



The Open University

# The Tanzanian public health sector as buyer and user of medicines and other supplies and equipment

REPOA Policy Dialogue Workshop

Research project on Industrial Productivity  
and Health System Performance

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# Outline of presentation

- How is the public sector in health care currently supplied?
- Strengths and weaknesses of near-monopoly supply structure
- Challenges facing the main supplier (Medical Stores Department - MSD)
- Experience and impact of supply problems on patients and health staff
- Implications for strengthening local supply chains

## Background: health sector facilities and retail outlets in Tanzania

- Health services provided through three levels of facilities: dispensaries: 86.7%; health centres: 9.4%; hospitals: 3.9%
- Nearly 6000 facilities (MoHSW, 2010)
- 67% owned by public sector
- Medicines and medical supplies retailed through pharmacies, Accredited Drug Dispensing Outlets (ADDOS), and licensed drug shops.

The public sector is supplied almost entirely by a public supply chain: from MSD directly to facilities or through District Medical Officers

**Sector where medicines sourced, by sector of use/retail sale (% of all tracers)**

Facility/shop sector	Source sector			Total
	Public	Donation	Private	
Public	97	1	3	100
FBO/NGO	16	2	83	100
Private	3	0	97	100
<b>Total</b>	50	1	49	100

Also true for medical and laboratory supplies and equipment though donations are important for medical equipment supply

**Sector where other tracers sourced, by sector of use/retail sale (% of all tracers)**

Facility/shop sector	Source sector			Total
	Public	Donation	Private	
Public	85	11	4	100
FBO/NGO	20	19	61	100
Private	7	6	87	100
<b>Total</b>	50	11	39	100

As a result the monopoly public supplier, MSD, is undertaking activity of daunting complexity and scale

- Receiving orders and aggregating required supplies for half or more of the health sector's consumption
- Procurement of medicines and medical supplies through tendering
- Managing multiple funding sources including government and donor funds
- Receipt of goods from local suppliers and overseas exporters, and clearance of goods
- Warehousing, storage and handling
- Transport and supply across very large geographical area

“MSD is overburdened” [experienced senior pharmacist]

Nevertheless, the monopoly supply system has very substantial achievements

1. Availability of tracer medicines and supplies was quite high in public hospitals at the time of the research
2. Prices of medicines bought through the public sector are substantially below the prices on the private sector
3. Few complaints on medicines quality.

