



**Makerere University
College of Health Sciences**



School of Health Sciences Annual Report 2022

February 2023

ADMINISTRATIVE TEAM OF MAKSHS

Office of the Dean MakSHS



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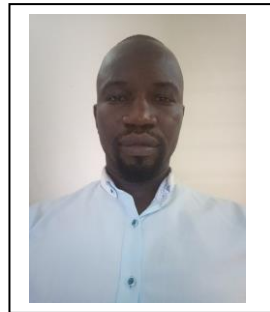


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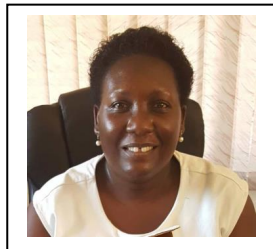


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LIST OF ACRONYMS

ACMIS	Academic management information systems
AMR	Antimicrobial resistance
BDS	Bachelor of Dental Surgery
BEC	Basic emergency care
BSN	Bachelor of Science in Nursing
BPharm	Bachelor of Pharmacy
CEES	College of Education and External Studies
CGPA	Cumulative Grade Point Average
FIP	International Pharmaceutical Federation
HEPI	Health Education Partnership Initiative
IDI	Infectious Diseases Institute
JASHC	Joint Annual Scientific and Health Conference
MakCHS	Makerere University College of Health Sciences
Mak-RIF	Makerere University Research and Innovations Fund
MakSOD	Makerere University School of Dentistry
MakSHS	Makerere University School of Health Sciences
MakSHSREC	Makerere University School of Health Sciences Research & Ethics Committee
MNS	Master of Nursing
PCG	Pharmacognosy
PHSM	Pharmaceuticals and Health Supplies Management
NCHE	National Council for Higher Education
NDA	National Drug Authority
NIH	National Institutes of Health
UAB	University Appointments Board
UNACOH	Uganda National Association of Community and Occupational Health
WHO	World Health Organization

DEAN'S MESSAGE

We thank all staff and students of MakSHS for a job well done in the year 2022. Special thanks to the Heads of Department and units, programme coordinators and students' leadership in the departments for successfully navigating our school through the congestion of post-lockdown catch-up in academic calendar and for the teamwork exhibited in 2022. We are delighted to present this report highlighting the performance of MakSHS in delivery of the university's core mandate of teaching, research and community engagement as guided by both Makerere University strategic plan and MakCHS strategic plan in 2022. Although this report is by no means exhaustive of the accomplishments, misses and challenges in MakSHS in 2022, the presentation provides a fair snapshot of the school's balance sheet in delivering on the university's mandate as of December 2022. My hope is that all staff and departments in MakSHS and MakSOD find this report useful in reflecting upon the journey accomplished and what was missed in the year 2022 so as to have a brighter 2023 and beyond. As a school, we dedicate ourselves to using this report as a springboard for continuing improvement in delivery of the university's desire of being research led.

We thank the leadership of MakCHS, university Management and the University Council for all the support rendered to ensure that MakSHS continues on an upward trajectory through 2022. In particular, we thank the Deputy Vice Chancellor Academic Affairs for the engagements in university Management that enabled major increase in staff establishment for the then Department of Dentistry and the approval of two additional faculty positions for the Department of Pharmacy over the last two years. Furthermore, we thank university Management, Senate and the University Council for granting the Department of Dentistry a School status. We will continue engaging you as we work towards upgrading the Departments of Nursing and Pharmacy into Schools in accordance with their status regionally and globally, as demanded by the professional Councils. I wish you a blessed 2023.

Pakoyo Fadhuru Kamba, PhD
DEAN

EXECUTIVE SUMMARY

The School of Health Sciences (SHS) is one of the four schools that constituted the College of Health Sciences from inception in 2008. Mid way through 2022, the Department of Dentistry was split from the School of Health Sciences and granted a School status as the fifth school in the College of Health Sciences. The School of Health Sciences achieved several outputs in fulfillment of the university mandate of teaching and learning; research and partnerships; and community service in the year 2022. The school ran five undergraduate degree programmes (Bachelor of Dentistry, Bachelor of Science in Dental Technology, Bachelor of Science in Nursing, Bachelor of Optometry, Bachelor of Pharmacy), four Masters degree programmes and PhDs by research. The total students' enrollment in the school was about 770, and 145 students completed their degree programmes during this period. Staff of the school contributed to at least 80 refereed publications in this period, and held grants from diverse sources of approximately USD 682,000. Over the reporting period, departments in the school benefitted from various partnerships with local agencies such as the National Drug Authority, the Infectious Diseases Institute and School of Public Health, and international entities such as Seed Global Health, Farmacie Mondiaal Foundation (Netherlands) and several overseas universities in Africa, United States, Canada, Europe and Australia. Of note, Seed Global Health facilitated the Department of Nursing with an expert in emergency nursing to assist with clinical teaching and development of a new Master of Nursing (Emergency and critical care) while the Department of Pharmacy receive a large donation of assorted laboratory equipment for pharmaceutical compounding and analysis from Farmacie Mondiaal Foundation. Additionally, the School of Dentistry undertook a successful student and teacher exchange programme with the Karolinska Institute (KI) with an inward and outward mobility of two undergraduate students each. There were also major contributions to community service by the school's faculty. Of note, one of our faculty served on the case management team for Ebola Virus Disease (EVD) at Mubende Regional referral hospital. The school's goal is to enhance grants and publications productivity in the short-to-medium term through deliberate efforts such as stepped-up staff sensitization, coordination, training, mentoring and support to grants writing and publication activities.

1. INTRODUCTION

1.1 Background

Makerere University School of Health Sciences (MakSHS) is one of the four pioneer schools that constituted Makerere University College of Health Sciences (MakCHS) when it was formed in 2008. The school originally comprised four Departments, namely, Nursing, Pharmacy and Allied Health. In mid-2022, the Department of Dentistry was granted school status by the University Council. By October 2022, the School of Dentistry had started operations in its new status, although it continues collaboration with MakSHS on some administrative functions such as the school registrar and holding joint meetings of school boards; School Exams Irregularities and Malpractices Committee; and School Establishments, Appointments and Promotions committee.

The mission of MakSHS is rooted in Makerere University's strategic goal of consolidating its position as a global knowledge hub in Africa by transforming into a professionally governed, engaged, research-led university with increased graduate student enrollment and knowledge production, and enhanced partnerships with the community, industry, universities and research institutions regionally and globally for the period 2020/21-2030/31. It is also rooted in MakCHS strategic position as a leader in health professional education in Uganda and the region, and her vision of consolidating leadership in generating knowledge that impacts society. Guided by these strategic ideologies, MakSHS aims to consolidate Makerere University's position as the leading degree training institution for nurses/midwives, dental surgeons, pharmacists, optometrists, dental technologists and all allied health professions in Uganda and the region. To achieve this, MakSHS had the following priorities in 2022;

- i. Enhanced administrative efficiency and transparency at school, department and unit levels through timely handling of all business and feedback to clients
- ii. Enhanced graduate student completion rates
- iii. Progression of curricula for academic programmes undergoing re-accreditation and approval processes.
- iv. Enhanced involvement of academic staff in research and innovation activities through encouragement, mentoring and skills building
- v. Staff academic development and promotion, and addressing staffing gaps
- vi. Strengthening teaching and research infrastructure
- vii. Consolidate existing partnerships and develop new partnerships and collaborations for teaching and research
- viii. Develop new allied health degree academic programmes that address critical needs
- ix. Strengthen examinations and results management and governance

Each of the Department also sets goals unique to their discipline. The annual goals for the Department of Dentistry were;

- To improve the teaching and learning of both the dental undergraduate and postgraduate students.
- To continue with the e-learning platform MUELE for student training that was established during the COVID-19 period

- To improve and increase training facilities/spaces in terms of both classroom and clinical spaces for dental undergraduate and postgraduate students.
- To encourage staff development through staff joining graduate training and also increase the research output at the department of Dentistry by encouraging staff to carry out research and submit grant proposals to available opportunities.
- Develop strategic partnerships and collaborations with international Institutions for both teacher and student exchange, research and grant collaborations.

The Department of Nursing at Makerere University was established in 1993 to offer undergraduate studies in Nursing. This undergraduate program was the first baccalaureate nursing program in Uganda. The program incorporates and emphasizes general nursing, midwifery, community health, management, leadership, and research. The VISION of the department is “*to be a leading and transformational department for academic excellence and innovation in Nursing in Africa*”. Its mission is “*to improve the health of the people of Uganda through innovative and responsive teaching, research, and provision of services*”.

1.2 Location and structure of the School of Health Sciences

MakSHS is a multi-site school with the Department of Nursing, office of the Dean, and Optometry laboratory premises located within MakCHS on Mulago Hill while the Department of Pharmacy is located on Makerere University main campus, sandwiched between the Infectious Diseases Institute and the university police station on the Eastern part of the campus. The office of Head of Department of Allied Health is in the Pharmacy Building. MakSOD offices and Dental Hospital premises are also located on Makerere University main campus, opposite the university police station and the Infectious Diseases Institute, respectively.

2. PROGRESS IN MEETING THE SCHOOL’S GOALS

2.1 Teaching and learning

2.1.1 Compliance with academic calendar

Like the rest of MakCHS, the year 2022 was a very demanding period for teaching and learning because a large portion of the recess Semester of 2020/21, three Semesters (I, II and Recess) of 2021/22, and most of the first Semester of 2022/23 were fitted into it. Faculty of MakSHS were able to complete teaching, learning, assessment and examination activities for all these semesters on time.

2.1.2 Students’ enrollment

By close of the year 2022, MakSHS had a total students’ enrollment of 771, comprising 711 undergraduates, 53 Masters degree, and seven doctoral students (**Table 1**)

Table 1. Number of students enrolled into academic programmes in MakSHS in 2022/23

Academic programme	Number of students					Total
	Year I	Year 2	Year 3	Year 4	Year 5	
Undergraduate Programmes						
Bachelor of Dental Laboratory Technology	13	16	16			45
Bachelor of Optometry	16	12	8	17		66
Bachelor of Dental Surgery	28	35	25	24	54	266
Bachelor of Science in Nursing	24	32	20	31		107
Bachelor of Pharmacy	51	67	60	49		227
Sub-total	132	180	133	163	90	711
Postgraduate programme						
Master of Nursing (Midwifery & Women's Health)	6	6				12
Master of Dentistry (Oral and Maxillo-facial Surgery)	5	0	2	2		9
Master of Science in Pharmaceuticals and Health Supplies Management	13	11				24
Master of Science in Pharmacognosy	2	3				5
PhD (Nursing, Pharmacy, Dentistry)	2	2		3		7
Sch of Dentistry	6	1		2		9
Sub-total	28	22	7	3		60
TOTAL	160	202	140	166		771

* Data presented is for the number admitted. The number of students enrolled may be lower.

2.1.3 Students' completion of their academic programmes

MakSHS presented 185 students who completed their studies in the 2020/21 academic year for graduation comprising one (1) PhD, 14 Masters degree and 170 Bachelors degree at the 72nd graduation ceremony in May 2022 (Table 2).

