



Uganda Cancer Institute

Cancer Prevention and Management

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Kampala Serena Hotel Conference Centre

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What is Cancer

- Cancer is a disease stemming from abnormal alteration(aberration) in genome(genetic makeup of cells).
 - Germline(constitutional) inheritable aberration
 - Somatic(acquired) aberration
- Cancer is therefore a genetic disease
- Hallmark
 - Uncontrolled cellular proliferation(multiplication)



Causes of cancer

Cancers are associated with risk factors which are categorized under

Environmental

Lifestyle

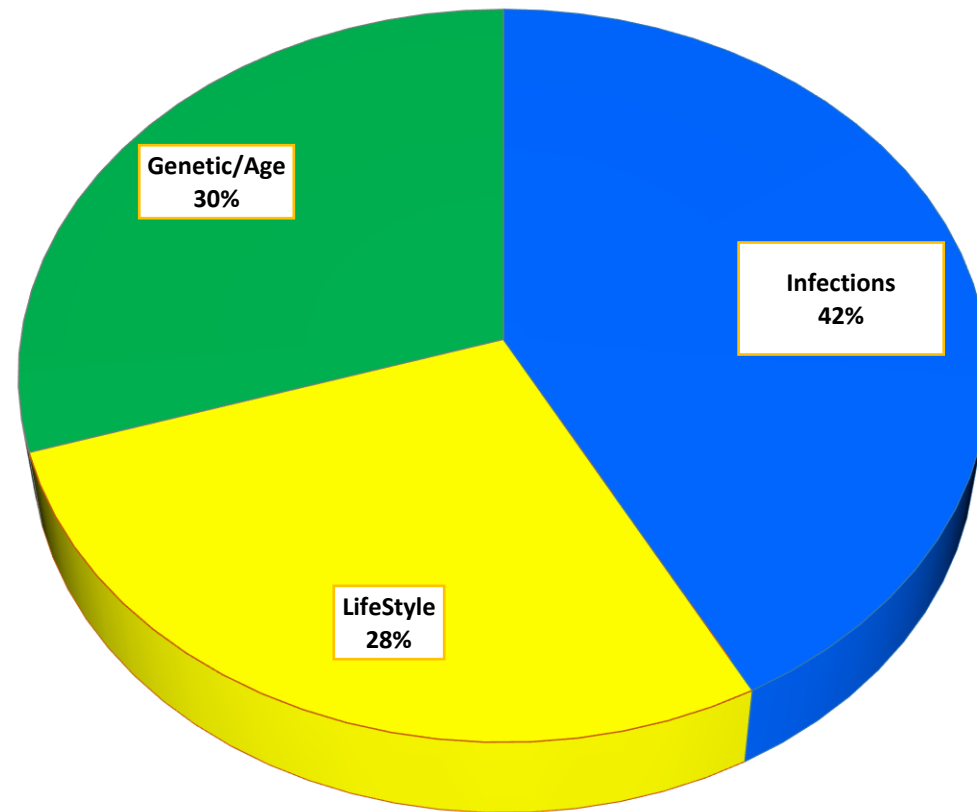
Occupational

Biologic agents(Infection)

