

## SHORT COMMUNICATION

### Availability of prescribed medicines for elders at Sekou-Toure Regional Referral Hospital in Mwanza, Tanzania

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#### Abstract

Many older people are unable to afford even basic treatment, let alone, the medications needed to control chronic diseases that become more prevalent in older age. This study was conducted to assess the implementation of the Tanzania national exemption policy on availability of prescribed medicines in elderly people. This cross-sectional study was conducted at Sekou-Toure Regional Referral Hospital in Mwanza, Tanzania, from April to June 2016. Randomly selected outpatients aged above 60 years who attended the hospital were involved in the study. Data were collected by using interview guided questionnaire. Each patient was privately interviewed to obtain information on availability of medicines prescribed and whether or not the medicines were provided free-of-charge according to the exemption policy. A total of 100 outpatients were involved in the study. The mean age was 66.25 years (range= 60 to 87 years). About one-third (31%) were members of social security fund receiving monthly retirement pension. Only 27% ( $p$ -value=0.44) of elders received all medicines as per prescription. Majority of elder patients (39.7%) received 50% of prescribed medicines per prescription while 4.1% did not receive any medicine prescribed and only 1.4% received 80% of medicines prescribed. Results show that almost 50% of elders with diabetes received all anti-diabetics prescribed while 37% of elders received all antihypertensive prescribed. There is poor availability of medicines used by elderly people at Sekou-Toure Regional Mwanza thus elders do not get free medicines as per national cost sharing policy.

**Key words:** medicines availability, elderly people, exemption policy, Tanzania

The population of older people (aged 65 years or older) is expected to reach 1.5 billion by 2050 (NIH, 2011). The most rapid increase is taking place in the developing world, with Africa alone projected to have 204 million to 210 million older people by the year 2050. People's notions about what constitutes old age is more linked to the decline of a person's physical abilities and retirement. However, the notion of retirement is incongruent with African life experience as only a small share of workers are employed in the formal economy and could actually "retire" from their jobs (Ferreira, 2005).

The coexistence of two or more chronic conditions is common among elders. The prevalence of comorbidity is greater than 60% worldwide and is probably greater than 80% among persons aged  $\geq 85$  years (Salive, 2013). Many older people are unable to afford even basic treatment, let alone, the medications needed to control chronic diseases that such as diabetes and hypertension become more prevalent in older age (NIH, 2011).

People grow old in a social and economic context that affects their psychosocial development: their feelings of self-esteem, value, and place in family and society. These factors have a combined effect on the morale of older people, and a number of models have been developed to

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explain why some people remain more active and healthier at older ages than other people (Kinsella & Phillips, 2005). Primary healthcare services are rarely age-friendly. Older people are still being denied their right to accessible and appropriate healthcare. Healthcare systems are not being adapted to take into account population ageing. Older patients continue to be refused treatment because they are too old and too poor (Williams, 2009).

According to the government policy, exemptions are targeted to vulnerable groups. These have been defined to include pregnant mothers and children under the age of five years. These are directed to get free-of-charge medical services on essential reproductive and child health related problem (MOH, 1994). Furthermore, in 1999 the Minister for Health officially announced in one of the National Parliamentary Budget Sessions that all Tanzanian citizens aged 60 years and above should be exempt from user charges at government health facilities (Mubyazi, 2004). However, elderly people access in health services delivery is still a threat in Tanzania. This limit elder's opportunity to involve in production as they find themselves victims of health problems.

The main challenges in accessing health services to elders in public facilities including inadequate knowledge on free medical treatments, waiting time and lack of important medication (G. Sanga, Unpubl). Health system needs to be strengthened by making essential medicines available for patients. Ensuring access to free medicines is likely to reduce private expenditure on medicines, which is a long-term, sustainable way to towards universal health coverage (Prinja *et al.*, 2015). Little is known on implementation of the government's policy for free medication and treatment to old age individuals in Tanzania. Therefore this study was conducted to assess the implementation of the policy particularly on availability of prescribed medicines in elderly persons at Sekou-Toure Regional Hospital, Mwanza in north-western Tanzania.

This cross sectional study was conducted at Sekou-Toure Regional Referral Hospital in Mwanza, Tanzania, from April to June 2016. The study included outpatient elders aged above 60 years who attended the hospital and have been prescribed with one or more medicines. The study excluded inpatients or outpatients aged 60 years and above who were beneficiaries of health insurance policy. Convenient sampling techniques was used where all elders with inclusion criteria who attended the hospital during the study period were interviewed.