Table 2. Number of students presented for graduation in May 2022 per academic programme

Academic programme	Number of graduands
Undergraduate Programmes	
Bachelor of Science in Dental Technology	6
Bachelor of Optometry	15
Bachelor of Dental Surgery	31
Bachelor of Science in Nursing	28
Bachelor of Pharmacy	90
Sub-total	170
Postgraduate programmes	
Master of Nursing (Midwifery & Women's Health)	1
Master of Dentistry (Oral and Maxillo-facial Surgery)	1
Master of Science in Pharmaceuticals and Health Supplies Management	10
Master of Science in Pharmacognosy	2
PhD in Nursing	1
Sub-total	15
TOTAL	185

At the same time, 145 students of MakSHS completed their studies and were approved for graduation in the 73rd graduation ceremony in February 2023, comprising one (1) PhD, 20 Masters degree and 124 Bachelors degree (**Table 3**). Among these, four BSc in Nursing and seven Bachelor of Pharmacy students made it to the Dean’s list with CGPAs of at least 4.0 (**Table 4**).

Table 3. Number of students presented for graduation in May 2022 per academic programme

Academic programme	Number of graduands
Undergraduate Programmes	
Bachelor of Science in Dental Technology	2
Bachelor of Optometry	16
Bachelor of Dental Surgery	32
Bachelor of Science in Nursing	19
Bachelor of Pharmacy	55
<i>Sub-total</i>	124
Postgraduate programmes	
Master of Science in Nursing (Midwifery & Women’s Health)	7
Master of Dentistry (Oral and Maxillo-facial Surgery)	0
Master of Science in Pharmaceuticals and Health Supplies Management	10
Master of Science in Pharmacognosy	3
PhD in Nursing	1
<i>Sub-total</i>	21
TOTAL	145

Table 4. List of 2022 undergraduate finalists on the Dean’s list

No.	Student
Bachelor of Science in Nursing	
1	18/U/23126/PS Nakato Phiona
2	18/U/40376 Mwesigwa Racheal Nakimuli
3	18/U/23123/PS Kilili Debo Roy
4	18/U/36651/PS Ruva Oscass Jimmy
Bachelor of Pharmacy	
1	17/U/20045/PS Mazzinga Abubakr
2	18/U/036 Asiimwe Lydia Irene
3	18/U/27003/PS Ssentongo Andrew
4	18/U/40382 Kasujja Ahmed
5	18/U/041 Bukenya Isah
6	18/U/26623/PS Mukesha Anastanzia
7	18/U/26984/PS Sisye Paul

2.1.4 Curriculum development and accreditation

The Bachelor of Dental Surgery (BDS) was re-accredited by the National Council for Higher Education (NCHE) for five years effective 22nd August 2022. The NCHE also visited MakCHS to assess teaching facilities and learning resources for the Bachelor of Nursing Science. The

University Council approved revised curricula for the Bachelor of Pharmacy (BPharm) and MSc in Pharmaceuticals and Health Supplies Management (MSc PHSM). MakSHS has since submitted copies of these curricula to the Deputy Registrar Senate for onward submission to the NCHE for re-accreditation. The revised MSc in Pharmacognosy (MSc PCG) and Bachelor of Dental Technology were approved by Quality Assurance committee of the University Council in November 2021 and the school is following up on their status of consideration by the University Council.

On the other hand, MakSHS has advanced a number of new academic programmes through various stages of university approval. Curricula for the new Master in Clinical Pharmacy and new MSc in Medicines Regulation tenable in the Department of Pharmacy were submitted to Senate for consideration in 2022. The Department of Nursing has developed three new Masters degree programme, namely; Master of Science in Nursing (Paediatrics), Master of Science in Nursing (Midwifery), and Master of Science in Nursing (Emergency and Critical Care). The MSc Nursing (Paediatrics) was considered by the Board of Graduate Studies and is slated for approval by Senate. The MSc Nursing (Emergency and Critical Care) has been considered at department level and is slated for submission to the School Board of MakSHS for next level of consideration. The MSc Nursing (Midwifery) has been considered College Programmes and Libraries Committee, and the department is effecting revisions recommended by the committee. The School of Dentistry developed a new Master of Science in Conservative Dentistry, and it has so far been presented to Board of Research and Graduate Training and awaits its comments to guide further action.

MakSHS has also been engaged by senior members of the Orthopaedic Technology Board of the Allied Health Professionals Council to develop a new Bachelors degree programme in Orthotics and Prosthetics under the Department of Allied Health. Three meetings have so far been held by the Dean, the Head Allied Health department, local the experts in Orthopaedic Technology, and international academic supporters and collaborators of the proposal to start this new programme that currently is not run by any university in Uganda. A draft curriculum for the programme is being finalized and start approval process soon.

2.1.5 Progress on open, distance and e-learning (ODEL)

By end of 2022, the Department of Nursing had uploaded full e-learning content for 16 courses comprising nine on the Bachelor of Nursing Science and seven on the Master of Nursing (Midwifery and Women's Health), although they are not yet utilized by learners. The Department of Nursing has also proposed another 20 courses (10 undergraduate and 10 graduate) for development of e-content, bringing the total courses that are slated for interactive online learning to 40. The Department of Pharmacy had uploaded incomplete e-learning content for 12 courses by December 2022, comprising nine on the Bachelor of Pharmacy, one on the MSc in Pharmacognosy and two on the MSc in Pharmaceuticals and Health Supplies Management. Furthermore, the department has proposed another 19 graduate courses for development of full e-content and active adoption of interactive e-learning, bringing the total courses that will utilize to 39. With support from the Mastercard Foundation Scholars Program e-learning Initiative at the university, departments and the school have committed to active transition to blended learning once development of well instructionally designed e-content for the selected courses is complete.

2.1.6 Innovations in teaching and learning

The Department of Nursing employed several innovations to enhance teaching, namely;

- i. Teaching methods including innovative use of WhatsApp and Zoom platforms
- ii. Pre-recorded videos and class lectures
- iii. Use of videos for clinical skills-based return demonstrations, among others.
- iv. Introduction of innovative short courses like the WHO basic emergency care (BEC) course in which 30 students were trained (**Figure 1**). Four faculty received training of trainers (TOT) certification in the BEC course.
- v. Community teaching of MSN community midwifery course in partnership with the University of Yale at the Atiak birthing facility (**Figure 2**).



Figure 1: BSN IV students during training on the WHO BEC course



Figure 2: Master of Nursing students during community placement in Atiak. *Left*, Master of Nursing students using community ambulances in Atiak. *Right*, Master of Nursing students interacting with community members in Atiak.

The Department of Pharmacy continued implementing weekly research seminars for staff and graduate students.

2.1.7 Graduate training in the school

In accordance with the university's master plan of transforming into a research-led university, MakSHS is steadily growing its stature in terms of doctoral training. The Department of Nursing is particularly doing well on this, and the Department of Pharmacy and the School of Dentistry are steadily picking up. In 2022, two candidates completed their PhDs under the Department of Nursing. At least seven students are at various stages of their doctoral studies under MakSHS, comprising four in the Department of Nursing, one in Department of Pharmacy, and two in the School of Dentistry. Meanwhile, improvements in Masters degree training were noted, with 20 candidates approved for the February 2023 graduation, up from 14 who completed in 2021. The school has fastened turnaround times for feedback to doctoral applicants' concepts and department nominations for examiners candidate's, executed timely delivery of doctoral candidates' theses to examiners, as well as strengthened follow up mechanisms with examiners. This has reduced the time lag between a candidate's submission of thesis to the Dean for examination and scheduling of public defence. The school has also adopted the NCHE's benchmark standards on graduate viva voce examination and oral public thesis defence that all examiners' reports are availed to the candidates and comments addressed satisfactorily before they progress to the viva voce. This has reduced delays in students' implementation of corrections recommended by examiners and facilitated improvements in Masters degree completion rate.

2.1.8 Results management

Like the rest of MakCHS and the university, MakSHS has fully embraced utilization of the ACMIS results management system for results management. Results of all students who were admitted into their programmes beginning the 2018/19 academic year are now uploaded in ACMIS, and individual course coordinators are now uploading these results into the system immediately after approval by department examiners boards. Graduate lists for final year candidates who were admitted beginning 2018/19 academic year were also fully processed by Heads of Department in ACMIS. Furthermore, every department displayed results on their notice boards immediately after consideration by department examiners' boards. Lastly, the school strives for timely completion of marking of end of semester examinations, and will continue to track performance of departments and each faculty in this regard so that necessary intervention is provided to those that are less compliant with time lines.

2.2 Research grants

2.2.1 School of Dentistry research grants

Faculty in the School of Dentistry held at least seven research grants, worth a total of USD 408,000 and UGX 240 million (**Table 5**).

Table 5. Research grants in the School of Dentistry in 2022

#	Name of staff and role	Title	Funder	Amount	Remarks
1.	Dr. Annet Kutesa	Transforming presumptive age estimation in Uganda: methods, certainty and the law	Mak-Rif	70m Shs	Project closed
2.	Mr Nono David	Assessment of the informed consent process in the provision of dental care in Mulago Hosp Uganda			Project closed
3.	Mr Picho Ali	The proportion of head and neck patients treated at Mulago Hosp who need maxillofacial prosthesis from 2010 to 2020			Project closed
4.	Ernest Mwebesa	Patient satisfaction with services at the dental out patients' department in Mulago Hosp.			Project closed
5.	Dr. Catherine Mwesigwa	The dental workforce in Uganda-A situational analysis	Mak-Rif	50m Shs	On-going
6.	Dr. Francis Ochieng	Medicinal plants	Mak-Rif	70m Shs	On-going
7.	Dr. Annet Kutesa	Anxiety, knowledge and perceived vulnerability towards covid-19 pandemic among Oral Health workers and its effect on oral health provision in Uganda	Mak-Rif COVID19	50m Shs	On-going
8.	Dr Francis Ochieng	Helichysum odoratissimun: Isolation and identification of	RIF	70m Shs	On-going

		bioactive compounds and their effects on oral bacteria			
9.	Dr Annet Kutesa	Mapping the undergraduate Dental curricula of four African Dental Schools	AFREHealth	20USD	On-going
10.	Dr. Barbara Ndagire	Knowledge, perspectives and extent of use of caries risk assessment in the management of dental caries among Ugandan practitioners	HEPI	4000USD	On-going
11.	Dr. Allan Kalyesubula	Prevalence of dental caries and its determinants among children and adolescents attending diabetic clinic in Mulago.	HEPI	4000USD	On-going
12.	Dr. Catherine Mwesigwa and Prof Adriane Kamulegeya	Oral human papilloma virus and microbiota (OHPVMC)	NIH	400,000USD	On-going
13.	Dr Juliet Ntuulo	An electronic dental records system to improve clinical training and patient outcomes at Makerere University Dental Teaching Hospital	RIF	50m Shs	On-going
14.	Dr Moses Nkamba	Students' perceptions towards teaching and learning at the School of Dentistry	Self		On-going
15.	Dr Barbara Ndagire	The informed consent process for fixed prosthodontic treatment in Kampala metropolitan area, Uganda: Practices, patient understanding and development of a multimedia intervention			On-going

2.2.2 Department of Pharmacy research grants

Faculty in the department of Pharmacy held at least eight research grants (four new and four continuing), worth a total of UGX 578,942,400=, GBP 76,636 and USD 20,000, as shown below;

