



Caring for the Urology patient: Tales from Uganda

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Objectives

- Describing the healthcare system in Uganda
- Training in urology
- Description of urology service provision in Uganda



Introduction

- British protectorate 1894-1962
- Member commonwealth to date
- Independence 9th October 1962 with Muteesa II as president and Obote (PM)
- Republic 1963 and Obote president
- Kingdoms abolished 1966 and then president assumed all government powers
- Socio-political instability from 1971 with coups



Introduction

- Idi Amin 1971-1979
- Multiple coups and short-term presidents
- 1986 to date current president (Y.K Museveni) assumed presidency in a coup. Head of state and head of government
- Civil war (Lord's Resistance Army-LRA) 1986-2008 in Northern Uganda
- 2006- 1st general elections



Introduction

- “the **Pearl of Africa**” (Sir **Winston Churchill** 1909)
- **Population (2014 est.):** 35,918,915
- Home to the source of the Nile and 2nd largest fresh water lake in the world, sits on the equator



- Mountains
- Wildlife
- Tropical forests
- Rivers and lakes
- Home to “**the last king of Scotland**” (Idi Amin Dada)

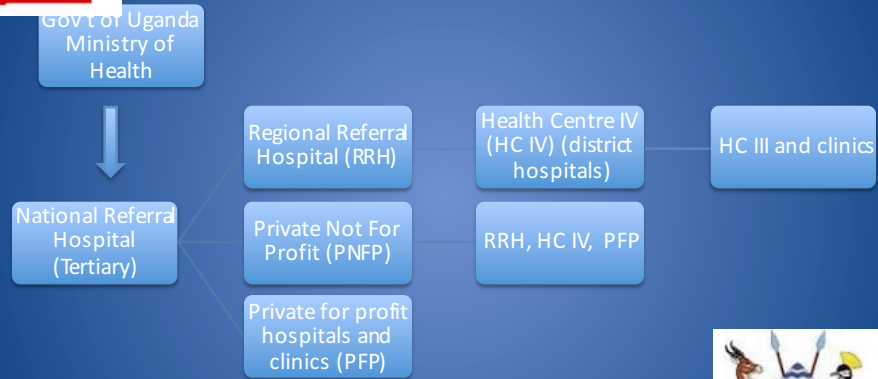




- Geographical area smaller than Oregon
- GDP per capita USD 1500 (c.f Canada USD 51,958)
- Literacy rate 66.8% (c.f 99% Canada)
- Life expectancy at birth 58years (c.f 81.24 year Canada)
- Median age is 15years in Uganda and lowest in the world (c.f 42yr in Canada)



Healthcare System in Uganda

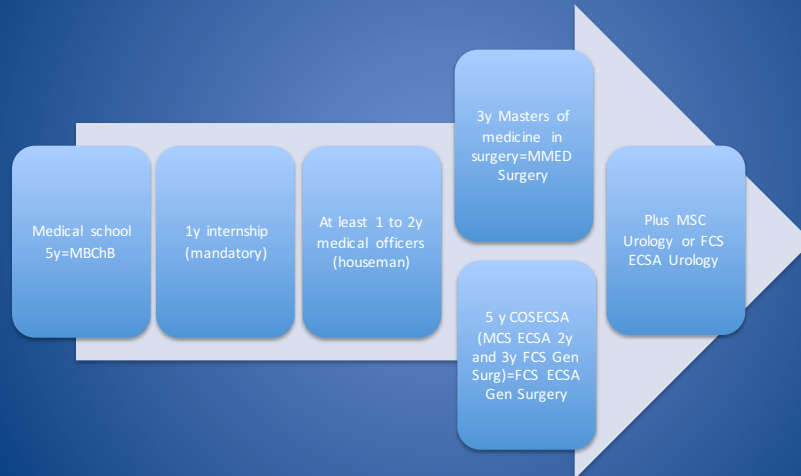


Health funding in Uganda

- General budget support to Uganda: Norway, Ireland, United Kingdom, the European Commission and the World Bank.
- In addition Denmark, Belgium, Sweden, France and Italy provide sector budget support
- 25% of current national budget is from donors (after 2012 c.f 42% previously)
- 2.5% GDP allocated to health (public spending) c.f 11.6% in Canada