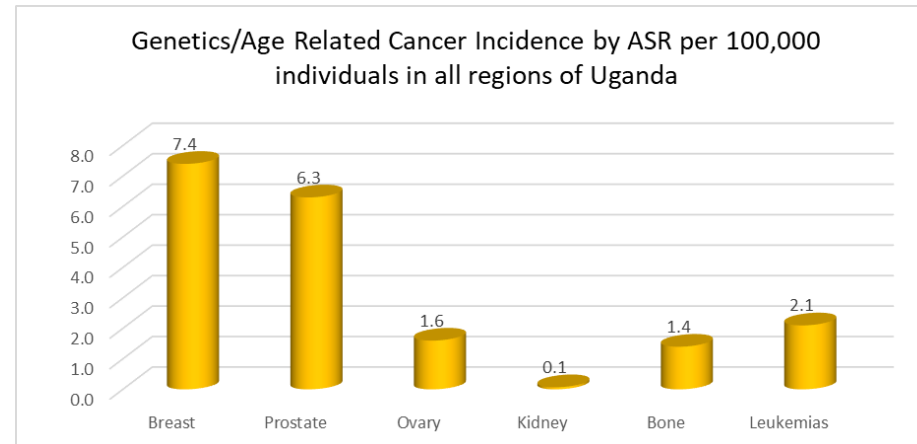
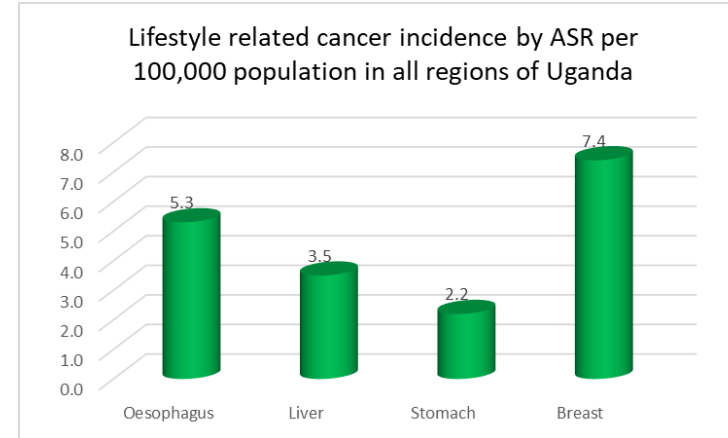
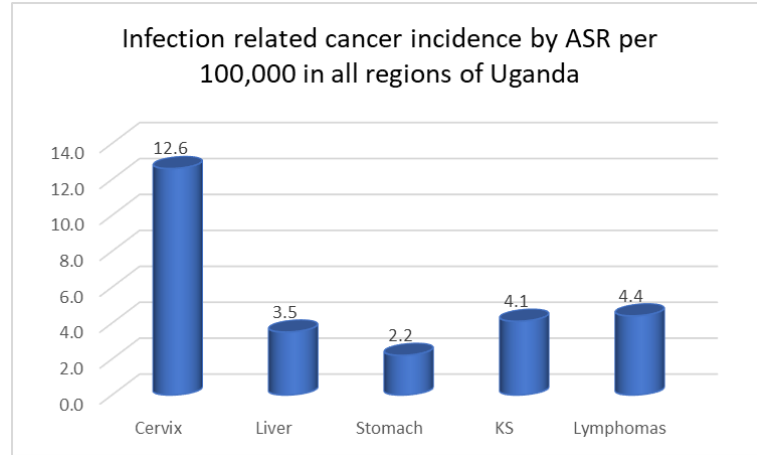
Genetic defects



Common Cancer Risk Factors in Uganda



Common Cancers Types by Risk Factors



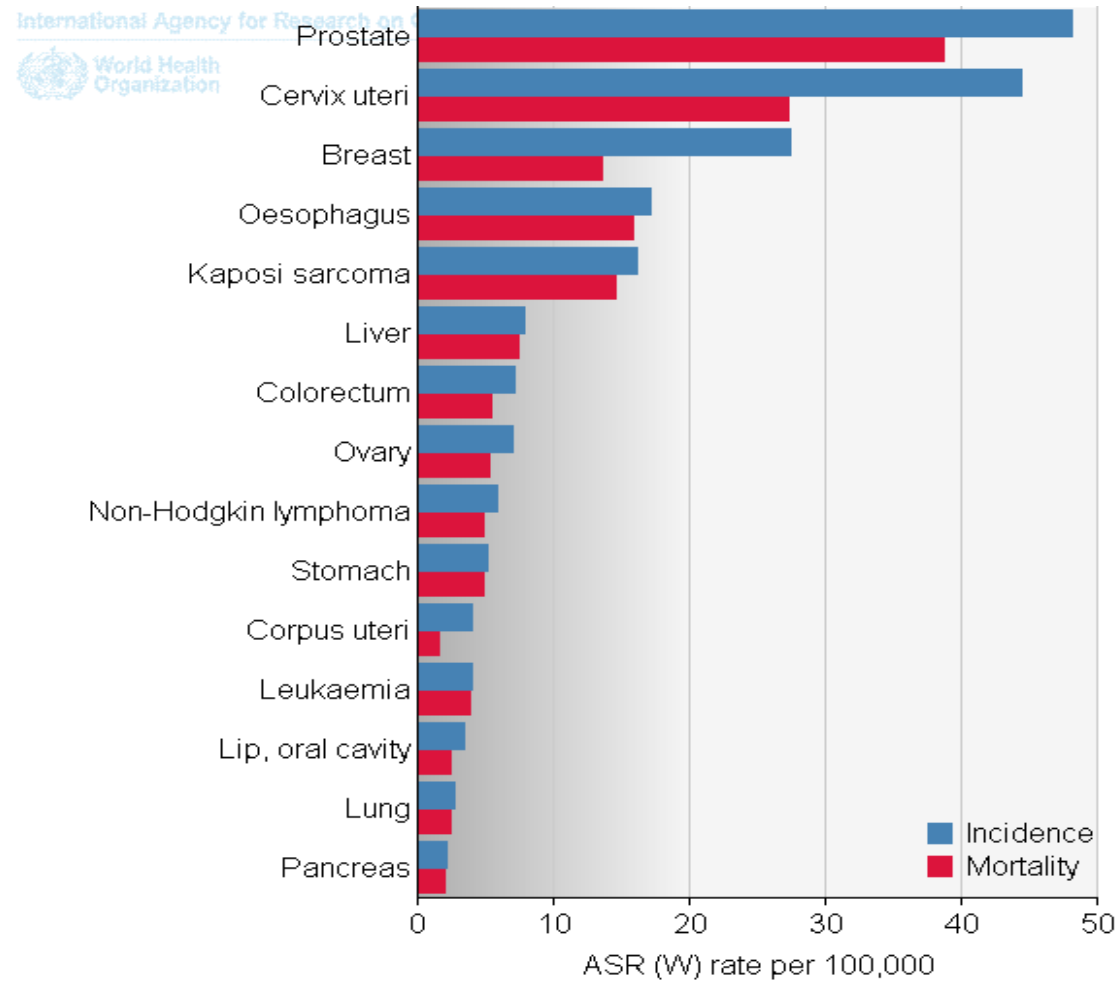
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Overview of Cancer in Uganda

