title, possession, or claim, or a virtual, intentional throwing away of property, in this case a relative. The term includes both the intention to abandon and the external act by which the intention is carried into effect. In determining whether one has abandoned a person/relative or rights, the intention is the first and paramount object of inquiry, for there can be no abandonment without the intention to abandon.[5-6] Poverty leads to PA because medicines and medical services in general need money. Therefore, a person with no money, homeless without relatives to support him/her, he/she may automatically be helpless (unattended and abandoned).

An individual's health is a function of many factors, the most important being the degree of responsiveness of the health system to individual's non-medical expectations, degree of health fairness in health care financing and self-esteem like the feeling of worthiness that an individual enjoys [7]. Nevertheless, because of the existence of poverty gap between poor and non-poor, those right are denied to the poor. The poverty gap defined as the requirement of money (shortfall) by a poor to come out of the poverty or gap between the total consumption value of a poor and the value of the poverty line. The poverty gap index is a standard measure of the depth of the poverty that averages the ratios of shortfalls to the value of poverty line over both poor and non-poor assuring zero shortfalls for non-poor and presents as percentage. Shortfall quantifies the poverty gap in terms of money, in possession of resources and access to basic consumption needs.[8]

However, since HCSs are now higher on the international agenda than ever before and concern for the poor is becoming a central issue in development. The National Strategy for Growth and Reduction of Poverty (NSGRP), MKUKUTA in its Swahili acronym under its poverty reduction strategy-targets which are similar to the millennium development goals-(MDG), provides a vehicle for increasing public allocations to priority sectors, where education and health featured particularly strongly.[1,9-11] Thus health improvement should simultaneously march with poverty alleviation and by so-doing to a great extent PA might be attenuated. In Tanzania, the provided HCSs (state or privately operated) are an important economic asset, and are not gratuitous, though they are subsided by the government; however they are unaffordable by majority of the citizens, particularly the poor.[12-13] Therefore this study aims at assessing the factors that attribute to PA, attitude of HCPs to patients, and its effect on HCSs.

## Methodology

### Study area and population

The study was conducted at Muhimbili National Hospital (MNH) in Dar es Salaam City, which is the largest city and the main business centre in the country. Dar es Salaam is located on the east-coast part of Tanzania bordering the Indian Ocean to the east and all other sides the Coast region. MNH is the most important health facility in the country to which most serious cases are

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conveyed. The study targeted all patients who were abandoned at MNH and who also voluntarily accepted to participate in this study. It also involved all available and willing HCPs. Exclusion criterion was to exclude all subjects who were unwilling to participate.

**Study design**

It was a randomized cross-section study which involved patients and HCPs at MNH. It also involved all available and willing HCPs.

**Data collection**

A semi-structured interviewer administered questionnaire was used to obtain information from the HCPs, and individualize interviews guided by a structured and semi-structured questionnaire were conducted to extract information form the patient. The questionnaire for the HCPs sought information on their opinions on why patients were abandoned, what measures were been adopted to resolve the problem, how PA affected their daily duties, what were the abandoned patient's major requirements. It also looked into the attitude of the HCPs to the abandoned patients, and how could the HCPs tackle PA. The interview with the patient enquired on the following key aspects: demographic aspects, reasons for admission (disease condition), physical residential address, and region of origin. It also elicited the attitude of the HCPs to the abandoned patients. These aspects were further complemented by asking the patients whether they had have relatives nearby or any at all, their socio-economic capabilities, what they thought was/were the reasons their relatives did not take care of them. To seek any possible solution, the patients were also asked what they thought could be done to extricate this awful situation. The main poverty assessment tools employed in this study among several factors were possession of resources, level of education, money (income and expenditure per month and year), and accessibility to basic needs such as food, education, health care, and living in a decent shelter.[14]

**Data analysis**

All questionnaire forms were checked for missing and out of range data and for inconsistent data. While the data obtained through the interviews were cleaned on the daily basis. Then all relevant questionnaires were assigned numbers, and all open-ended questions were coded before data entry. The complied data were analyzed by Statistical Package for Social Sciences (SPSS version 10, 1999) computer software (SPSS Inc., Chicago, IL). Associations between poverty and PA were analyzed using Chi-squared statistics for contingency tables. Significance level was set at $p<0.05$.

