Breast cancer awareness: Initiatives at Mulago National Referral Hospital, Kampala, Uganda.

A team of diagnostic imaging experts outlines initiatives undertaken to raise breast cancer awareness in Uganda.



Opening of the breast cancer awareness week

Introduction

Similar to many other low-income countries, breast cancer continues to place a significant burden on the healthcare system in Uganda. The age standardized incidence and mortality rate of breast cancer is 21.3 per 100,000 and 10.3 per 100,000 respectively[1]. While 80% of Ugandan women present with advanced disease ,50% experience diagnostic delays of more than a year between symptoms and diagnosis. Worse still, 50% of women diagnosed with breast cancer will die from their disease within 5 years [2,3,4]. Recent data from the pathology department, Mulago National Referral Hospital MNRH revealed 201 new cases of breast cancer in 2022 and 283 cases in 2023.

Mulago National Referral Hospital (MNRH) is the largest public hospital in Uganda with 1200 beds. It is located in Kampala, the capital city of Uganda. It is also the teaching hospital for Makerere University College of Health Sciences.

Though, there is an increasing incidence of breast cancer in Uganda, the uptake of mammography is low only a few health facilities have this equipment. A review of patients' returns for mammography in 3 hospitals in Kampala, showed an average of 1-2 patients per month. The majority of patients who seek this investigation are symptomatic

With the limited resources and suboptimal health systems, early detection and access to effective treatment remain a challenge. Therefore during the breast cancer awareness month of October, MNRH has taken initiatives to raise awareness about breast cancer, to promote early detection and support those affected by this disease among health workers and the public. It used known cost effective interventions which can enhance breast cancer control

Initiatives at MNRH

In 2021 the World Health Organization established the Global Breast Cancer Initiative (GBCI), to provide guidance to governments on health systems strengthening for breast cancer. It brings together stakeholders from

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around the world and across sectors with the shared goal of reducing breast cancer by 2.5% per year, which over a 20-year period would save 2.5 million lives. GBCI employs 3 key strategies to achieve these objectives: health promotion and early detection; timely diagnosis; and comprehensive breast cancer management[5].

Effective early detection and access to effective treatment remain a challenge for countries with limited resources, despite there being proven and cost-effective interventions. Substantial improvements in global cancer control can be achieved by implementing what we already know works. MNRH has taken initiatives to raise awareness about breast cancer, promote early detection and support those affected by this disease among health workers and the public.

Policy action

During the scheduled biweekly top level management meetings at MNRH, identification of the previous and current efforts to access breast health care in particular mammography was done. The members made an assessment of breast health services and community partnerships with the institution. The target group was health workers and the general public. The top level managers set objectives, which included raising awareness about breast cancer, promoting early detection and support of those affected by this disease among health workers and the public. The directorate of diagnostics was selected to lead the breast cancer awareness drive.

Breast health awareness, education and community outreach:

In a bid to increase breast cancer awareness, MNRH held a breast cancer awareness camp for 5 days. Educational talks about breast health were conveyed by health professionals during patient encounters. They were educated about the signs and symptoms of breast cancer and encouraged to quickly report any breast concerns to a healthcare provider. Demonstrations of self-breast examination were performed. Studies have shown that patient education and community outreach can improve participation in early detection programs and reduce misconceptions about breast cancer and breast cancer treatment[6]. This time around, the breast care awareness camp targeted the health workers and general public. Free mammography and breast ultrasound services were offered to the participants. In several low-resource countries, Uganda inclusive, there is a lack of trust and confidence in the health system for cure of cancers, which discourages patients from presenting for evaluation of a breast disease. Breast cancer awareness camp is one of the effective ways to address these issues by educational talks and providing services directly to the patients.