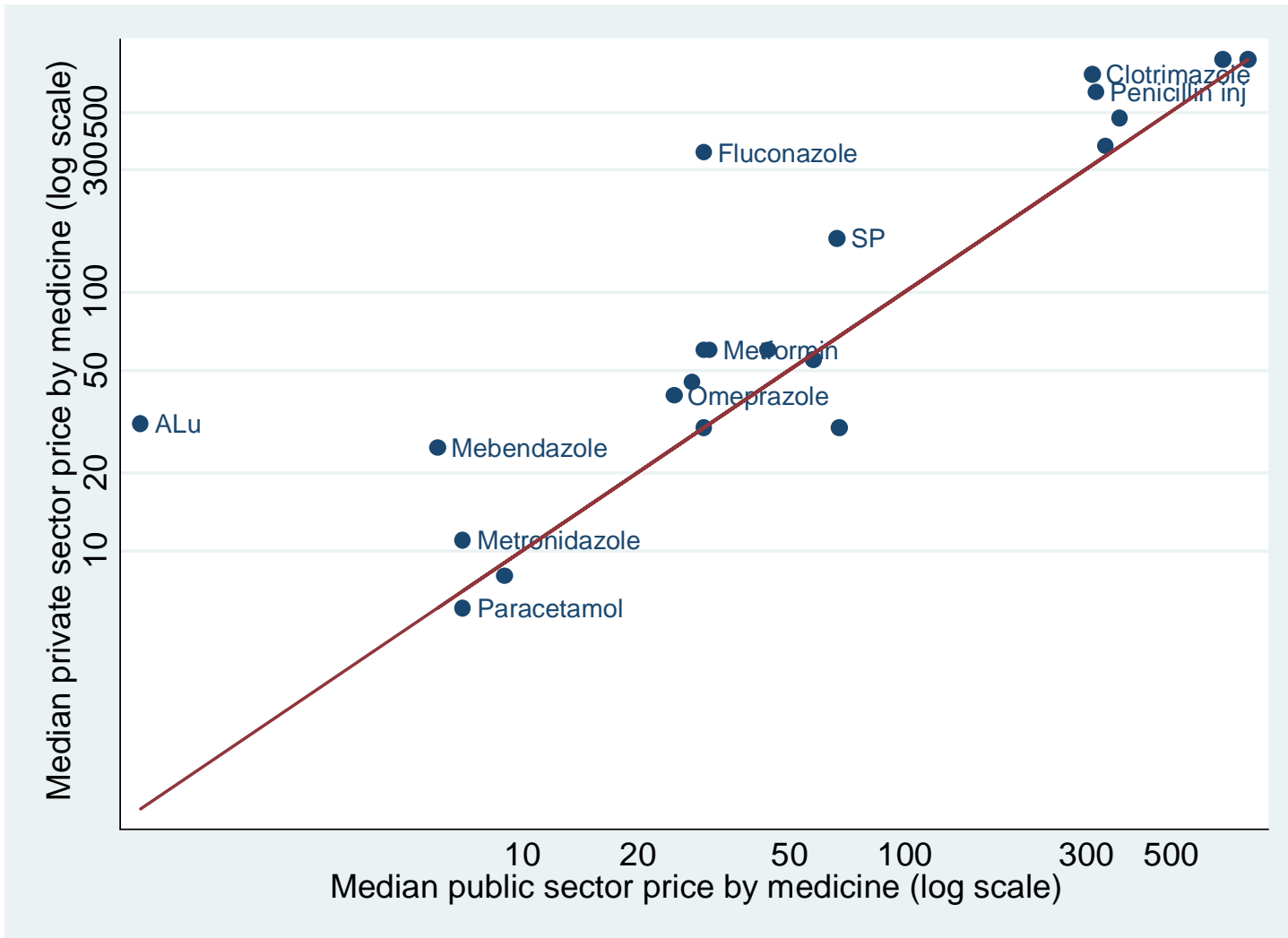
1. Availability of tracer medicines quite high in public hospitals; >90% of essential supplies also available