1. Incorporation of Pharmacovigilance (PV) in pre-service training curriculum for Health professional training Institutions in Uganda. PI-Kalidi Rajab; Funder: WHO; Amount: UGX 62,196,200=
2. Improving Pharmaceutical Care Skills of Undergraduate Pharmacy Students of Makerere University through Enhanced Skills Curriculum. PI-Kalidi Rajab; Funder: Binghamton University; Amount: USD 20,000

3. Youth as leaders of climate change mitigation and adaptation in Uganda; a case study of Kasese district. PI-Kalidi Rajab, Funder-MakRIF Round 4; Amount: UGX 76,719,000
4. Development of a prescription drug monitoring system (PDMS) for opioids and psychotropic drugs in Uganda. PI: Prof. Richard Odoi Adome. MakRIF; Amount: UGX 167,828,000=
5. Fleming Country Grant II for Antimicrobial Resistance Surveillance in Uganda, RFP/CGII/UGANDA. UK Department of Health and Social Care. [Consortium led by Infectious Diseases Institute, Makerere University]; Amount: £ 76,636; Role: Department of Pharmacy Partner Team Lead: Dr. Pakoyo Kamba
6. Development of a Natural Anti-Aflatoxin drug product. PI: Dr. Kagawa Bruhan. MakRIF. Amount: UGX 66,894,000/=
7. Determining the capacity of Uganda's pharmaceutical supply chain to withstand disruptive effects of recurrent covid-19 and resilience needs. PI: Dr. Kyeyune Henry. Amount: UGX 99,888,200/=
8. Assessing Experiences of frontline Health care workers (HCWs) with Antimicrobial Resistance (AMR) in Uganda's Regional Referral Hospitals. PI: Dr. Mike Mugisha. MakRIF. Amount: UGX 98,417,000/=

2.3 Partnerships and collaborations

2.3.1 Department of Pharmacy collaborations

A longtime friend of the Department of Pharmacy, **Mr. Frans Bosman** from the **Farmacie Mondiaal Foundation**, Netherlands donated to it a large consignment of assorted laboratory equipment for pharmaceutical compounding and analysis, including lots of glassware.

The Department of Pharmacy has for the last 5 years partnered with the World Health Organization (WHO) and the International Pharmaceutical Federation (FIP) on a project to develop and pilot a course on substandard and falsified medicines. A 5-module course was developed and a memorandum of understanding signed between the parties committing to the course being incorporated into the Bachelor of pharmacy curriculum at the next curriculum review. As part of this partnership, one faculty attended the "World Health Organization's Regional Workshop on falsified and substandard medical products" in South Africa from 15th to 17th November 2022. Furthermore, the World Health Organization has offered an Infrared spectroscopy-based equipment (Pillscan) for assessment of substandard and falsified medicines to the department to support the training on substandard and falsified medicines. The equipment is at the WHO country office and awaits installation and user training of staff of our department and National Drug Authority staff, scheduled for 27th February to 3rd March 2023.

The department completed a Collaboration with IDI (the prime grantee) on the Fleming Fund Country Grant II project to fight antimicrobial resistance (AMR) in Uganda and the following deliverables accomplished and submitted to IDI; a) a national Antimicrobial Stewardship Manual; b) Report on Value chain analysis of distribution pathways for veterinary medicinal products in Uganda; c) Report on assessment of the national health care logistics and chain management system to support microbiology laboratories in Uganda; and d) Report on survey to assess antibiotic prescribing patterns at selected private health facilities in Kampala.

With support from MakRIF, staff in the Department of Pharmacy are implementing a collaboration with Avytel Informatica, a private IT development firm in Kampala to develop an integrated, mobile and web-based electronic prescription drug monitoring system for opioids and psychotropic drugs in Uganda.

The Department of pharmacy also collaborates with Binghamton University, Binghamton, NY USA to improve pharmaceutical care skills training of undergraduate pharmacy students. Through this collaboration, an enhanced pharmaceutical care skills training curriculum has been developed and Binghamton University donated a number of skills training equipment to facilitate the implementation of curriculum.

The Department of Pharmacy also participates in the Erasmus mobility programme supported by the European Union under the Erasmus+ Programme. This mobility scheme focuses on enhancing the research capacity and opportunity for internationally comparative work to be undertaken, in particular through the exchange of staff and students in the School of Social Sciences and School of Public Health, Makerere University, and Nottingham Trent University (NTU) (UK). In 2022, three undergraduate students, three Master's students, one PhD student and two academic staff in the department benefitted from mobility scheme.

The department continued with symbiotic collaborations with several other partners that were established in the last four in the areas of training, research and services. Among these are the National Drug Authority (NDA) Wilkes University, Pennsylvania; Binghamton University, New York; Infectious Disease Institute, Makerere University; University of Minnesota; and University of Camerino, Italy.

Lastly, students from the Department of Pharmacy continued to participate in the longstanding collaboration between the Pharmaceutical Society of Uganda and Abacus Pharma Ltd that offers undergraduate scholarships for both needy undergraduate and graduate pharmacy students with interest to work in rural and underserved areas after graduation. In 2022, three Bachelor of Pharmacy students were awarded the scholarships.

2.3.2 Department of Nursing collaborations

The Department of Nursing renewed its Memorandum of Understanding with the School of Nursing at Johns Hopkins University, USA. The Department also engaged in a partnership with SEED Global Health, under which it received a Nursing SEED educator Ms. Katie Anderson, an expert in emergency nursing who is assisting with clinical teaching and development of the Master of Nursing (Emergency and critical care) curriculum.

The Department of Nursing also participated in faculty and student exchange collaboration with Nottingham Trent University (NTU), UK in 2022 under the Erasmus NTU-MAK partnership through Makerere University School of Public Health. Through this, one staff, Dr. Patience Muwanguzi visited NTU on Faculty exchange in May-July 2022; four Bachelors and Masters degree students (Phiona Nambi, Prossy Nandawula, Mary Hilda Changulo, Georgina Birungi) and

two PhD students (Mariam Namutebi and Allen Namaala) visited NTU on student exchange May-July 2022.

2.3.3 School of Dentistry collaborations

Four faculty of the School of Dentistry participated in an ongoing collaboration with Karolinska Institute, Sweden. The School also undertook a successful student and teacher exchange programme (LP programme) with the Karolinska Institute (KI) where it sent two undergraduate students to the latter and in turn received two students from KI. Furthermore, the school continued with staff and students' exchange collaborations with the University of North Carolina (USA), University of Bergen (Norway), University of Benadir (Somalia), and University of Western Ontario (Canada). The School also signed an agreement with the Schulich School of Dentistry in Western University Canada to foster internationalization (**Figure 3**)

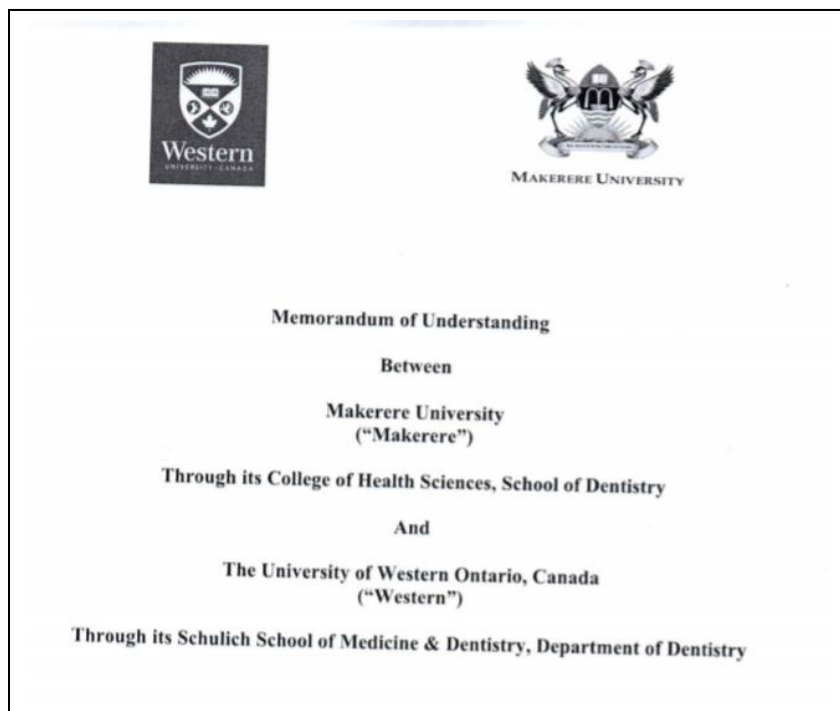


Figure 3. MOU between Makerere University and University of Western Ontario on partnership between their dental schools

2.3.4 Department of Allied Health collaborations

The Department of Allied Health continued with the final year students' exchange programme with the University of New South Wales (UNSW) School of Optometry & Vision Science (UNSW SOVS) Sydney, Australia. As part of this partnership, the department's final year students and those of UNSW participated in joint virtual Grand Rounds. This activity is being coordinated through the MakCHS International office. The Department, through MakCHS International Office is also developing an MOU with the University of Western Australia

(UWA) School of Optometry & Vision Science. If this is included, the department will become an Optometry Clinical site for UWA.

2.4 Publications

MakSHS staff contributed to publication of at least 80 refereed journal articles and reports in 2022 (**Appendix 1**). However, only 16 of these publications have our staff as first authors. Furthermore, a reasonable number of staff have not had a publication for multiple years. Pragmatic efforts are needed to improve the publication productivity, including more frequent training and mentoring, and enhanced supervision from heads of department.

2.5 Innovations

With funding from Makerere University Research and Innovations Fund (Mak-RIF), staff in the Department of Pharmacy are developing various innovative solutions to critical national and global public health problems. In collaboration with Avytel Informatica, an information technology (IT) programming and software development firm in Kampala, a team led by Professor Richard Odoi Adome and Dr. Pakoyo Kamba have designed a prototype of an integrated web-based, mobile prescription drug monitoring system (PDMS) that digitally collects data on opioid and psychotropic drug prescribing, dispensing and use, and allows automated data retrieval and analysis. The goal is to deter misuse, abuse and dependence on prescription opioid and psychotropic drugs by enhancing identification of serial users of these medications and timely linkage to care for patients with drug use disorders by prescribers and dispensers in Uganda. So far they have completed wire framing and development of the prototype and stakeholder consultation on the desirable functional scope of the product. The team is now preparing for usability testing among simulated end users (prescribers, dispensers and medicines regulators) after which final developments to fix gaps will be done followed by pilot testing on actual end users.

A team led by Dr. Kaggwa Bruhan has developed TLC fingerprints and is currently developing HPTLC fingerprints and densitograms for phytochemical standardization of herbal medicines manufactured in Uganda. Among others, they have developed TCL fingerprints for medicinal plants commonly found in cough syrups indicated for upper respiratory infections such as *Albizia coriaria* stem bark, *Mangifera indica* etc (**Figure 4-5**). These fingerprints and densitograms will be used as reference standards by local herbal drug manufacturers and medicines regulators for quality control of herbal raw materials and products.