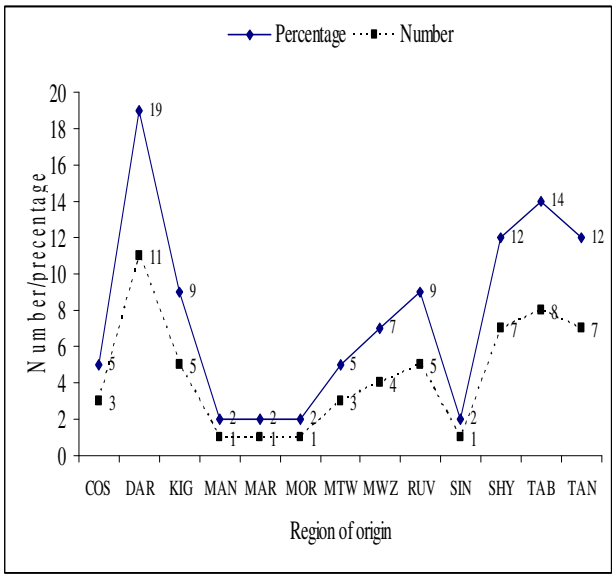
**Ethical issues**

These were addressed to the MUCHS and MNH relevant authorities. Both patients and HCPs voluntarily participated in this study under informed verbal consents, after clearly being explained the aim of the study. The participants were also assured of confidentiality of volunteered information.

**Results**

**Socio-demographic characteristics of the study population**

Fifty seven patients participated in the study, out of those, 29 (51%) were females and 28(49.1%) males. Figure 1 shows distribution of the study population per region of origin. The ages of majority of the abandoned patients (61.8%) ranged from 30-65 years, 15 (25.5%) patients were between 19-29 years and a few 7(12.7%) were over 65 year-old. Table 1 summarizes the patients' demographic characteristics in relation with their education levels. Out of 27 HCPs, 18 (67%) were females and 9 (33%) males.




Key: COS-Coast; DAR-Dar es Salaam; KIG-Kigoma; MAN-Manyara; MAR-Mara; MOR-Morogoro; MTW-Mtwara; MWZ-Mwanza; RUV-Ruvuma; SIN-Singida; SHY-Shinyanga; TAB-Tabora; TAN-Tanga.

**Figure 1:** Distribution of abandoned patients categorized per region of origin.

**Impact of patient abandonment on HCS and attitude of HCPs towards the patients**

This study also revealed that in the current year 2006 (May), the rate of abandonment was expected to be higher compared to the previous years (2004-2005) data not shown. Giving explanations to this trend the interviewed HCPs said this was due to increased poverty 20 (74%), 6 (22%) said due to withdraw of subsidy for referred patients and 1 (4%) attribute this to emergency of much more diseases. Patient's abandonment negatively affected HCSs since obliged the hospital management to spare extra time and efforts to handle both the incoming and the abandoned patients, which led to patients overcrowding in wards. Figure 2 shows the patient's relatives who would be responsible for taking care of them. Almost a half of

the patients (49%) said they were taking care of themselves.

Most of the interviewed HCPs said that the service needed for abandoned patients were everything 18 (67%), this includes feeding, bathing, dressing, accommodating etc. Whilst 5 (18.5%) of the HCPs said the patients needed monetary aids to purchase medicines, and 2 (7.4%) said all they needed was localization of their relatives to incur medical expenses, and another 2 (7.4%) needed money for treatment and general care, which is almost similar to the shortly stated reason. The HCPs said they usually helped the patients by addressing the problem to the Director General of MNH (60%), inform the social workers on the matter (16%), by finding Samaritans/donors to alleviate the problem (20%), and 4% of the HCPs said they helped them by encouraging and counseling them. Patient's abandonment was generally condemned and described variously as immoral, inhumane and demonstration of ungodliness by the respondents. Gastrointestinal problems, gingivitis and tuberculosis were among the major health problems that affected the patients (Table 2).