**Availability of tracer medicines in hospitals, by sector (% of all tracers)**

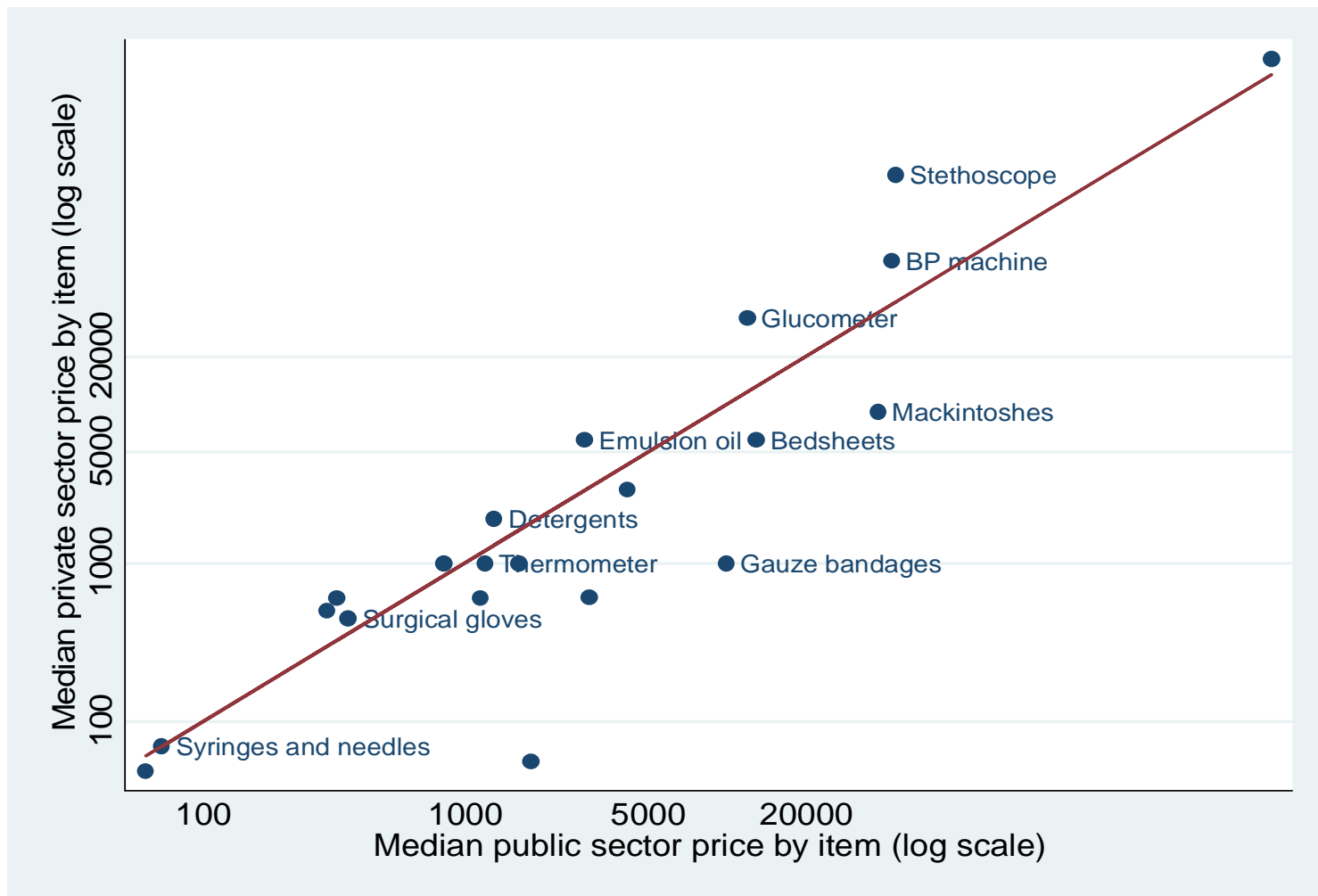
<b>Facility/shop sector</b>	<b>Availability</b>			<b>Total</b>
	<b>Available</b>	<b>On order</b>	<b>Never ordered</b>	
<b>Public</b>	86	7	7	100
<b>Faith-based</b>	85	2	13	100
<b>Private</b>	67	8	25	100
<b>Total</b>	83	6	11	100



2. Buying prices of medicines were generally lower when facilities purchased from MSD as compared to purchase prices from private wholesalers



2. ..though buying prices of medical supplies – for which our data are less good – appear sometimes more expensive from the public sector



### 3. MSD medicines and some laboratory and other supplies thought to be of good quality, more mixed views about medical supplies and equipment

“The government) should allow us to purchase drugs from MSD. This will help us to get good quality drugs and avoid the fake things found in our market...” [In-charge, private dispensary, Mkuranga].

What they supply is also of good quality. For example, bed sheets supplied by MSD are very strong and durable and are fit for coping with heavy duty hospital use.” [Hospital pharmacist, private hospital, Ilala]

“Lack of essential commodities at MSD is a challenge. Poor quality of products, things like mop and broom do not last. Detergents ... too dilute and not good enough for hospital use. ...sometimes we get the [mackintoshes] pre-cut from MSD and they do not fit the bed sizes.” [Public hospital, Mkuranga]

The challenges and problems in the public supply chain are nevertheless very great

As experienced by health facilities: shortages and supply gaps, with major implications for patients and staff

- Long delays in getting medicines and other supplies.
- Receiving lower quantities than ordered
- Receiving items that were not ordered
- Particular problems with equipment shortages
- Danger of purchasing low quality replacement items from the private sector.