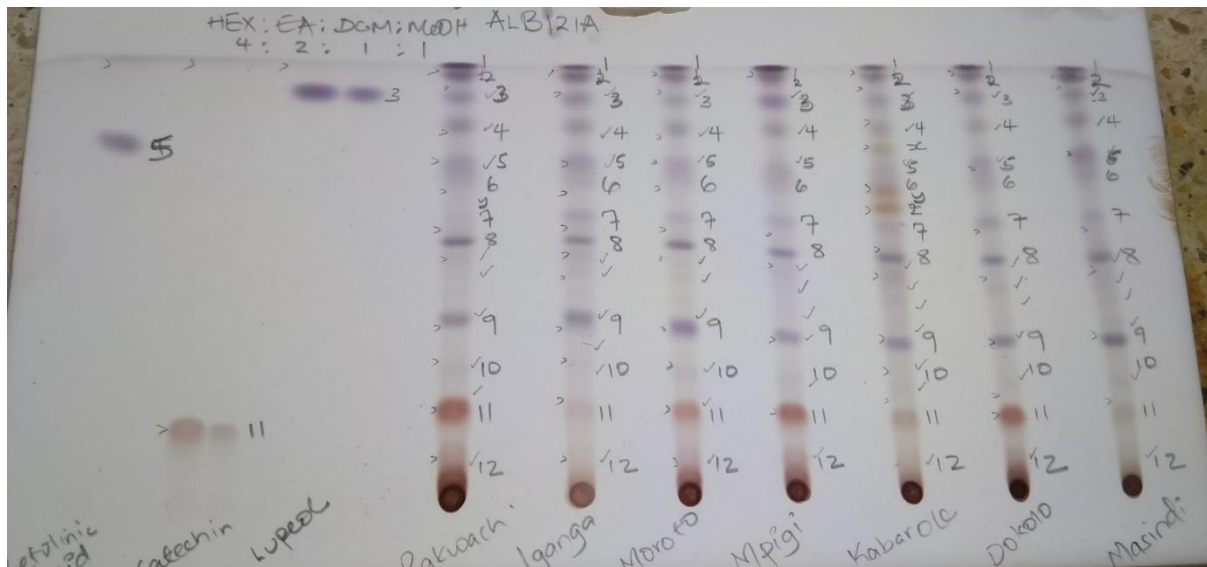


Figure 4: Thin layer chromatography fingerprint for *Albizia coriaria* stem bark raw materials from different districts across different regions of Uganda. [Image courtesy of Kaggwa Bruhan]

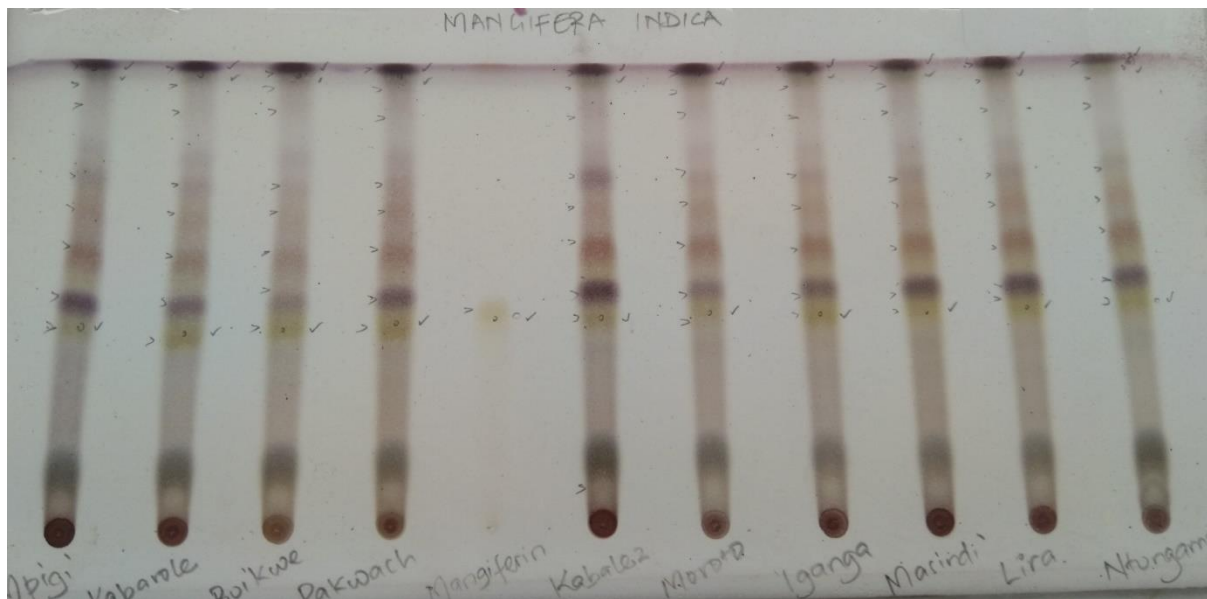


Figure 5: Thin layer chromatography fingerprint for *Mangifera indica* leaf raw materials from different districts across different regions of Uganda. . [Image courtesy of Kaggwa Bruhan]

A team led by Dr. Kaggwa Bruhan is also developing an anti-aflatoxin drug product from readily available plant materials. This product is intended to help farmers fight plant fungal diseases that produce aflatoxins in the garden and reduce aflatoxin intoxication of produce. This work is in early stages. Lastly, a team led by Dr. Norbert Anyama and Dr. Pakoyo Kamba is developing a method

for recombinant production of SARS-CoV-2 spike protein that could be employed in vaccines, diagnostics and biochemical studies.

2.6 Research disseminations and conferences

A number of MakSHS staff conducted dissemination of their research findings to end users (policy makers, development partners, practitioners, affected community) and the scientific community.

2.6.1. Dissemination to end users

In the Department of Nursing, Dr. Richard Muhindo conducted six dissemination activities of findings from the project “**Supplement: TACK COVID-19, Tackling COVID-19 Vaccine Hesitancy among People Living with HIV in Uganda**”. Firstly, he held a dissemination workshop for 52 end users of the findings comprising representatives of PLWH, health facility in-charges and Ministry of Health on 26th June, 2022 at Fairway hotel Kampala (**Figure 6**); also accessible at Muhindo Richard dissemination activities <https://youtu.be/uzPA1GcCQnk>.



Figure 6. Dissemination workshop on COVID-19 hesitancy among PLWH, Fairway Hotel, Kampala, 26th June 2022. *Top left*, Richard Muhindo, the Research Fellow presenting the findings. *Top right*, Commissioner from Ministry of Health giving remarks. *Bottom*, group photo with the workshop participants.

Secondly Dr. Muhindo presented at a virtual meeting of the task force to support COVID-19 vaccination through PEPFAR-support programs by CDC/DDPHSIS/CGH/DGHT and USAID comprising over 40 key partners and implementers of COVID-19 vaccination response on 20th July, 2022. Thirdly, Dr. Muhindo presented his findings at the IDI research forum meeting on 21st July, 2022, where 55 people including health professionals and researchers were reached. Fourthly, Dr. Muhindo and team conducted a training workshop where 52 health professionals (doctors, nurses and clinical officers) from health facilities within Kampala metropolitan area received information on debunking COVID-19 vaccination misconceptions. The workshop was held on 29th July at Fairway hotel in Kampala (**Figure 7**). Health facilities and participants received 1000 IEC materials (500 brochures, 500 leaflets, and 100 t-shirts) with messages on COVID-19 vaccination.



Figure 7. Training workshop for 52 health professionals from health facilities in Kampala metropolitan area on debunking COVID-19 vaccination misconceptions, Fairway Hotel, Kampala, 29th July 2022. *Top left*, Dr. Stephen, a partner, giving remarks. *Top right*, Dr. Muhindo interacting with participants during the workshop. *Bottom left*, participants engaging in the discussion. *Bottom right*, group photo with the workshop participants.

Fifthly, Dr. Muhindo and team presented findings to the UNEPI (Uganda National Expanded Programme on Immunization) service delivery pillar sub-committee virtual meeting that reviews performance, where 23 participants from key partners (WHO, CDC, USAID and national managers of the immunisation program in Uganda) were reached on 3rd August, 2022. Lastly,

Dr. Muhindo's team presented their findings at the COVID-19 Round 3 AMVC National Feedback Workshop for UNEPI Pillars, 4th August 2022 at Imperial Royale Hotel, Kampala where 35 people were reached (**Figure 8**).



Figure 8. Dr. Muhindo (c) at the AMVC National Feedback Workshop for UNEPI Pillars, 4th August 2022 at Imperial Royale Hotel, Kampala.

2.6.2 Conference presentations

Staff in the Department of Nursing made at least 10 presentations at both national and international conferences covering diverse topics such as Vitamin A-rich Food Consumption among Women and Mother-child dyads in Uganda; reasons for non-acceptance of COVID-19 vaccination among people living with HIV; and Barriers and facilitators of regular syphilis and HIV testing among Female sex workers in Uganda. Others include Predicting adverse newborn outcomes using umbilical cord artery lactate measurements; role of midwives in the care of women with Fetal distress; oral PrEP uptake among high-risk men at workplaces in Uganda; and minimizing Stigma in HIV Prevention and Care Provision to MSM and Transgender Persons in Uganda (**Appendix 2**).

2.6.3 Organization of major conferences

In support of MakSOM, staff of MakSHS served in the organizing committee for the 16th Joint Annual Scientific Health Conference/28th UNACOH Conference/3rd MinOSH International Conference/20th Dr. Mathew Lukwiya Memorial Lecture/1st National Antimicrobial Resistance Symposium that was held at Speke Resort Munyonyo, Kampala on 21st – 23rd 2022.

2.7 Research management and research skills development

2.7.1 Research management in MakSHS

MakSHS has had a Uganda National Council of Science and Technology (UNCST) accredited Research and Ethics Committee (MakSHSREC) for at least 10 years. MakSHSREC facilitates ethical and responsible conduct of research in the school and in the country by conducting initial and continuing review and approval of research projects, with the aim of protecting rights and welfare of human research participants involved in research. In 2022, MakSHSREC hastened the protocol review process to enable faster feedback and approval of research protocols. This was realized by conducting more frequent protocol review meetings; MakSHSREC held protocol review meetings 22 times in 2022. Of these, six were sessions of concurrent meetings for handling the high volume of undergraduate research protocols from the departments of Pharmacy and Nursing. In addition, MakSHSREC held five joint meetings with the School Higher Degrees Committee (MakSHSHDREC) to consider PhD concepts and nominees for supervisors and doctoral committee for provisional admission, PhD research protocols for full admission, and graduate thesis examiners. Altogether, 272 research protocols were handled by MakSHSREC in 2022 (Table 6).

Table 6. Breakdown of number of research protocols handled by MakSHSREC by category

Categories of research protocols handled	Number of research protocols handled
Initial research protocols (new protocols)	130
Renewed research protocols (continuing protocols/ studies)	12
Amended research protocols	13
MAKSHS PhD concept papers handled	03
Total	272

Concepts and proposed doctoral supervisors and committee for at least two more applicants are under consideration by the DHREC. Furthermore, the MakSHSHDREC considered thesis/dissertation examiners for one PhD candidate from the Department of Nursing and nine Masters degree candidates from the Department of Pharmacy. In 2022, the use of online meetings was partly instrumental in enabling MakSHSREC to handle a higher volume of protocols because quorum was realized faster. MAKSHSREC generated UGX 122,434,758= for its operations in the year 2022.