- Public institutions funded by government through ministry of finance or ministry of health
- Faith-based and NGO funded hospitals (funded by religious organisations and donors respectively)
- Fee for service (health insurance for employees and directly by patient)

The road to urology



Training in urology



- All urology providers are general surgeons
- MMed Surgery (MUK, MUST), patient based and a research thesis
- College Of Surgeons of East Central and Southern Africa (COSECSA) patient care based
- MSC urology post MMED (not available locally): India, Tanzania - Arusha



Training

- Collaborations:
- IVUmed, Surgery for Children, Bolzano Policlinico -Italy, UBC-Uganda training alliance, others): lectures, consultations, apprentice-style skills transfer, clinical placements/electives abroad

Urology Service Provision

- Public hospitals (NRRH) 5 Urologists
- RRH –general surgeons (limited to skill level)
- Private hospitals and clinics (urologists, general surgeons, medical officers, clinical officers, nurses and others of questionable credentials (**traditional/cultural/religious**)

- PNFP (NGO) –general surgeons and urologists from collaborating groups
- Rural outreaches by Association of Surgeons Of Uganda (ASOU) consultations, skills transfer and support supervision
- Rural outreaches with collaborations (UBC, SFC) doing consultations and skills transfer
- Solitary or one time visiting surgeons

Rural outreaches



- **Camps with UBC** (Swedish, Sickkids)
2 hernia camps, pediatric surgery and urology camps (clearing backlog, consultations and surgery for more complex and reconstructive)
- **IVUmed** (travelling scholars): lectures, consultations and demonstrations in OR
- **Sporadic visiting surgeons:** Unsupervised and “flying solo”. Come in for a week, do their thing and leave with no follow-up or established continuity of care

Collaborations

- **Surgery for Children:** pediatric surgery and pediatric urology-clearing backlog, skills transfer and service provision (Italian NGO)
- **Province of Bolzano ,Italy** and Ospedale di Bolzano (adult and pediatric urology)-skills transfer and service provision, clinical training in Bolzano.

Common conditions

- Large hydroceles and scrotal elephantiasis
- Urethral strictures (trauma and STIs)
- BPH and Ca Prostate
- HIV and associated conditions (HPV condylomata, Ca Penis, Fournier's gangrene)
- Pediatric urology: intersex, hypospadias, enuresis, stone disease, PUV, Wilms tumor
- Stone disease, UPJO, duplications and reflux, renal tumors



Uganda

- **BPH** and **Ca Prostate** first present with urine obstructive symptoms then worked up
- Foley or SPC
- US (volume and bladder residuals)
- Tru-cut biopsy (no imaging guidance)
- If BPH- open prostatectomy and TURP (ltd)

BC

- Surveillance then appropriate treatment

Ca prostate cont'd

- If Ca prostate, radical prostatectomy (if amenable), follow PSA (at patients cost), bilateral orchiectomy
- **Ca Penis:** partial or total penectomy

Urethral stricture

- STIs, TB and trauma
- Difficult management (long wait for care), depends on local surgeons expertise or await visiting teams (majority)

Stone disease

- Limited to open surgery for most bladder and renal stones
- Cystoscopic lithotomy where possible compared to Lithotripsy or ureteroscopy that are available here, laparoscopy

Pediatric

- **PUV**; vesicostomy or foley then wait for visiting surgeon with pediatric scope
- **Hypospadias**: 2 local adult urologists (mostly in private hospitals), majority done at outreach by local or with collaborating teams (majority)

Intersex

- Tests limited to buccal mucosal karyotyping and laparotomy, US
- Mostly falls to visiting teams
- Complications from ill advised operations



Other conditions

- **Schistosomiasis** (hematuria, chronic cystitis, SCC cancer): *endemic to the Nile basin*
- **TB** (kidney, bladder and urethra). Rare more common in immunocompromised
- Filariasis (*wuchereria bancroftii*): epididymitis, orchitis,
- **Spina bifida**. Many die of meningitis from rupture and sepsis. Hydrocephalus managed by external VP shunt except in CURE neurosurgical hospital (3rd ventriculostomy where it was developed). Private pediatric hospital