**Relationship between: patient occupation-education level and duration of sickness prior seeking HCS**

The study also investigated on factors that led to PA at MNH. Most of the HCPs said the patients had no relatives near by 14 (52.0%), followed by those who the patients' relatives had no fares for visitation 10 (37%), and others 2 (7.4%) said was due to fear of contracting tuberculosis (TB), HIV and leprosy. Table 3 stratifies the patients in accordance to their education levels, and depicts various reasons as to why they think their relatives had abandoned. The study findings also revealed a correlation between the patient's duration of sickness before seeking HCSs and level of education as has been depicted on Figure 3. No significant differences ($p < 0.05$) were observed on the patient's duration of sickness between those who had completed primary education (22 days) and those who had secondary education (31days); similarly between patients who had never schooled (43 days) and those who had uncompleted primary school education (40 days).

Table 1: Demographic characteristics of the study population (abandoned patients).

| Disease | No. of patients | % | Cumulative % |
|---|---|---|---|
| Gingivitis | 9 | 15.8 | 15.8 |
| Tuberculosis | 6 | 10.5 | 26.3 |
| Gastrointestinal problems | 14 | 24.6 | 50.9 |
| Paraplegia | 2 | 3.5 | 54.4 |
| Kidney problems (failure, calculus) | 2 | 3.5 | 57.9 |
| Polymyositis & dermatomyositis | 3 | 5.3 | 63.2 |
| Epilepsy | 3 | 5.3 | 68.5 |
| Injuries (breast, leg, arms) | 3 | 5.3 | 73.8 |
| Hernia | 2 | 3.6 | 77.4 |
| Keloid | 1 | 1.7 | 79.1 |
| Pains (head, chest) | 2 | 3.6 | 82.7 |
| Malaria and anemia | 3 | 5.3 | 88.0 |
| Visual problems | 7 | 12.0 | 100.0 |
| **Total** | **57** | **100.0** | **100.0** |

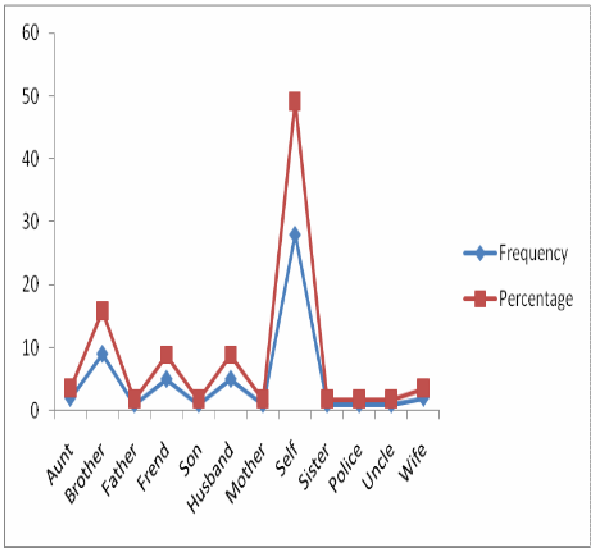



Figure 2: The patients' would-be care takers of the abandoned patients

Table 2: Reasons (disease conditions) that led the patients to be referred to MNH.

| Patients reasons for staying at MNH | Education Level (%) | | | |
|---|---|---|---|---|
| | Incomplete PE | Completed PE | Secondary | Never schooled |
| Relatives had no fares for visitation/take care of them | 6 (10.53) | 4 (7.02) | 2 (3.51) | 2 (3.51) |
| Don't have money for diagnosis | 5 (8.77) | 3 (5.26) | 0 (0.0) | 0 (0.0) |
| Don't have fares and referral letters | 3 (5.26) | 5 (8.77) | 1 (1.75) | 0 (0.0) |
| Don't have money for treatment | 3 (5.26) | 5 (8.77) | 2 (3.51) | 7 (12.3) |
| Don't have fares/money for treatment | 2 (3.51) | 3 (5.26) | 1 (1.75) | 3 (5.26) |
| Total | 19 (33.3) | 20 (35.1) | 6 (10.5) | 12 (21.1) |

