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Access to Essential Anticancer Medicines in Africa: Case study from Ethiopia

ISPOR Africa Research Network

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Outline

- Introduction and statement of need
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Introduction and statement of need

- Access to essential medicines is corner stone of **universal health coverage**.
- However ensuring access to medicines remains to be a major challenge for the health systems of many African countries
- Different studies show that the overall level of expenditure and per capita expenditures for medicines are low in many African countries when compared with global standards.
  - The share of out-of-pocket expenditure on drugs is very high
  - This results in low economic access to drugs, particularly by the poor

Introduction and statement of need

- There is a low level of access to cancer care in many African countries, especially SSA
- Accessibility (availablitiy and affordability) of cancer medicines is a major challenge
- In Ethiopia:
  - Limited number of hospitals provide cancer care, despite recent changes
  - The high patient caseloads, underfunding and inefficient medicine distribution systems are barriers to consistent service provision
- There is limited research on the accessibility of anticancer medicines in Ethiopia as in the rest of Africa
  - Thus this study is done as part of the ISPOR Africa Research Network initiative

Objectives

General Objective:

- To evaluate the accessibility and pricing of essential cancer medicines in Ethiopia

Specific Objectives:

- To assess the availability of essential cancer medicines in Ethiopia.
- To evaluate the price and price components for selected essential cancer medicines in Ethiopia
- To assess the affordability of selected essential cancer medicines