- **Trauma** (spine and pelvic injuries)
- No multi-disciplinary care for these and not much if any follow-up. *“Don’t know what happens to these patients”*
- *“They are either well or dead, if you don’t see them”*



Boda bodas (taxi bikes) biggest cause of head and spine injuries

- AVSI and Terres des Hommes in northern Uganda (paraplegics and quadriplegics (CISC)
- **FGM** (Clitoridectomy, with or without excision of labia minora and majora, +/- sealing
- **VVF:** complicating obstructed labor (CPD)
- Stunting is 45.5% in <5y and median age of 1st pregnancy is 18y c.f 29y here
- Surgery by local obs/gyn and 1 urologist, outreaches with AMREF (African Medical and Research Foundation)

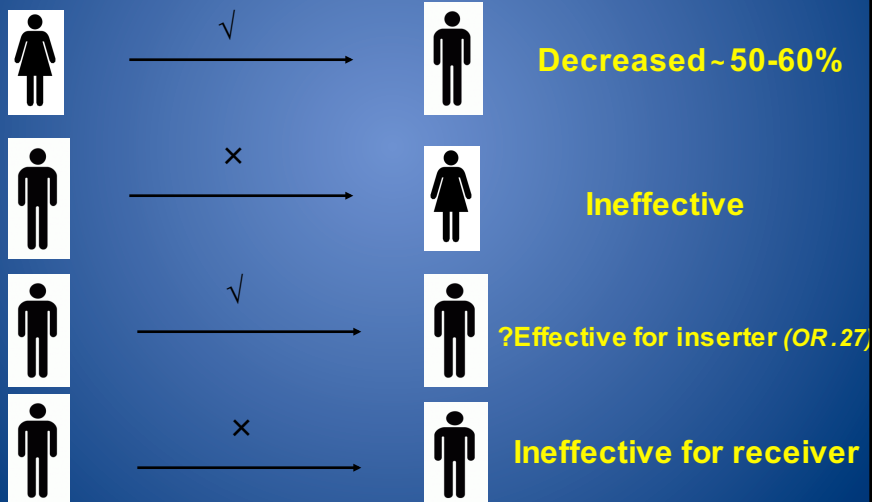
- **Antibiotic use:** drugs approved by NDA and procured by NMS/JMS and sources are questionable
- Inefficacious drugs and frequently have to retreat infections with same drug but from e.g Germany
- Miniscule quantities of active ingredients if not just flour!