Collaboration

MNRH collaborated with Uganda Women's Cancer Support Organization (UWACASO). Its current membership is 35 breast cancer survivors. This group is crucial for the effective creation and dissemination of breast health awareness messages. The survivors who participated in the breast camp focused on educating the population on the importance of early diagnosis and treating of breast cancer. They also educated the participant of the importance of routine screening and self breast examination SBE. The participants were taught how to do self-breast examinations through demonstrations by the survivors. In addition, testimonies of cancer survivors help reduce psychosocial barriers to treatment

Opportunistic screening:

In opportunistic screening, additional diagnostic services are offered by the healthcare team. The primary focus of the health camp was breast cancer awareness. MNRH partnered with Makerere University Joint Aids Program MJAP. MJAP plays a vital role in the Uganda Health care system and has strong links to Ministry of health. It offers support to TB and HIV services in districts, regional referral hospitals and public health facilities in the country. MJAP was able to offer other screening tests, that is routine counselling test for HIV and random blood sugar. This is cost effective especially in low resource setting

Medical training, Research and Clinical Breast Examination (CBE)

There are mounting efforts to improve the expertise and quality of the human workforce that is radiologists, radiographers and sonographers through education and training. In 2016 , Uganda Society for Advancement of Radiology and Imaging USOFARI, an umbrella professional body for medical imaging practitioners adopted and adapted the use of Breast imaging and reporting system BIRADS for ultrasound and mammography. This has been incorporated in the curricula of medical imaging trainees.

MNRH has customized breast ultrasound and mammography report templates using BIRADS. This eases the communication of the breast imaging reports and management recommendations. It also makes it easy to measure the outcome of the findings

Endocrine surgeons participated in the breast cancer awareness event. During the surgical consultations, clinical breast examination CBE was done on the women who attended the camp. CBE screening is cheap, less resource intense compared to mammographic screening especially in unscreened populations. CBE can also be performed by performed by trained non-physician providers especially in low-resource settings.

The training curriculum for the surgery residents has incorporated CBE and counselling in the management of breast cancer to reduce discomfort and anxiety.

Multidisciplinary approach to diseases improves management plans and reduce duplication of care. MNRH supports multidisciplinary interactions of health professional in the management of breast cancer through grand rounds. A session was facilitated by a multidisciplinary team which included radiologist, surgeon and pathologist during the camp. A male and female patient with breast cancer were presented to physicians and medical students. Peculiar clinical problems were presented. The participants were able to

update their knowledge of diagnosis, innovate treatment and advances in research. Emphasis on coordination of multidisciplinary care was underscored. This environment fosters continuous professional development.

Since 2014, more than 10 research articles on breast health have been published in scholarly journals by multilateral collaborations with the department of radiology[6].The breast health research work which has been done at MNRH has significantly contributed to the knowledge and advances in this field [7].

Coordination of care, work flow and patient navigation:

MNRH is a complex institution with several subunits of health care. Similarly, breast cancer care is complex and requires series of investigations. The directorate of diagnostics at MNRH offers medical imaging, clinical laboratory and pathology services. All these departments are located on different levels of the institution. Navigating this process can be challenging for patients and their attendants where there are no referral networks. The patients face delays, lack information about their investigations the next to follow. Worse still, in low resource countries, most patients travel long distances to access tertiary care. However, a retrospective study done at MNRH, using patient navigation to reduce time diagnosis of breast cancer between the departments of radiology and pathology revealed markedly decreased time to diagnosis and rates of loss to follow up [8].

MNRH, therefore can justify the role of patient navigators who can assist patients in navigating the system by helping with appointment scheduling and coordination of care.

Financing models and User fees

One of the barriers of access to breast health care in Uganda is the high costs. UBOS 2022 reveals that 30.1% of the population live below the poverty line and subsequently the health financing is out of pocket. Studies done on health policy and planning in Uganda in 2005 revealed abolition of cost sharing is pro poor [9]. Abolition of user fees in clinical laboratory and pathology department at MNRH has improved access to healthcare. While there is still low allocation to the national health budget, the government should consider financing models that target populations for breast cancer programs and other cost intensive management. Alternative financing models, for example insurance schemes, prepayment and conditional cash payments may reduce financial barrier to access to health care