2.7.2 Research skills development activities conducted in 2022

With financial support from Mak-RIF under the project ““*A prospective cohort study of oral morphine self-medication by caregivers of paediatric patients at Mulago National Referral Hospital, Kampala*”, a two-day research skills workshop was held for junior teaching staff (Lecturer and below), Masters degree students, PhD students, and research staff in the Department of Pharmacy on July 26th 2022 (Figure 9). The workshop covered topics on research ethics; responsible conduct of research; grants financial management; and introduction to grants writing.



Figure 9. Research skills enhancement workshop for junior faculty, research staff and graduate students in progress. *Left*, Dr. Kalidi Rajab training on r\Research Ethics and Responsible Conduct of Resaerch. *Top right*, Mr. George Turyamureeba, Head Finance at MakRIF/GAMSU training on Grants Financial Management. *Bottom right*, Dr. Pakoyo Kamba training on Grant Writing.

2.8 Service to the university and the community

The Department of Pharmacy together with School of Public Health with support from WHO and National Drug Authority implemented a project titled “*Incorporation of Pharmacovigilance (PV) in pre-service training curriculum for Health professional training Institutions in Uganda*”. The project involved performing a training needs assessment and development of a national PV training curriculum for incorporation into the curricula of health professional training institutions in Uganda. The ultimate aim of the project is to improve the detection, recognition and timely reporting of medicine safety by the future health care professionals in Uganda through improved PV education.



Figure 10. Group photo of participants at Pharmacovigilance stakeholder dissemination meeting held at Forest Cottages, Bukoto, Kampala, 17th August 2022.

Each year, the pharmacy students carry out a number of activities through their umbrella association Makerere University Pharmacy Students Association (MUPSA). This year they organized a medical camp in Sheema District Western Uganda where they conducted health education and treated many community members for primary health care conditions. The students association also conducted an annual students' career workshop and quiz.

Members of MakSHS also served on boards of government agencies in 2022. In the Department of Pharmacy, Dr. Pakoyo Kamba completed his tour as member of the Board of National Drug Authority and Dr. BD Otto was appointed by the Minister of Health as his replacement. Dr. Pakoyo Kamba also continued his service as member of the Allied Health Professionals Council representing the College of Health Sciences. In the School of Dentistry, Dr. Mbabali Muhammed served on the Board of National Drug Authority as a representative of Uganda Dental Association. In the Department of Nursing, Dr. Richard Muhindo served on the organizing committee for the Joint Annual Scientific Health Conference 2022, and Dr. Patience Muwanguzi served on the case management team for Ebola Virus Disease (EVD) at Mubende Regional referral hospital (**Figure 11**).



Figure 11. Essential community clinical services provided by MakSHS staff. *Left*, Dr. Patience Muwanguzi at the EVD Case management unit in Mubende Regional Referral Hospital. *Right*, Academic Vision Center at the University Teaching Hospital hosting pre-registration practical exams for foreign trained optometrists on behalf of the Allied Health Professionals Council.

The Department of Allied Health conducted pre-registration practical exams for foreign trained optometrists with Diplomas and Degrees in Optometry on behalf of the Allied Health Professionals Council in November 2022 (**Figure 11**). This was the first ever pre-registration exam for foreign trained optometrists in Uganda. The Department also provided clinical services to Makerere University staff, students and the community at its three teaching sites, namely, Academic Vision Centre (AVC) at the University Hospital, Optometry Teaching Clinic (OTC) at the College of Health Sciences, Mulago, and the Optometry Clinic at Mulago Hospital Eye Unit.

3. CHALLENGES TO MEETING SOME GOALS

3.1 Common challenges across all units in the school

- All departments report overload from teaching many classes and supervising many students that that has perpetually deprived staff of time for research, grant writing and publication. Allied Health department has only three academic staff (two permanent and one on short contracts). No wonder it has submitted only one unsuccessful grant application in many years. This department also lacks an administrative secretary, lab technicians and cleaners. The departments of Pharmacy and Nursing have severe shortages in teaching staff relative to the teaching work load they handle and the tremendous increase in class sizes in the last few years.

- With the exception of MakSOD that received affirmative action for dental teaching materials, all other departments report that they again lacked critical teaching materials like laboratory consumables and hospital personal protective equipment (PPE) in 2022 due to low budgets.
- Long delays in procurement also led to late delivery and shortages of teaching materials. This even affected units with better budgets for teaching materials such as MakSOD.

3.2 Department of Pharmacy

- The department lacks essential modern laboratory equipment, and the old laboratory equipment and infrastructure (water pipes and gas lines) are dilapidated.

3.2 Department of Allied Health

- Shortage of space- Department of Allied Health lacks a home, and some of its faculty lack office space completely.
- The revised curriculum for Bachelor of Optometry was submitted to Senate, but have not received any feedback for a long time.

3.3 Department of Nursing

- There was damage to the fibre optic for its internet during construction works in Mulago which led to long blackouts without repair or temporary solution like Wi-Fi routers or portable internet devices. This affected online teaching.
- Delays in maintenance response to leaking roofs and other building needs affected classes during rains
- Department continues to face challenges in transportation of students to clinical sites such as Kiruddu, Butabika and Kawempe hospitals. The single mini-van is not enough to carry all students.

3.4 School of Dentistry

- The student numbers were quite high in 5th year, which affected length of students' exposure in some clinical rotations and delivery of clinical mentoring by staff.

3.5 MakSHS REC

- The REC has run out of office space for storing research protocols submitted to it. It intends to ask the Department of Pharmacy to accord them some open space to expand their storage, but it also lacks the funds to partition such space.
- The number of protocols and business handled by the REC has drastically increased in the last few rendering one administrator insufficient. It desires to recruit an administrative assistant to bolster the administrator. However, lack of sufficient funds is still hampering realization of this goal.

4. ACADEMIC ADMINISTRATION AND GOVERNANCE

4.1 School Board meetings

MakSHS conducted 10 school board meetings (about monthly) in 2022 in fulfillment of its corporate oversight and decision making roles. Meeting regularly enabled timely disposal of academic business requiring decisions of the board, such as consideration of students' results and performance; students' applications for withdrawal, reinstatement, remarking, conceded pass, change of academic programme, exemption from prior offered courses; admissions' applicants; etc. MakSHS board considered 21 students requests for withdrawal, 11 for reinstatement, and

five for remarking, among other students' related business (**Table 7**). The board discontinued one student for failing the same course three times, and was updated on students who had received Dean's written warnings after failing the same courses twice. Furthermore, the board considered a request for tuition waiver from one staff in the school and a nomination of Professor Odoi Adome as Emeritus Professor in the Department of Pharmacy.

Despite the good performance of the board in 2022, MakSHS is striving for further improvement in timeliness of board decisions by targeting to achieve the statutory requirement of at least one meeting monthly that is prescribed in the "*Management of Constituent Colleges of Makerere University statute, 2012*".

Table 7. Statistics of different students' business handled by MakSHS Board in 2022

Students' related business	Number of cases handled
Applications for withdrawal from academic programme	21
Applications for reinstatement into academic programme	12
Applications for remarking	5
Request for exemption of prior done courses (degree entry scheme)	2
Application for conceded pass	1
Request to stay put	1
Students who have failed same course three times	1
Students who had failed same courses twice	4
Continuing student's transfer from MBChB to BPharm	1

4.2 School Examinations, Irregularities and Malpractices Committee meetings

MakSHS held three meetings of its Exams, Irregularities and Malpractices committee in which 14 cases (two for Semester II 2020/21, seven for Semester I 2021/22, five for Semester II 2021/22) of students who were found with unauthorized material in the examination rooms were considered. Of these, 12 students were cautioned and their examination for the affected courses cancelled while two students were suspended from their academic programmes for one year and their examination for the affected courses cancelled. The College, school and departments have variously engaged students to sensitize them on examination malpractices and penalties, but the perpetrators seem not to relent. In addition to continuing with students' engagements, the school has strengthened vigilance by invigilators, Heads of Department and Dean's office prior to and during examinations to mitigate the vice.

4.3 School Establishments, Appointments and Promotions Committee meetings

MakSHS held three meetings of its Establishments, Appointments and Promotions committee in 2022 during which 10 applications for promotion, six applications for confirmation into the university service, and two short lists of applicants seeking appointment by the university into faculty positions in the school's departments were considered. Hastening the progression of human resource business through the school is a priority of current leadership. We, therefore, drastically reduced the lead time for consideration of appointments and promotions business

submitted by departments to the school from a few months previously to not more than two weeks as required by the university.

4.4 School Management and Finance Committee

MakSHS Management (Dean, Heads of Department, Head REC, school registrar, school administrative secretary, school accountant) which also doubles as its Finance Committee met once to consider Management business and once to consider finance committee business in 2022. We could not meet more frequently due to the hectic teaching occasioned by the shortened semesters post COVID-19 lockdown.

4.5 Presentation of school business at College committees

MakSHS presented the Department of Pharmacy's proposal for transformation into a School of Pharmacy to the College Academic Board. After consideration, the latter recommended that proposal is revised and submitted to the College Programmes and Libraries Committee. Furthermore, that more stakeholder consultations, including a stakeholder meeting is conducted. MakSHS is working with the Department of Pharmacy to address these recommendations and resubmit the proposal as guided by April 2023.

5. HUMAN RESOURCE DEVELOPMENT IN THE UNIT

5.1 Staff establishment

In 2022, MakSHS boasted of 83 full time staff before Dentistry attained School status, comprising 14 in the Department of Nursing, 26 in the Department of Pharmacy, 3 in the Department of Allied Health, and 36 in the School of Dentistry (**Appendix 3-8**). The 83 comprise 63 academic, six technical (technicians, nurses, radiographer, Chairsides Assistant), one library, six are administrative, and eight support staff. The Department of Nursing has one unfilled vacancy for academic staff whose advert is awaited.

The number of academic staff in MakSHS and MakSOD is far below the number required to deliver the work load they are entrusted with, which leaves staff with heavy teaching loads and little time for research and publication. Consequently, the school suffers from low productivity of first author papers and lack of large grants which are typically accessible from external funders. Low research productivity is also partly exacerbated by shortage of staff with PhDs in the school. Among the 63 academic staff, 15 hold PhDs comprising six in the Department of Nursing, four in the Department of Pharmacy and five in the School of Dentistry.

The Department of Allied Health is hardest hit with staff shortage, with only three staff (two permanent, one on short term contracts) shouldering a whole academic programme involving lots of hands-on practical and clinical training. The Department also lacks an administrative secretary, technicians, and cleaners.