Methodology

Study design

- Based on the WHO/HAI survey recommendations

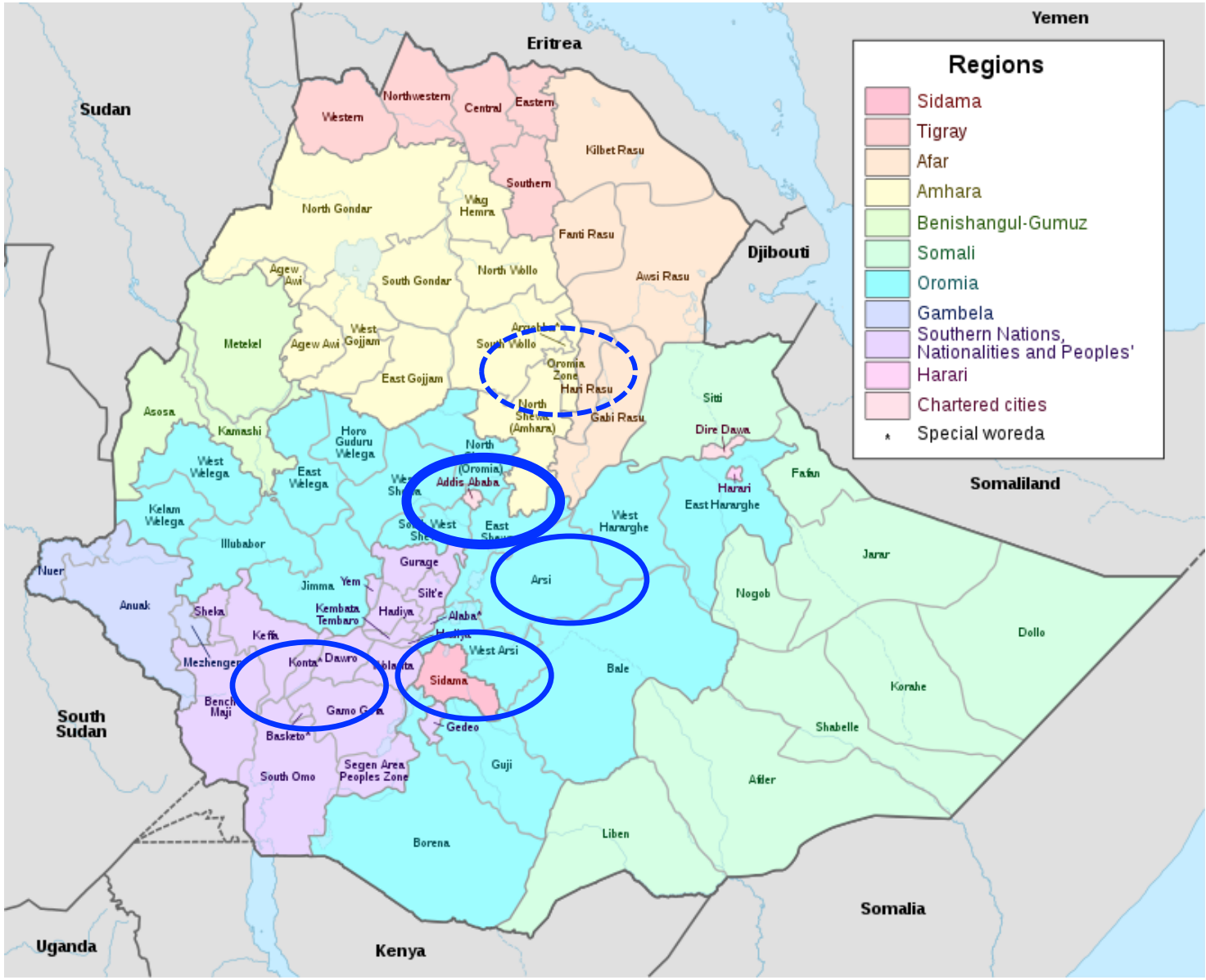
Study setting

- The study was conducted in Ethiopia as part of the ISPOR Africa Research Network Initiative involving seven African countries

Methodology

Sampling and Study Participants

- Based on the WHO/HAI survey recommendations
- Facilities in each administrative area of the study country:
  - Public health facilities (with cancer treatment)
  - Registered private retail medicine outlets



Methodology

Data Collection

- Questionnaires and checklists as suggested by the WHO and HAI
- Based on Ethiopia's (2020) and WHO's essential medicines list (& Oncologist recommendations)
  - A total of 50 medicines were selected

Data Analysis

- All the relevant WHO/HAI recommended analysis methods were employed.
- South African Medicine Price Registry was used as a reference

(http://www.mpr.gov.za/ErrorPage.aspx?aspxerrorpath=/published%20documents.aspx)

Ethics

- Ethical approval obtained from the IRB of the School of Pharmacy, Addis Ababa University

Results and Discussion

- Only data from Addis Ababa will be presented (research in progress)
- 4 public and 8 private facilities were involved in the study

Medicine availability (Mean % availability)

Type of medicine	Public health facilities (n= 4)	Private pharmacies (n=8)
Innovator brand	0%	0%
Lowest priced generic	69.5%	60.5%

Results and Discussion

Procurement prices (EPSA)

Statistics	Lowest priced generic (n= 37)
Median MPR	0.23
25 %ile MPR	0.11
75 %ile MPR	0.36
Minimum MPR	0.03
Maximum MPR	6467.26

Results and Discussion

Patient prices

Statistics	Public Facilities Lowest priced generic (n= 26)	Private Facilities Lowest priced generic (n= 33)
Median MPR	0.29	0.68
25 %ile MPR	0.16	0.45
75 %ile MPR	0.44	2.06
Minimum MPR	0.04	0.10
Maximum MPR	7172.13	8044.46

Results and Discussion

Markups

Type of medicine	Ratio of Public health facilities patient price to procurement price	Ratio of Private pharmacies price to Procurement price	Ratio of Private pharmacies to Public health facilities
Lowest price	26.4%	179.2%	107.9%

Results and Discussion

Treatment Affordability

Lowest paid government worker is Birr 120 (approx. US$ 2.55) per day

Treatment (1 cycle = 21 days)	Days of work based on public facilities' price	Days of work based on private pharmacies' price
Doxorubicin and cyclophosphamide (breast ca tx)	7.8	21.9
Cisplatin and fluorouracil (cervical ca tx)	4	21.2
Cisplatin and gemcitabine (nasopharyngeal ca tx)	23.2	67.9

Conclusions

- Apparent increase in medicine availability in the past four years
- Better pricing and affordability in the public sector
- A lot still needs to be done to improve access
- Data collection from other parts of the country on going

Thank you!