Advocacy and communication

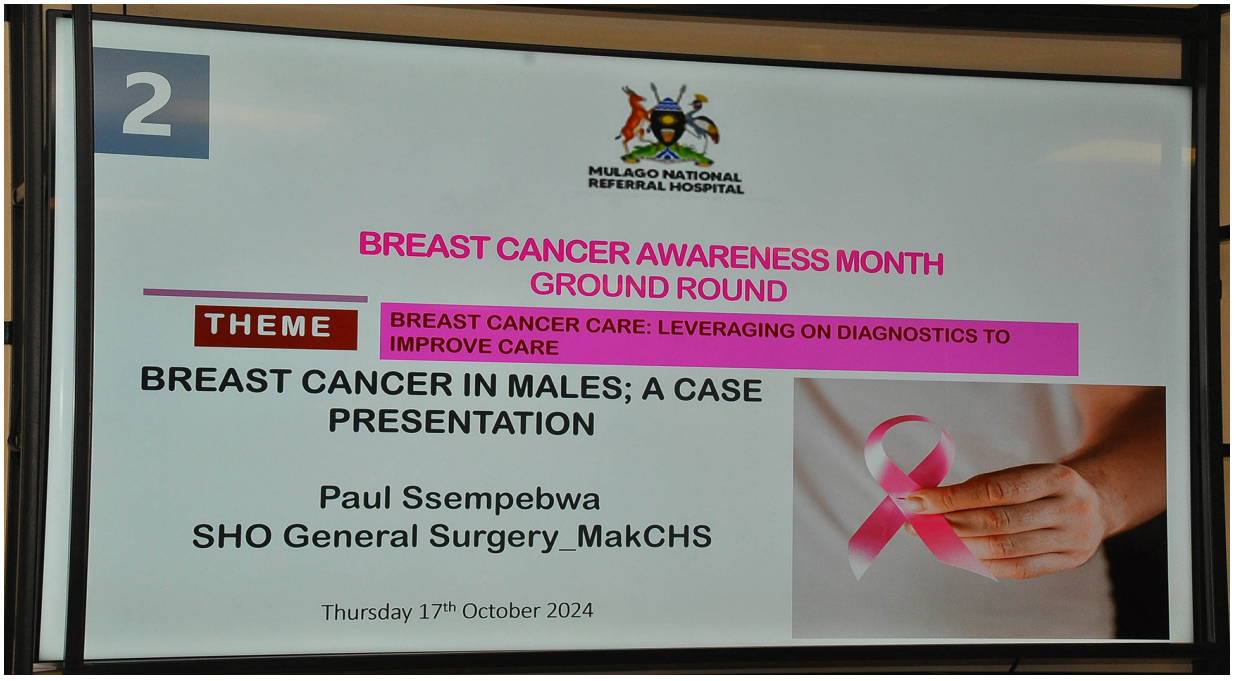
MNRH engaged Ministry of Health (MOH) to participate in the breast cancer awareness event. The participation of political figures and top-level technocrats in the ministry amplifies the priority of breast cancer on the public health agenda. National and private media got an opportunity to cover the stories at breast cancer awareness event. This improved the coverage of awareness and understanding of the breast cancer to larger communities, as the information was shared on television, radio and social media.

Healthy living

In 2023 , MNRH started physical health programs for members of staff. The hospital dedicates 2 days per week for physical exercise. The activity is scheduled for 1 hour . Regular exercises reduces the risk of developing cardiac diseases, diabetes, cancer and obesity. Physical exercise also increases self esteem and confidence and decreases stress and anxiety.



A nurse conducting a breast cancer awareness talk



Presentation on breast cancer in males

FUTURE ASPECTS

Teleradiology

The MOH set up a teleradiology centre at Mulago National Referral Hospital to assist with the transmission of CT images located in 16 Regional Referral Hospitals. Uganda still has a shortage of radiologists. Teleradiology can be used to bridge the gap of the lack of radiologist expertise for breast imaging services in the regional referral hospitals , Implementation of teleradiology can also provide learning opportunities to medical professionals as well as transform the patient care in these regions by lowering the turnaround time for diagnosis, improving quality by encouraging subspecialist evaluation and reducing healthcare costs.

Artificial intelligence

MNRH should explore AI solutions in breast imaging, interpretation and research. AI is reported to assist the radiologist in detecting suspicious findings in imaging exams, diagnosis, choosing a personalized patient protocol and minimizing diagnostic errors. The future of AI in radiology is promising.

Fellowship training

One of the strategic objectives of MNRH is to strengthen capacity for research and training. Investing in human resources capacity is crucial. Supporting fellowship training of breast radiology will enable the trainees to acquire advanced knowledge and skill hence improve the management of breast diseases in the hospital and country

Conclusion

The Initiatives of MNRH, towards breast cancer awareness stem from commitment of the leadership of the institution. The efforts of the hospital are geared towards raising awareness about breast cancer, promoting early detection and supporting those affected by this disease among health workers and the public.

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