In public health centres and dispensaries, availability of essential medicines was lower than in hospitals

**Availability of tracer medicines in health centres and dispensaries, by sector (% of all tracers)**

<b>Facility/shop sector</b>	<b>Availability</b>			<b>Total</b>
	<b>Available</b>	<b>On order</b>	<b>Never ordered</b>	
<b>Public</b>	58	9	32	100
<b>Faith-based</b>	72	7	22	100
<b>Private</b>	63	6	31	100
<b>Total</b>	62	8	26	100

## ...as was the availability of medical supplies and equipment

**Availability of medical and laboratory supplies, medical equipment and other supplies in health centres and dispensaries, by sector (% of all tracers)**

Facility/shop sector	Availability				Total
	Available	On order	Never ordered	Not functioning	
<b>Public</b>	62	5	32	1	100
<b>Faith-based</b>	79	3	17	1	100
<b>Private</b>	64	3	33	0	100
<b>Total</b>	66	4	29	1	100

The public dispensaries did not order, or were waiting for, a number of essential medicines

- The items 'never ordered' by >50% of lower level public sector facilities included most of the chronic conditions and mental illness medicines: atenolol (hypertension), omeprazole (ulcers), amitriptyline (depression), metformin (diabetes), glibenclamide (diabetes).
- One of our tracers was oxytocin injectable (for post-partum bleeding): 38% of lower level facilities were either waiting for supplies or did not stock it (spread across all sectors).

## Supplies 'never ordered' in lower level public facilities did not appear inessential

- Nearly half of public health centres had no glucometer to test for diabetes, and a majority had never had glucometer strips;
- one had never had microscope slides;
- nearly half had no sharps box;
- a quarter had never had bed nets;
- a majority had never ordered hydrogen peroxide for wound cleaning;
- one had never had a weighing scale for paediatrics.
- A majority of public dispensaries lacked a microscope – and even more lacked the slides for it;
- however all the public facilities had surgical gloves when visited.



## Causes of supply gaps: long delays that can damage patients

“Look: our September request order was brought on 14 November 2012, very late” [In-charge, Public health centre, Mkuranga]

“Medicines from MSD do not come on time, for example at our centre, the batch that was to be delivered in December 2012 was delivered on 01/02/2013, there was no medicine at this centre the whole of January ...” [In-charge, public dispensary, Meru].

“MSD delays to deliver supplies on time. So it’s so challenging because we are dealing with human beings whose lives we need to save. We don’t have much hand other than waiting for MSD to deliver supplies. “ [Hospital pharmacist, Public hospital, Ilala]

“ It has been over a year we are [repeatedly] ordering ORS but we have not got it yet, yet the main disease affecting children in this area is diarrhoea.” [In-charge, public dispensary, Monduli]

“ Sometimes up to 45% of the order is reported missing... “out of stock”” [Hospital pharmacist, public hospital, Meru]

## Causes of frustration : supplying what was not ordered

“We sometimes get different items from those that we ordered.” [In-charge, Public health centre, Mkuranga]

“MSD brings medicines which were not ordered and this is done repeatedly. A good example is a delivery to our dispensary on 03/01/2013. The following were brought while they were not ordered: Clotrimazole cream 6 packs of 24 tubes @ 45,000; Diazepam 10amps at 20,000; Metronidazole tabs 7 tins of 1000tabs @ at 35,000; Magnesium tabs 5 tins of 1000tabs@ at 15,500...” [In-charge, public dispensary, Monduli]

## Problems of poor quality of some equipment and essential supplies

- “ Poor quality of products, things like mop and broom do not last. Detergents (liquid) soap is too dilute and not good enough for Hospital use. Things like mackintoshes, sometimes we get the pre-cut from MSD and they do not fit on the bed.”  
[Public hospital, Mkuranga]
- “The main challenges we encounter with medical equipment include the poor quality of the items. For example beds do break in less than a year. Things like BP machines : the plastic tubes burst or some of them do not work at all” [In-charge, public health centre, Monduli]

Many public hospitals and other facilities tried to use fees and basket funds to deal with frequent shortages

"Yes, we have a problem of shortages of supplies because of shortages of financial resources. What we collect [in user fees] is not enough [to fill gaps] so we have constant supply shortages. Also, the procurement process takes very long, and there is nothing we can do about this because we have to follow the government procurement guidelines."  
[Hospital pharmacist, public hospital, Monduli]

This could lead to the use of sub-standard supplies from the private sector:

Stock outs, and .. the laboratory delays to get the reagents ...There is a risk of getting low quality from the vendors because of the business oriented, profit making mentality. In case of emergency (hospital running out of stock completely) there are no petty cash vouchers."  
[in-charge of laboratory, public hospital, Mkuranga].