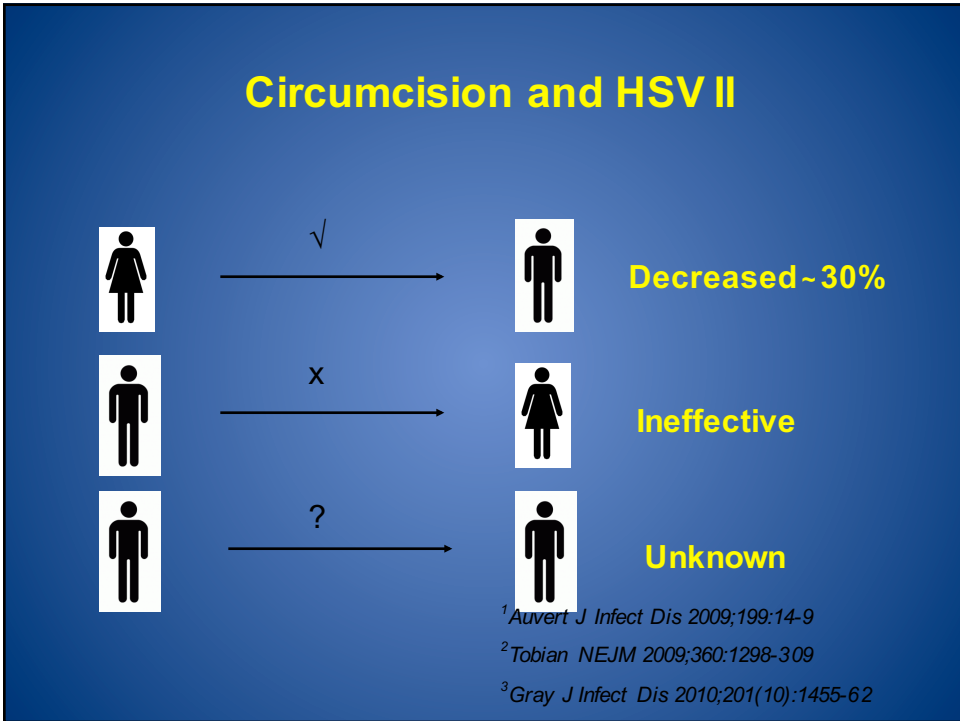
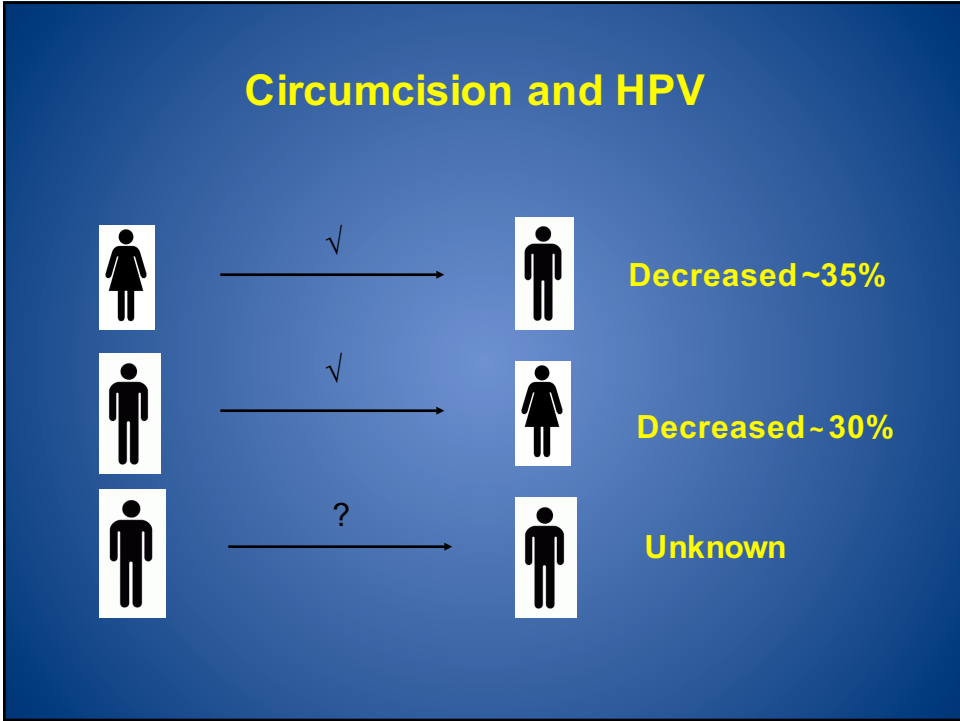
Male Circumcision for HIV "prevention"

- *"15 men on a dead man's chest, yo ho ho, and a bottle of rum"*
- WHO pays for national drive
- All sorts are doing circs including private facilities for ages requiring GA
- Its quick money
- Loads of urethro-cutaneous fistula complicating procedure
- More promiscuity



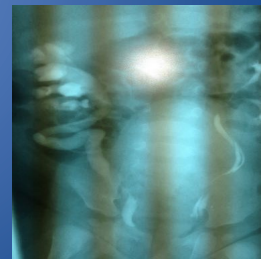
Circumcision and HIV





Available investigations

- US
- XR
- CT (direct cost to patient)
- Contrast urograms, cystourethrograms (direct cost to patient)
- PSA (cost to patient)



Work place injury

- Access to HAART for needle stick injuries
- All hospitals have an HIV project clinics whose physicians do the assessment and start treatment