5.2 Staff academic development

MakSHS greatly values the academic development and career growth of its staff as the engine to attaining Makerere University's dream of becoming a research-led institution. The year 2022 was very rewarding to MakSHS in terms of academic achievement of its academic staff, with four staff completing their doctoral degrees. In the Department of Nursing, Dr. Joyce Nankumbi completed

her PhD at the University of Massachusetts, Amherst while Dr. Richard Muhindo and Dr. Elizabeth Ayebare completed PhDs at Makerere University (**Figure 12**). In the School of Dentistry, Dr. Annet Kutesa completed her PhD at Makerere University. We congratulate them upon reaching the zenith of academic achievement. The school also congratulates Ms. Damalie Namusabi, the secretary in the Department of Pharmacy who completed a Master of Public Administration and Management at Makerere University in 2022. On the other hand, a number of staff in the MakSHS are undertaking doctoral and Masters degree studies. In the School of Dentistry, eight staff are undertaking PhD training at Makerere University (Kamulegeya Adriene, Ntuulo Juliet, Barbara Ndagire, Mwebasa Ernest, Kalyesubula Allan) and overseas (Catherine Mwesigwa, Nono David, Picho Ali). In the Department of Nursing, five staff are undergoing PhD training at Makerere University (Mariam Namuetbi, Lydia Kabiri, Tom Ngabirano) and overseas (Charles Peter Osingada, Connie Olwit), while one staff is studying a MSc in Clinical Epidemiology and Biostatistics (Patience Muwanguzi). In the Department of Pharmacy, six staff are undertaking PhD studies at Makerere University (Winnie Nambatya, Paul Kutwabami, Edson Munanura) and Mbarara University of Science and Technology (Kaggwa Bruhan, Lutoti Stephen, Pamela Blessed Purity). Lastly, one administrative staff in the Dean's office is pursuing a Masters degree in Health Services Research.



Figure 12. Right to left, Dr. Elizabeth Ayebare (*with flowers*) after her successful doctoral defence on 22/12/2022, celebrating with colleagues Dr. Richard Muhindo (*right*) and Dr. Joyce Nankumbi (*left*), and mentor Dr. Rose Nabirye Chalo (*second left*).

5.3 Staff career growth

The year 2022 was equally rewarding to MakSHS in terms of career growth of its academic staff, with one staff promoted to the rank of Associate Professor and three staff promoted to the rank of Senior Lecturer. In the Department of Nursing, Dr. Richard Muhindo and Dr. Patience Muwanguzi were promoted to Senior Lecturer. In the School of Dentistry, Dr. Adriane Kamulegeya was promoted to Associate Professor. MakSHS congratulates them for the monumental career leaps.

During 2022, MakSHS also handled a number of staff applications for promotion, many of which have satisfactorily progressed through the College Establishments and Appointments Committee and are awaiting the decision of the university Appointments Board (UAB). These include three applications for promotion to Associate Professor (one each from Pharmacy, Nursing and Dentistry), two for promotion to Senior Lecturer (one each from Nursing and Pharmacy), and one for promotion to Lecturer (Pharmacy). Lastly, a number of staff were appointed into academic leadership in the school. Dr. Pakoyo Fadhiru Kamba was appointed Dean of the School of Health Sciences, Dr. Annet Kutesa was appointed Dean School of Dentistry, and Dr. Robert BD Otto was appointed Head Department of Pharmacy (**Figure 13**), each for four-year terms. MakCHS congratulates them upon those achievements and thanks them for accepting the responsibility to usher the two schools into research intensive units of the university.

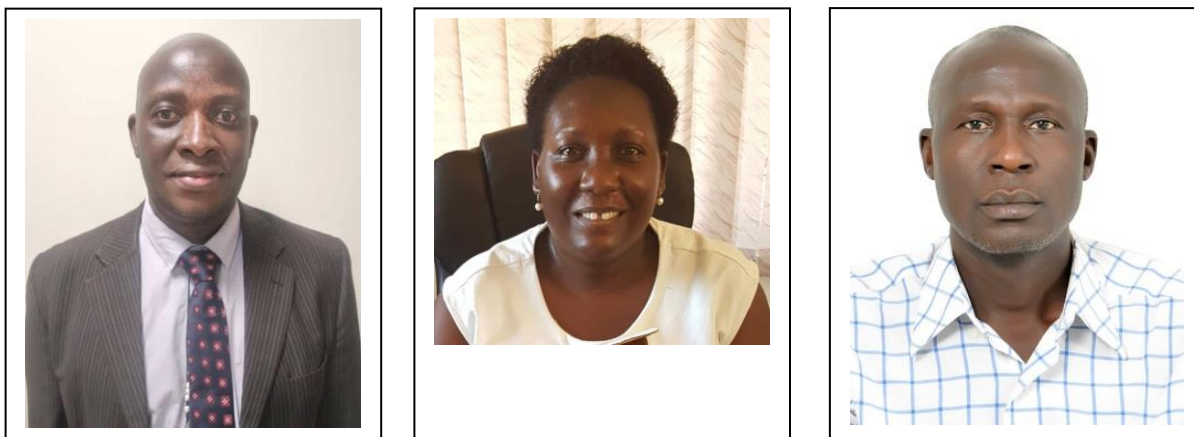


Figure 13. Recent portraits of Dr. Pakoyo Fadhiru Kamba (left), Dr. Annet Kutesa (centre) and Dr. Robert BD Otto (right).

5.4 Confirmations in the service of Makerere University

MakSHS considered applications for confirmation in the service of the university for six staff (five academic, one support) who had satisfactorily served their probation, and recommended all of them for the consideration of the College Establishments and Appointments Committee. The latter has since recommended them for confirmation by the University Appointments Board.

5.5 New staff recruitment, retirement, post-retirements and transfers

The university hired two new Assistant Lecturers for the Department of Pharmacy, namely, Dr. Henry Kyeyune and Dr. Noah Mutebi. We congratulate them upon appointment into university service. Relatedly, MakSHS considered and approved short lists of applicants for the positions of Assistant Lecturer and Technician in the School of Dentistry. These have since been approved by the College Establishments and Appointments Committee and candidates interviewed. Final decisions on their appointments are awaited from the University Appointments Board.

Furthermore, Professor Richard Odoi Adome (**Figure 14**) who founded the Bachelor of Pharmacy programme at Makerere University and served as pioneer Head of the Department of Pharmacy and pioneer Dean of MakSHS also completed his final post-retirement contract on attaining 70 years of age in November 2022 after over 40 years of service to the university. MakSHS commends Professor Odoi's dedication and diligent service to the university. In recognition of Professor Odoi's outstanding contribution to the growth of academic pharmacy, pharmacy practice and the

pharmaceutical sector in Uganda, he was severally nominated by former students, colleagues, and eminent peers across the globe for the university to consider appointing him to the position of Emeritus Professor. The nomination has so far advanced successfully through the Department Academic Board, School Academic Board and College Academic Board, and is on its way to Senate for further consideration.



Figure 14. A current portrait of Professor Richard Odoi Adome

Lastly, Ms. Grace Kyonoba who was the Administrative Secretary for MakSHS was transferred to the office of the Deputy Principal, College of Education and External Studies (CEES) while the school received Ms. Tusiime Priscilla as its new Administrative Secretary. We thank Grace for her four years of service to MakSHS and wish her the best in her new duty station. We also welcome Priscilla to the family of MakSHS.

5.6 Expansion in staff establishment for Department of Dentistry and Pharmacy

In the last 2-3 years, the departments of Dentistry and Pharmacy with support from the leadership of MakSHS and MakCHS has successfully engaged university Management to address concerns of the joint East African Medical and Dental Practitioners Councils and those of the Council of the Pharmaceutical Society of Uganda about inadequate staffing in these departments. Through these engagements, the academic staffing levels in the new MakSOD has affirmatively expanded from 14 four years ago to about 30 and that of Pharmacy has increased by two to 19. MakSHS thanks university Management and the University Council for the tremendous support rendered towards this achievement.

6. INFRASTRUCTURAL DEVELOPMENTS IN THE UNIT

6.1 Estates development and maintenance

Makerere University Council granted the Department of Dentistry a School status, which was soon after operationalized by the University and a Dean appointed. A new building for the Dental Hospital of the School of Dentistry was completed next to the Don Bosco building and officially opened by the First Lady and Minister of Education and Sports on May 17th 2022 (**Figure 15**). New dental equipment for the dental hospital were also delivered, installed and operationalized in May 2022.



Figure 15. Group photograph after launch of the Dental Hospital and School of Dentistry by the Minister of Education and Sports and First Lady, Hon. Janet Kataha Museveni, in the presence of Makerere University Council Chairperson Mrs. Lorna Magara, Vice Chancellor Professor Barnabas Nawangwe, Principals of MakCHS and Deans of schools in MakCHS on May 17th 2022.

In the Department of Pharmacy, renovations were conducted by the Estates Department to repair leaking roofs, broken water/sewerage systems, lighting and broken ceiling. We thank the leadership of MakCHS for financially and administratively facilitating these repairs.

6.2 Improvements and acquisition of new laboratory Equipment

Through the network of its longtime friend, Mr. Frans Bosman, the Department of received a large donation of assorted lab equipment for pharmaceutical compounding and analysis, including multitudes of glassware, worth at least USD 500,000 from the **Farmacie Mondiaal Foundation**, Netherlands. These equipment include some we had never had such as capsule moulds and

consumables, and membrane ultrafiltration equipment for preparation of sterile ophthalmic products. The consignment of these equipment was received in February and commissioned by the Deputy Vice Chancellor Academic Affairs (DVCAA), Professor Umar Kakumba on March 2nd 2022. This was done in the presence of the Deputy Principal MakCHS, Professor Isaac Kajja, Member of the Council of the Pharmaceutical Society of Uganda (PSU)/Chair of PSU's Examinations Committee, Dr. Francis Otim, and staff and students of the Department (**Figure 16**).



Figure 16. Commissioning of donated lab equipment by the DVCAA, Makerere University at the Pharmacy Laboratories, Pharmacy Building. Top left, Mr. Frans Bosman (donor) speaking via zoom. Top right, DVCAA, Professor Umar Kakumba speaking at the commissioning of the equipment. Bottom left, Dr. Micheal Kibwika from the Pharmaceutics and Radiopharmacy Unit

demonstrating the sequence of events during production of capsules using the donated molds. Bottom right, DVCAA inspecting the rest of the unsealed boxes of equipment and glassware.

In August 2022, the Department of Pharmacy received video conferencing equipment from Professor KarenBeth Bohan, a longtime collaborator from the School of Pharmacy, Binghamton University, New York (**Figure 17**). The equipment are aimed at consolidating the learning and research collaboration between the two schools of pharmacy.



Figure 17. Handover ceremony for videoconferencing equipment to the Department of Pharmacy in the Pharmacy Building on Makerere University main campus by Professor KarenBeth Bohan of Binghamton University New York. *Left to right;* Professor Richard Odoi Adome, Mr. Sabila Bosco, Dr. Robert BD Otto, Professor KarenBeth Bohan, Dr. Kalidi Rajab.

7. DEVELOPMENTS IN THE LIBRARY AND LEARNING RESOURCES

Departments in MakSHS have not reported receipt of any new books and e-resources from either the university library book bank programme or donations in 2022.

8. AWARDS AND RECOGNITION

In the Department of Pharmacy, Dr. Lutoti Stephen won a Heroes in Health Award (HIHA) in the Pharmacy category in November 2022 for his innovative and creative contributions to the health sector (**Figure 18**). This was the second consecutive year Dr. Lutoti was winning this award. Additionally, Dr. Lutoti won the award of Lecturer of the Year from the Makerere University Pharmacy Students Association (MUPSA) in September 2022 (**Figure 18**).