Key facts

- 34,008 new cases of cancer in Uganda per year
- The UCI receives only 20% of these cases (6,000 to 7000, 600(10%) children)
- 30% of the patients with Cancer are HIV positive
- Survival is low for most cancers
- Majority present in stage III and IV disease
 - For example, for breast cancer, 71-90% of patients present in stage III and IV

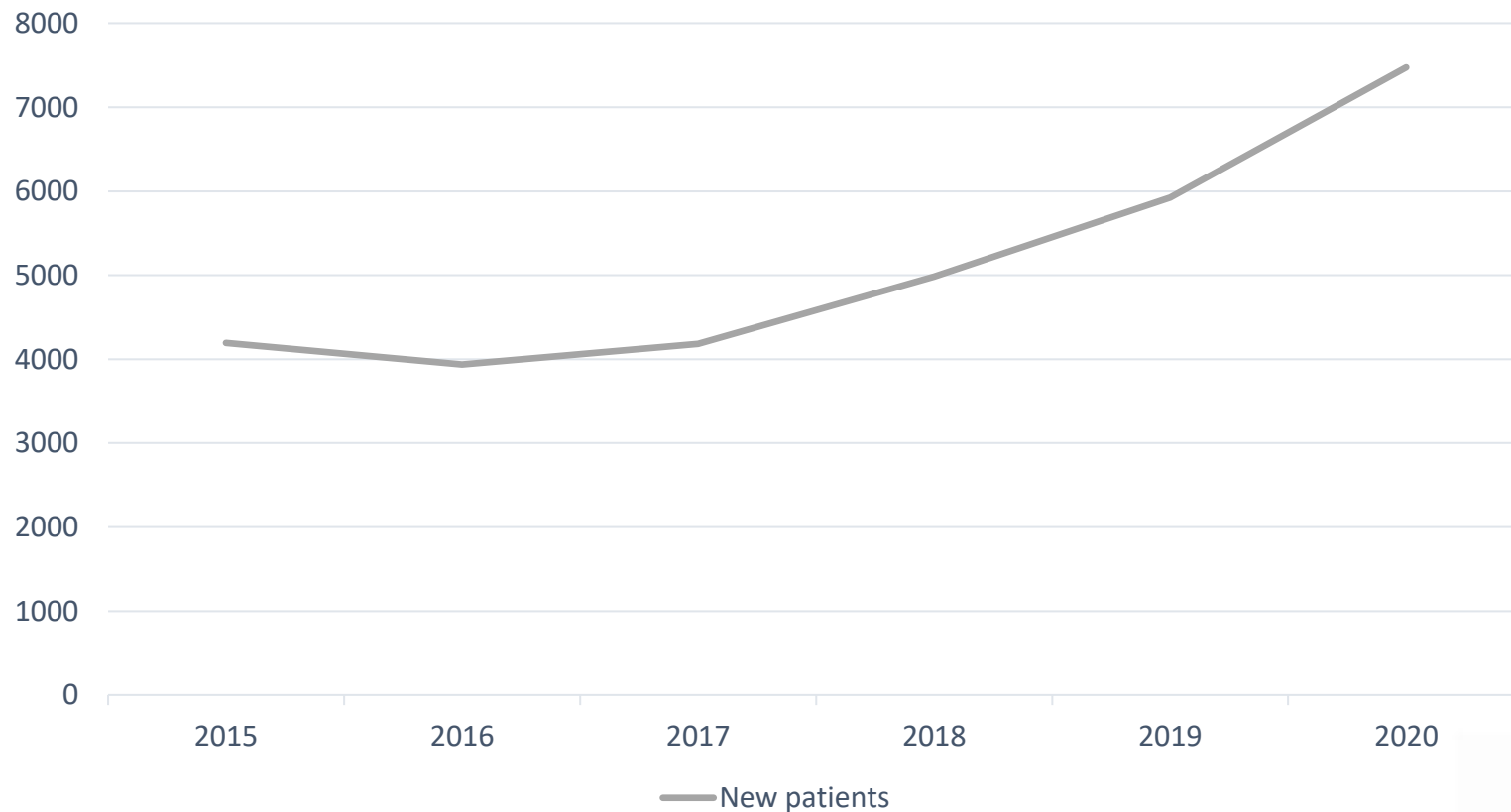
Common cancers incidence and mortality rates: both sexes