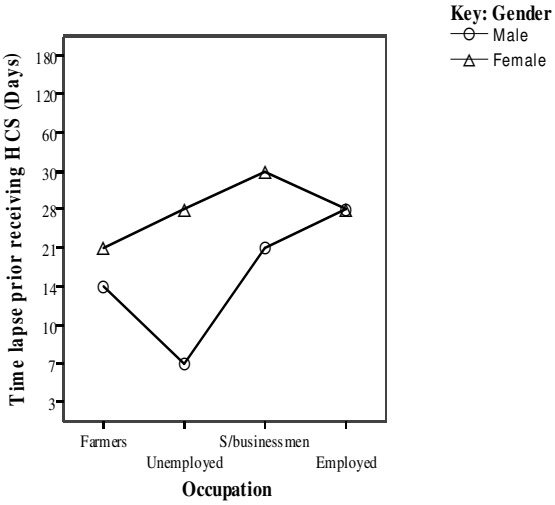



Figure 3: Time-lapse prior receiving/seeking medical attention in relation to the patient gender and occupation. Lines/points on graph represent modes.

Table 3: Reasons given by respondents as to why they their relatives abandoned them and why they were stranded at MNH.

| | Education Level (%) | | | |
|---|---|---|---|---|
| | Incomplete PE | Completed PE | Secondary | Never schooled |
| **Occupation:** | | | | |
| Farmers | 14 (24.56) | 8 (14.02) | 0 (0.00) | 7 (12.3) |
| Employed | 3 (5.26) | 4 (7.02) | 1 (1.75) | 0(0.00) |
| Unemployed | 0(0.00) | 4 (7.02) | 1 (1.75) | 1 (1.75) |
| Small businessmen | 2 (3.51) | 4 (7.02) | 4 (7.02) | 4 (7.02) |
| Total | 19(33.33) | 20(35.09) | 6(10.52) | 12(21.07) |
| **Sex:** | | | | |
| Females | 8 (14.03) | 11(19.30) | 4(7.02) | 6(10.53) |
| Males | 11(19.30) | 9(15.79) | 2(3.50) | 6(10.53) |
| Total | 19(33.33) | 20(35.09) | 6(10.52) | 12(21.06) |
| **Age:** | | | | |
| 1-18 | 2(3.50) | 1(1.75) | 0(0.00) | 3(5.26) |
| 19-29 | 13(22.81) | 12(21.05) | 5(8.77) | 6(10.53) |
| 30-65 | 4(7.02) | 7(12.30) | 1(1.75) | 3(5.26) |
| Total | 19(33.33) | 20(35.1) | 6(10.52) | 12(21.05) |

**Key: PE-primary education**

## Discussion

There are many different definitions and concepts of poverty. This study focuses on a few fundamental aspects of poverty that it is defined as whether households or individuals have enough resources or abilities today or to meet their needs, inequalities in the distribution of income, consumption or other attributes across the population. Tanzania being one the poorest country her citizens face so many financial constraints as the results of this study show. The study findings show that majority of the patients found to be abandoned were farmers; this is because the rural area people have lower incomes and more poverty-stricken than in the urban.[9-10] Most of the reasons mentioned by the farmers/patients that led to their abandonment were inability to incur operation and diagnostic tests expenses, and inability to buy some expensive drugs especially those were unavailable at the MNH pharmacy. If MKUKUTA targets are to be met, it is clear that rural poverty reduction needs to be accorded critical priority. Since poverty reduction is sensitive to growth, a strategy must be put in place that ensures high growth for a sustained period of time. This calls for two things to happen. First, agriculture must grow at a sustained rate of at least 6 % per annum. Second, growth needs to be broad based and strategies that promote such broad-based growth must be developed and implemented [11]. Nonetheless, the reasons given by patients who were engaged in small business, unemployed as well as the employed patients were not dissimilar to those of the farmers. Previous studies that have analyzed the status and trend of poverty have focused on the incidence of poverty measurement, that is the percentage of the population whose per capital consumption is below the basic basket of goods/ poverty line.[11, 15-16] This study tries to translate this into HCSs and its accessibility by those who live below the poverty line. Result shows that PA was done intentionally, because most of the abandoned patients hailed from Dar es Salaam region. These patients claimed that their relatives had no money for fare to visit them or to pay for other important staffs. Patients from other regions said they had no relatives around, and others said unknowingly have been abandoned by their relatives. But obviously this was attributable to poverty. Hopefully, if MKUKUTA and MDG will accomplish their goals of halving the incidence of poverty by 2010 and 2015 respectively[11], this will expectedly be reflected on reduction of PA.