# Impact of supply chain constraints on patients and health staff

Patients do not get treatment in a timely manner

“For example, many patients suffer from malaria, and when I receive the consignment [of medicines] without even a single anti-malarial, it affects my patients and I am also affected since I am not able to serve them... For example, currently the first line anti-malaria is *Mseto* [ALu in Kiswahili], but I get quarterly supplies without it, not even the second line drug [for malaria].” [In-charge, public health centre, Monduli].

People may die because of lack of treatment:

“As delays for medicine continue for a long time, patients’ illnesses get chronic and sometimes they do not recover at all. Most of the patients in our location have low income and they do not have alternative sources to obtain medicine. Many children in our villages have died from pneumonia.” [In-charge, public health centre, Mkuranga]

# Impact of supply chain constraints on health facilities and health staff

Poor patients may be further impoverished

“If there are shortages of drugs then we cannot provide good care to patients. We tell patients to buy drugs outside the health facility where they are more expensive in private pharmacies (if paying patients). Some patients are not even supposed to pay for health care.” [Medical Doctor, Public health center, Ilala]

Patients may lose confidence in facility staff

“Shortages have implications on patients, Delays in the procurement process cause stock outs so this puts patients at risk. For staff it is demotivating and it creates frustration. Patients lose confidence in us if we tell we have no medicines or supplies.” [Medical doctor public hospital, Monduli]

# Impact of supply chain constraints on patients and health staff...5

Blaming health workers demotivates and frustrate them

“.. we are also blamed for not giving drugs or asking the client to buy supplies (we are called corrupt). We are even doubted (professionally) when the patient is not cured. This demoralises us.”[Laboratory technologist, public hospital, Ilala]

Health workers are put at risk

“For workers, it is very frustrating if you don't have supplies. Also lack of supplies e.g. those for cleaning and protection puts workers at risk and they are demoralized. ... staff are supposed to wear three pairs of gloves but may end up wearing just one pair. Staff get frustrated because they cannot do their job professionally e.g. a woman can get a large tear during the delivery process and there would be no sutures.”[Medical doctor, public health center, Ilala]

# MSD's challenges as the monopoly public sector supplier: financial constraints

**Financial resources are inadequate and the flow is irregular while supply chain responsibilities are huge.**

“... the public supply system is not functioning well in terms of ensuring regular supplies. This is mainly due to the fact that there is only one supplier – MSD. MSD is overburdened and depends on financial resources from the public sector, which are not sufficient and are erratic in flow.” [Experienced senior pharmacist ]

**This was recognised by many health facility personnel also:**

“The government (MoH) is also a problem and it is difficult sometimes to put the entire blame on MSD. The government does not provide sufficient financial resources nor does it release approved funds on time.” Pharmacist, public hospital, Monduli]



# The challenges also include procurement frameworks

“Terms of the Procurement Act cause delays in the supply chain. Complying with all set out procedures takes a long time. Therefore if the supplier has problems and you need to change this can cause big problems... The process of getting another supplier, can take up to one year...” [Respondent at MSD in key stakeholder interviews]

# Issues for the public sector supply chain from these findings

- In procurement, MSD's core business of procuring low cost reliable medicines appears strong, while the qualities and prices of other supplies are less consistent?
- In the downstream supply chain, MSD's scope seems too extensive: supplies are not being distributed effectively, and there are real health sector performance costs

## **Questions**

- Could the public sector buy more from local producers?
- Could local producers of medicines be incentivised to upgrade?
- Could local producers improve medical supplies and equipment to produce more for the public sector?
- Could public sector distribution logistics be improved?