Patient Trends at the UCI

- Number of patients increasing over years

Patient Trends at the UCI (2015 - 2020)



Cancer Prevention

- Avoiding occurrence of cancer
- Eradicating/Eliminating the impact of the disease
- Minimizing suffering and disability due to disease



Preventive interventions

- Policies targeting risk factors
 - Environmental, Economic, social behavioral and cultural lifestyle
- Population/community interventions
 - Increase awareness of cancer risk factors
 - Avoidance of risk factors
 - Lifestyle change
 - Occupational/workplace practices
 - Protection(Vaccination)
- Individual level intervention
 - Regular health checkup
 - Screening
 - Exercise
 - Hygiene
 - Lifestyle changes
 - Tobacco
 - Alcohol
 - Drugs



Cancer Management

- Effort to minimize the impact of cancer on the population or individual who develop cancer



Key target for management

- Lowering personal risk of developing cancer
- Increase personal chances of early diagnosis
- Enhance opportunity for successful treatment of cancer



Strategy for effective Management

- Presenting for routing cancer screening
 - Breast, cervical, colorectal, prostate and lung cancer
- Increase chances for prompt diagnosis of symptomatic disease
 - Consider cancer as a possibility in any symptom
- Enhance capacity for disease evaluation and staging(extent)
- Availability of treatment facility and expertise
- Control of symptoms and improved quality of life



Availability of comprehensive cancer services in Uganda



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Uganda Cancer Institute – Artistic impression CoE Campus



UCI – CoE/Mulago Campus masterplan

LINAC Machine



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Radiotherapy Bunker



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Cancer service packages and utilization

	Available packages	Services	Cancer types	Level of capacity	Utilization
Prevention	Basic Package	Screening	Cancer of cervix Cancer of Brease	80%	60%
Cancer Management	Basic comprehensive care	Diagnosis Staging Treatment	All cancers	50%	120%
	Exclusive comprehensive care	Diagnosis Staging Treatment	All cancer	50%	5%



A case for building National capacity

- With use of less than 5% of exclusive comprehensive package there is need for a case for developing local capacity.
 - Reduce treatment out of the country
- Presentation of disease by our patient similar to that of an average Ugandan(stage, type etc.)
- Challenging management to the external system
 - Advance stage
 - High cost
 - Poor outcome
- Outcome marginally different than currently obtained in Ugand



Benefit of building our own capacity

- Benefit at personal level
- Benefit at population level
- Potential for medical tourism



Conclusion

- We now understand cancer better as a genetic disease
- Appreciate the causes and risk factors
- The burden and common cancers in Uganda
- Appreciate our role is prevention and management of cancer
 - At personal and population level
- The need to build our own system and capacity as a country to prevent and manage cancer.



Thank You