Furthermore, Professor Richard Odoi Adome won a Life Achievement Award from MUPSA for his services to academic pharmacy in Uganda and the region.



Figure 18. Awards to Dr. Lutoti; left, snapshot from HIHA award ceremony; right, plaque from MUPSA award.

10. CRITICAL NEEDS IN THE SCHOOL

10.1 Cross-cutting needs

- Shortage of senior academic staff at the ranks of Professor and Associate Professor, which strategically deprives the school of the clout needed to thrive in the global scientific market. Work overload and the slow pace of promotions in the university are hindering career progression of qualifying staff.

10.2 Department of Pharmacy

- The furniture and doors of the pharmacy lecture theatre (PLT) need repair and/or replacement
- Severe shortage of teaching staff relative to work load deprives staff of time for grant writing, research and manuscript writing.
- Department of Pharmacy has lacked Chief and Senior Technicians for over 10 years which hampers management of laboratory facilities, and planning, preparation and instruction of practicals to students. The Department of Pharmacy engaged the DVCAA on this in February 2022 and it was directed to make a formal request for tabling before management. We plan to follow this up in 2023.
- Severe shortage of cleaners. In the last six years, the department has suffered death of one cleaner, retirement of two cleaners and transfer of one cleaner without replacement creating a deficit of four cleaners. This deficit in cleaning manpower has greatly hampered maintenance of hygiene in the department.

- There is inadequate laboratory equipment and perpetual lack of reagents, which hampers delivery of practical teaching. Affirmative action on this matter is needed as it has been flagged as an area of tremendous concern by the supervision team of the Council of the Pharmaceutical Society of Uganda (PSU).

10.3 Department of Allied Health

- Severe shortage of academic staff has hampered all round delivery of university mandate because no time is left for research, sufficient mentoring of students and community outreach. This is also hindering staff from getting annual leave.
- The department lacks cleaners.
- The optometry teaching clinic (OTC) at the College of Health Sciences is used both as a clinical teaching facility and traditional classroom. This has led to a challenge of getting enough clinical practice time for both 3rd and 4th year Bachelor of Optometry students.
- The ceiling of the OTC partially collapsed due to water damage from the leaking roof. The plumbing is leaking which has led to flooding and disruption of water supply. There is urgent need to repair the plumbing work in the Optometry Teaching Lab as the lack of water disrupts practicals for the learners.
- The Academic Vision Centre (AVC) at the university hospital where final year students get their clinical experience and provides clinical care to university staff, students and the community lacks support staff which hinders equipment maintenance.
- Space has been availed by the Eye Unit at Mulago Hospital to create an Optometry clinic where our teaching staff and students will support the ophthalmology section by providing refraction, binocular vision, contact lens and low vision services. However, the unit needs equipment and proper partitioning for optimal instruction for the learners. There is need for engagement between the University and Mulago Hospital regarding furnishing of this clinic.

10.4 Department of Nursing

- Heavy teaching load is depriving staff of time to do more research and innovation. The Department has only 13 staff (including those on study leave) to provide classroom teaching, bedside clinical teaching and field supervision of undergraduate and graduate students, yet students' numbers are ever increasing.
- Nursing is a department at Makerere University yet it exists as schools and colleges in other universities regionally and globally. This reduced status not only disadvantages Nursing in some opportunities for partnerships but is also partly responsible for the inadequate staffing.
- Lack of space. The Department of Nursing is housed in a very small, old annex of the Department of Pharmacology, with many faculty crowding in small offices.
- Shortage of PPE for the students and staff to use during their clinical rotations.
- Inadequate transportation to clinical sites such as Kiruddu, Butabika and Kawempe hospitals

10.5 School of Dentistry

- Lack of dedicated school registrar. MakSOD still shares a registrar with MakSHS. Although one had been posted there, he was shortly transferred to another College.

10.6 MakSHS REC

- Budget shortfalls are hampering fulfillment of critical needs of additional storage space for research protocols and hiring of an administrative assistant to bolster manpower.

11. FUTURE PLANS

The following are the priorities for MakSHS in 2023 and the next three years.

11.1 School level plans

- Establish, empower and motivate joint MakSHS/MakSOD research teams to constantly provide timely and competitive responses to grant calls, requests for proposals/applications (RFPs/RFAs) or funding opportunity announcements (FOAs).
- Mobilize staff in the school to step up efforts on attaining requirements for staff promotion and career progression
- Obtain the support of senior faculty in sister schools in MakCHS (Medicine, Biomedical Sciences, Public Health) to support research teams and faculty in MakSHS and MakSOD in writing competitive grants to external agencies.
- Facilitate and encourage manuscript writing and publication through constant dialogue, research retreats, and writing skills enhancement training and mentoring.
- Make deliberate efforts to expand engagements of MakSHS and its departments and units with government agencies, private sector, non-profit sector, global agencies and universities through seeking of new memorandums of understanding (MOUs), collaborations and partnerships.
- Increase the uptake of ODEL in MakSHS through stepped up mentoring of faculty to develop and utilize e-content by the university's e-learning champions and support system.
- Reinvigorate work on transformation of the departments of Pharmacy and Nursing into School of Pharmacy and School of Nursing, respectively.
- Closely monitor progression of curricula under approval to ensure faster progression through the value chain.
- Enhanced support supervision to departments
- Complete development of a MakSHS strategic plan, and engage departments to develop their own strategic plans drawing from the university, college and school strategic plans.

11.2 Department of Allied Health plans

- Complete development of a department strategic plan.
- Engage the university to increase the number of teaching staff from the current three.
- Engage the university to allow affirmative consideration of staff development of outstanding graduates of the Bachelor of Optometry due to the shortage of people with postgraduate degrees in Optometry in Uganda.
- Operationalize the Optometry clinic at the Ophthalmology unit of Mulago Hospital.
- Commit more time for networking to Masters scholarships to support development of local faculty from young graduates of Optometry.
- Add more effort on writing grant applications and manuscripts by staff and students.

11.3 MakSOD plans

- Formalize and operationalize essential structures of the School of Dentistry.
- Consolidate and enhance collaborations with international institutions.

11.4 MakSHS REC plans

- Expanding office space to accommodate the big volumes of research protocols submitted
- Lobby for funds to support space expansion and recruitment of an administrative assistant, etc.

APPENDIX

Appendix 1. Publications by MakSHS staff in 2022

Department of Nursing

- 1) **Muhindo, Richard**, Stephen Okoboi, Agnes Kiragga, Rachel King, Walter Joseph Arinaitwe, and Barbara Castelnovo. "COVID-19 vaccine acceptability, and uptake among people living with HIV in Uganda." *Plos one* 17, no. 12 (2022): e0278692.
- 2) Udho, Samson, **Joyce Nankumbi, Mariam Namutebi**, David Mukunya, Grace Ndeezi, and James K. Tumwine. "Prevalence of anaemia in pregnancy and associated factors in northern Uganda: a cross-sectional study." *South African Journal of Clinical Nutrition* (2022): 1-6.
- 3) **Nankumbi Joyce**, Frederick KE Grant, Lindiwe Sibeko, Evelyn Mercado, Norman Kwikiriza, Simon Heck, and Lorraine S. Cordeiro. "Predictors of vitamin A rich food consumption among women living in households growing orange-fleshed sweet potatoes in selected regions in Uganda." *Frontiers in Public Health* 10 (2022).
- 4) **Nankumbi Joyce**, Lorraine Cordeiro, Lindiwe Sibeko, Frederick Grant, Evelyn Mercado, Norman Kwikiriza, and Simon Heck. "Comparative Analysis of Food Security Measures by Vitamin A-rich Food Consumption Among Mother-Child Dyads in Uganda." *Current Developments in Nutrition* 6, no. Supplement_1 (2022): 149-149.
- 5) **Nankumbi, Joyce**, Lorraine Cordeiro, Lindiwe Sibeko, Frederick Grant, Evelyn Mercado, Norman Kwikiriza, and Simon Heck. "Predictors of Vitamin A-rich Food Consumption Among Women From Selected Regions in Uganda." *Current Developments in Nutrition* 6, no. Supplement_1 (2022): 150-150.
- 6) **Namutebi Mariam**, Dorcus Kabahinda, **Scovia Nalugo Mbalinda**, Racheal Nabunya, Dorothy Gingo Nanfuka, **Lydia Kabiri**, Tom Denis Ngabirano, and Patience A. Muwanguzi. "Teenage first-time mothers' perceptions about their health care needs in the immediate and early postpartum period in Uganda." *BMC Pregnancy and Childbirth* 22, no. 1 (2022): 743.
- 7) Asiimwe Susan, **Charles Peter Osingada, Scovia N. Mbalinda**, Mark Muyingo, **Elizabeth Ayebare, Mariam Namutebi, and Patience A. Muwanguzi**. "Women's experiences of living with involuntary childlessness in Uganda: a qualitative phenomenological study." *BMC Women's Health* 22, no. 1 (2022): 1-13.
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- 9) Wanyenze Eva Wodeya, Josaphat K. Byamugisha, Nazarius Mboona Tumwesigye, **Patience A. Muwanguzi, and Gorrette K. Nalwadda**. "A qualitative exploratory interview study on birth companion support actions for women during childbirth." *BMC Pregnancy and Childbirth* 22, no. 1 (2022): 63.
- 10) Kwizera, Arthur, Cornelius Sendagire, Yewande Kamuntu, Meddy Rutayisire, Jane Nakibuuka, **Patience A. Muwanguzi**, Anne Alenyo-Ngabirano, Henry Kyobe-Bosa, and Charles

Olaro. "Building Critical Care Capacity in a Low-Income Country." *Critical Care Clinics* 38, no. 4 (2022): 747-759.

11) **Muwanguzi Patience A.**, Paul Kuodi Otiku, Blessings Gausi, **Tom Denis Ngabirano**, **Scovia Nalugo Mbalinda**, Mobolanle Balogun, Derrick Tembi Efié, and **Charles Peter Osingada**. "Outcomes of interventions to optimize linkage to HIV care and antiretroviral therapy (ART) initiation after HIV self-testing: A scoping review." *Journal of Global Health Reports* 5 (2022): e2021107.

12) **Muwanguzi, Patience A.**, LaRon E. Nelson, **Tom D. Ngabirano**, Noah Kiwanuka, **Charles Peter Osingada**, and Nelson K. Sewankambo. "Linkage to care and treatment among men with reactive HIV self-tests after workplace-based testing in Uganda: A qualitative study." *Frontiers in Public Health* 10 (2022).

13) Nasuuna, Esther, Florence Namimbi, **Patience A. Muwanguzi**, Donna Kabatesi, Madina Apolot, Alex Muganzi, and Joanita Kigozi. "Early observations from the HIV self-testing program among key populations and sexual partners of pregnant mothers in Kampala, Uganda: A cross-sectional study." *PLOS Global Public Health* 2, no. 1 (2022): e0000120.

14) Mills Tracey A., **Elizabeth Ayebare**, Jonan Mweteise, Allen Nabisere, Raheli Mukhwana, Anne Nendela, Grace Omoni, Sabina Wakasiaka, and Tina Lavender. "'There is trauma all round': A qualitative study of health workers' experiences of caring for parents after stillbirth in Kenya and Uganda." *Women and Birth* (2022).