Data were collected through face-to-face interview using a guided questionnaire. Then, each enrolled patient was privately interviewed to obtain demographic and necessary information such as availability of medicines prescribed on that day of interview, how often she/he gets medicines prescribed when attending the hospital, awareness about cost sharing policy and if medicines received on the day of interview was given free of charge according to the policy. After the interview, the prescription of each patient was reviewed to check availability of dispensed medicines in concern. Due to co morbidity facing majority of elders that makes one prescription to have medicines for more than one disease condition then, the study also assessed availability of medicines specific for common five diseases from study participants.

Data was entered and analysed by STATA Version 11. Categorical variables were summarized in proportions. A p-value of less than 0.05 was considered as statistically significant at the 95% confidence interval. Ethical clearance was granted by the joint Catholic University of Health and Allied Science/Bugando Medical Centre Research Ethics and Review Committee. Permission to conduct the study was sought from Sekou-Toure Hospital Administration. All patients were requested to sign written informed consents before recruitment.

A total of 100 elders participated in the study. Of this, 54% were males, 41% were aged between (60-64yrs), 33% were 65-69 years, 10% were 70-74 years, and another 10% 75-79 years and 6% were aged above 80yrs. The ages of the respondents ranged from 60 to 87 years (mean = 66.24 years). Only 48% of respondents do attend monthly clinic at hospital for various chronic diseases. Thirty-one (60%) were members of social security fund scheme receiving monthly retirement

pension. Only 27% ( $p$ -value=0.44) of elders who attended the hospital during the time of data collection received all prescribed medicines per prescription for free at the pharmacy of Sekou-Toure Hospital.

**Table 1: The proportion of medicines dispensed to the elder persons per prescription (n=73)**

| Proportion of medicines dispensed per prescription | Frequency of prescription | Percentage of prescription |
|--|---------------------------|----------------------------|
| 0  | 3                         | 4.1                        |
| 0.25   | 4                         | 5.5                        |
| 0.33   | 11                        | 15.1                       |
| 0.4  | 6                         | 8.2                        |
| 0.5  | 29                        | 39.7                       |
| 0.6  | 2                         | 2.7                        |
| 0.67   | 14                        | 19.2                       |
| 0.75   | 3                         | 4.1                        |
| 0.8  | 1                         | 1.4                        |

Majority of patients (39.7%) received 50% of prescribed medicines per prescription while 4.1% did not receive any medicine prescribed and only 1.4% received 80% of the medicines prescribed. Most of the participants were suffering from cardiovascular diseases and diabetes (Table 2). Results show that almost 50% of elders with diabetes received all anti-diabetics prescribed while only 37% of elders received all antihypertensive prescribed.

**Table 2: Medicines availability basing on selected common diseases**

| Disease                 | No. respondent with the disease | % respondents who received all medicines |
|-------------------------|---------------------------------|--|
| Cardiovascular diseases | 24                              | 45                                       |
| Diabetes                | 18                              | 52                                       |
| Respiratory diseases    | 10                              | 24                                       |
| Hypertension            | 13                              | 37                                       |
| Arthritis               | 4                               | 25                                       |

Access to essential medicines is important for the achievement of health equity and for increasing the quality of a healthy life for everyone including elderly people. The current study revealed that only about a quarter of elders received all prescribed medicines per prescription. The low percent of those who received prescribed medicine is likely to have been contributed to poor availability of medicines in public health facilities. A recent study in Tanzania reported that lack of medicine was the main problem facing public health facilities and four out of ten patients are not able to obtain prescribed medicines at the health facility (Wales *et al.*, 2014). The study done across low- and lower-middle income countries from 2007-2012, revealed that the average availability of selected essential medicines was 57% in public sector facilities and 65.1% in private facilities (Lorenc & Branthwaite, 1993). These statistics highlight the extent to which this is a problem in many developing countries.

In this study, almost half of elders with diabetes received all anti diabetics prescribed while about one third received all the antihypertensive drugs prescribed. In a similar study in India the availability of 60 % of anti-hypertensive drugs and less than half of anti-diabetics was reported recently (Prinja *et al.*, 2015). Older people with these two chronic diseases are required to attend their clinic on monthly basis; this means that when these medicines are out of stock at the public facility the patient is supposed to buy them from private pharmacies.

The limitation of this study is low sample size. Moreover, the convenient sampling technique used could lead to bias as the sample might not represent the population as a whole.

In conclusion, there is poor availability of medicines used by elderly people at Sekou-Toure Regional Mwanza, most likely due to frequent stock-out thus elders do not get free medicines as per national cost sharing policy. We would like to recommend the Tanzania ministry of health through Medical Store Department to ensure constant availability of medicines used by elderly people in public health facilities.

### **Acknowledgements**

We would like to acknowledge the support obtained from Medical Officer In-charge and Pharmacist at Sekou-Toure Regional Hospital and all patients who participated in this study.

### **Conflict of interest**

Authors declare no competing interests.

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