Illiteracy is one of the factors found to attribute to abandonment. Most of the abandoned patients were those who had not completed primary education, followed by those who had never schooled and who had just completed primary education. Although, the broadly based primary school education plays a major role in strengthening human capabilities in reducing poverty. Nevertheless, the available data suggest that the poor are more likely to be less educated.[10] This shows a direct association between rate of abandonment "poverty" and illiteracy or inadequate education and thus poor knowledge on how to elude hardship of the living. Furthermore, this study finding is in parallel with the fact that education is important in solving the problem of poverty. Since educated persons would not only know how to fight with poverty; saving money for emergencies and unpredictable situations, but also know how to get access to HCSs and other daily needs[5,17]. The act of PA not only reflects the inability of the patient to afford his/her health care expenses, but also goes back to relatives, whom for sure, they would not abandon their loved ones if they could be financially well. Most of the relatives presumably find PA as a remedy, since the patient will on the government care. A rich abandoned patient would just employ someone to take care of him that will be the right moment to spend his money wisely.

Most of the abandoned patients were obliged to sleep on the floor in order to leave beds for incoming patients. Certainly, this situation is hazardous for both patients and HCPs, since increases risks of contracting nosocomial infections.[18] The study also revealed that most of the patients needed to be fed, to be cleaned up and dressed. Others needed someone to localize their relatives to incur medical expenses. Fortunately, all these tasks were humanly and kindly performed by the HCPs, more specifically nurses. Generally, the study uncovered that the HCPs were very much concerned and humane to the patient. They had been counseling and helping the patient whenever deemed necessary. While HCPs were juggling all these demands, they were under escalating pressure to discharge the patient or localize the patients' relatives. Indeed, nowadays HCPs are asked to become enforcers of the very ''throughput'' that they feel overwhelmed by the patients they care for and makes their job so frustrating.[19] However, in several occasions the social workers were also informed and asked to help in the problem.

During the research, the patients were observed to be very desperate; since they were expecting some kind of assistance from the research team. Consequently, the HCPs were persistently asked "when are they coming", implying the research team. Because we could not offer them anything substantial, they became reluctant to keep on participating in the study. Therefore, in parallel to Charles & Charles findings[20], this study has also directly associated poverty and patient abandonment.

## Conclusion

Poverty and PA can be alleviated by equipping the citizens with an adequate education and appropriate HCSs. Patient's abandonment was strongly condemned as immoral and as inhumane by the respondents. There is a

direct association between poverty and PA, which is to a great extent, is related to the patient's level of education. Therefore, the government should think of re-introducing subsidies on HCSs in order to ease the heavy burden of medical expenses incurred by the low income citizens, particularly the unemployed and farmers. The study also recommends that the government should improve HCSs in regional hospitals in order to reduce/avoid travel and general patients care expenses. The plight of abandoned patients at MNH is currently addressed in an uncoordinated and fragmented manner. An integrated approach, involving all sectors affected by PA, should be promoted to improve the lives of these patients and reduce pressure on the health sector. Nonetheless, the respondents' belief that government should subsidize or offer free HCSs to the poor in order to extricate poverty and relationship between poverty and PA need to be further investigated.

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