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16) Moller Ann-Beth, Joanne Welsh, **Elizabeth Ayebare**, Effie Chipeta, Mechthild M. Gross, Gisele Hougbo, Hashim Hounkpatin et al. "Are midwives ready to provide quality evidence-based care after pre-service training? Curricula assessment in four countries—Benin, Malawi, Tanzania, and Uganda." *PLOS Global Public Health* 2, no. 9 (2022): e0000605.

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General Hospital, Uganda." *African Journal of Midwifery and Women's Health* 16, no. 4 (2022): 1-9.

- 21) Nandawula Prossy, **Ayebare Elizabeth**, Mathew Nyashanu, Michelle Telfer, and **Scovia Nalugo Mbalinda**. "Competency of Midwives in Assisting Vaginal Breech Births and associated factors: A Cross-sectional study in Lower Level Health Facilities of Hoima District, Uganda." *Student's Journal of Health Research Africa* 3, no. 9 (2022): 21-21.
- 22) McKenzie-White, Jane, Aloysius G. Mubuke, Sara Westergaard, Ian G. Munabi, Robert C. Bollinger, Robert Opoka, **Scovia N. Mbalinda**, David Katete, Yukari C. Manabe, and Sarah Kiguli. "Evaluation of a competency based medical curriculum in a Sub-Saharan African medical school." *BMC medical education* 22, no. 1 (2022): 724.
- 23) Onyango Jude Tadeo, Jane Frances Namatovu, Innocent Kabahena Besigye, Mark Kaddumukasa, and **Scovia Nalugo Mbalinda**. "The relationship between perceived social support from family and diabetes self-management among patients in Uganda." *The Pan African Medical Journal* 41 (2022).
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- 32) Sarah Maria Najjuka, **Connie Olwit**, Mark Mohan Kaggwa, Rose Chalo Nabirye, and **Tom Denis Ngabirano**. "Cervical cancer screening among HIV-positive women in urban Uganda: a cross sectional study." *BMC Women's Health* 22, no. 1 (2022): 1-9.
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- 34) Alanyo Linda Grace, **Tom Denis Ngabirano**, **Elizabeth Ayebare**, Enos Mirembe Masereka, David Mukunya, Grace Ndeezi, and James K. Tumwine. "Prevalence and Factors Associated with Undernutrition Among Pregnant Women in Lamwo District Northern Uganda." (2022). Research Square. Available at <https://assets.researchsquare.com/files/rs-1457711/v1/fb4828d6-4222-40aa-adc7-9e876b3fb88c.pdf?c=1652185754>
- 35) Muwema Mercy, Dan K. Kaye, Grace Edwards, **Gorrette Nalwadda**, Joanita Nangendo, Jaffer Okiring, Wilson Mwanja, Elizabeth N. Ekong, **Joan N. Kalyango**, and Joaniter I. Nankabirwa. "Perinatal care in Western Uganda: Prevalence and factors associated with appropriate care among women attending three district hospitals." *Plos one* 17, no. 5 (2022): e0267015.
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- 38) Nkemjika Stanley, Eniola Olatunji, **Connie Olwit**, Oluwole Jegede, Colvette Brown, Tolu Olupona, and Ike S. Okosun. "Comorbid Substance Use and Mental Health Disorders: Prior Treatment/Admission as a Predictor of Criminal Arrest Among American Youths." *Cureus* 14, no. 1 (2022).
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77. **Freddy Eric Kitutu**, Ahmed Ehanur Rahman, Hamish Graham, Carina King, Shams El Arifeen, Freddie Ssengooba, Leith Greenslade, Zoë Mullan. (2022). Announcing the Lancet Global Health Commission on medical oxygen security. *THE LANCET Global Health* DOI:[https://doi.org/10.1016/S2214-109X\(22\)00407-7](https://doi.org/10.1016/S2214-109X(22)00407-7)
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79. Tadele Mekuriya Yadesa, **Freddy Eric Kitutu**, Robert Tamukong & Paul E. Alele. (2022). Predictors of hospital-acquired adverse drug reactions: a cohort of Ugandan older adults. *BMC Geriatrics* volume 22, Article number: 359 (2022)
80. Ronald Kiguba, Helen Byomire Ndagije, Victoria Nambasa, Cordelia Katureebe, Henry Zakumumpa, Stella Maris Nanyonga, Jacquellyn Nambi Ssanyu, Phil Tregunno, Kendal Harrison, Corinne S Merle, Marie-Eve Raguenaud, **Freddy Eric Kitutu**. (2022). Implementation of a peer support intervention to promote the detection, reporting and management of adverse drug reactions in people living with HIV in Uganda: a protocol for a quasi-experimental study. *BMJ Open* Volume 12, Issue 5

Appendix 2. Conference presentations by MakSHS staff in 2022

Department of Nursing

1. **Dr. Joyce Nankumbi**. American Society for Nutrition June 2022
 1. Predictors of Vitamin A-rich Food Consumption Among Women From Selected Regions in Uganda
Joyce Nankumbi, Lorraine Cordeiro, Lindiwe Sibeko, Frederick Grant, Evelyn Mercado, Norman Kwikiriza, Simon Heck *Current Developments in Nutrition*, Volume 6, Issue Supplement_1, June 2022, Page 150, <https://doi.org/10.1093/cdn/nzac051.066>
Published: 14 June 2022
 2. Comparative Analysis of Food Security Measures by Vitamin A-rich Food Consumption Among Mother-Child Dyads in Uganda. Joyce Nankumbi, Lorraine Cordeiro, Lindiwe Sibeko, Frederick Grant,

Evelyn Mercado, Norman Kwikiriza, Simon Heck. Current Developments in Nutrition, Volume 6, Issue Supplement_1, June 2022, Page 149, <https://doi.org/10.1093/cdn/nzac051.065>
Published: 14 June 2022

2. Dr. Richard Muhindo

3. Poster presentation JASH Conference Munyonyo Kampala September 2022

Richard Muhindo¹ Stephen Okoboi² , Agnes Kiragga² , Rachel King³ , Walter Joseph Arinaitwe² , Barbara Castelnuovo². **Our bodies are weak, we don't yet know how the vaccine will react with HIV, and HIV medications": Reasons for non-acceptance of COVID-19 vaccination among people living with HIV in Uganda**

4. Muhindo Richard (2022). "COVID-19 Vaccine Acceptability Among People Living with HIV in Uganda." Paper presented to UNEPI service delivery pillar sub-committee (virtual meeting) on 3rd august, to the COVID-19 Round 3 AMVC National Feedback Workshop on 4th August, and IDI research forum 21st July and available on <https://youtu.be/uzPA1GcCQnk>

5. Muhindo Richard (2022). "Barriers and facilitators of regular syphilis and HIV testing among Female sex workers in Uganda." Paper presented at the 2022 CUGH conference

3. Dr. Elizabeth Ayebare

6. **Title of presentation:** Predicting adverse newborn outcomes using umbilical cord artery lactate measurements: an observational study, Safe Motherhood Conference, Ministry of Health, 25th – 28th October 2022, Kampala.

Authors: Elizabeth Ayebare (MN), James K. Tumwine (PhD), Jolly Nankunda (PhD), Anna Hjelmstedt (PhD), Wibke Jonas (PhD), Grace Ndeezi (PhD), Nicola Orsini (PhD), Claudia Hanson (PhD)

7. **Title:** Advancing care and support for women after stillbirth and early neonatal death: A feasibility study, Association of Obstetricians and Gynaecologist of Uganda annual conference, 10th to 11th November 2022Kampala.

Authors: Ayebare Elizabeth, Mills Tracey, Bedwell Carol, Nabisere Allen, Mweteise Jonan, Lovell Carina and Lavender Tina

8. **Title:** Exploring the role of midwives in the care of women with Fetal distress: a direct observation study at a National Referral Hospital, Nursing and Midwifery regulation conference, Uganda Nurses and Midwives council, 23rd November 2022, Kampala.

Authors: Ms. Elizabeth Ayebare*, Dr. Jolly Nankunda, Prof. James K. Tumwine and Prof. Grace Ndeezi

4. Dr. Patience Muwanguzi

9. **Title:** Barriers and facilitators to oral PrEP uptake among high-risk men after HIV testing at workplaces in Uganda: A qualitative study. 6th Joint Annual Scientific Health (JASH) Conference 2022. September 21-23rd 2022

Authors: Racheal Nabunya, Victoria M. S. Karis, Lydia Joslyline Nakanwagi, Pius Mukisa and Patience A. Muwanguzi

10. **Title:** Nurses' Reflections Pre-and-Post Sensitivity Training to Reduce Stigma in HIV Prevention and Care Provision to MSM and Transgender Persons in Uganda. 6th Joint Annual Scientific Health (JASH) Conference 2022. September 21-23rd 2022

Authors: Muwanguzi A. Patience, Nabunya Racheal, Nabisere Allen, Karis M. S. Victoria, Nangendo Joan, and Mujugira Andrew

Appendix 3. MakSHS Office of the Dean team

No.	Names of staff	Designation
1	Dr. Kamba Pakoyo Fadhuru	Senior Lecturer/Dean
2	Ms. Tusiime Priscilla	Administrative Secretary I
3	Mr. Ariko Joseph	Administrative Assistant
4	Ms. Birungi Josephine	Cleaner
5	Mr. Olute Martin	Driver

Appendix 4. MakSHSREC Team

S/No	Names of the Administrative team of MAKSHSREC	Institution/Department	Designation
1	Dr.Paul Kutuyabami	Department of Pharmacy-SHS-CHS	Chairperson MAKSHSREC
2	Dr.Pakoyo F. Kamba	Dean's office	Chairperson-MAKSHSHDREC
3	Asoc Prof.Charles Rwenyonyi Mugisha	School of Dentistry-CHS	Vice Chairperson MAKSHSREC/MAKSHSHDREC
4	Dr.Kalidi Rajab	Department of Pharmacy-SHS-CHS	Secretary/Ag.Chairperson-MAKSHSREC
5	Stellah Imot	MAKSHSREC Research Office	MAKSHSREC/MAKSHSHDREC Administrator

6	Members of MAKSHSREC/MAKSHSHDREC		
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Appendix 5. Staff of the Department of Allied Health

No.	Names of staff	Designation
1	Mr. Anguyo Dralega	Lecturer/ Ag. Head of Department
2	Mr. Kisenge Martin	Lecturer
3	Dr. Naome Nsubuga	Lecturer

Appendix 6. Staff of the School of Dentistry

No	Name	Position	Qualifications	Specialty
1	Assoc Prof Adriane Kamulegeya	Assoc. Prof	DDS, University of Dar es Salaam	Oral & Maxillofacial Surgeon
			Master Clinical Stomatology Oral Maxillofacial Surgery Tongji University.	
2	Assoc. Prof. Loius Mugambe Muwazi	Assoc. Prof	Doctor of Medicine Stomatology	Oral & Maxillofacial Surgeon
			Doctor of Philosophy in Medicine Maxillofacial Surgery/	
3	Assoc. Prof Charles Mugisha Rwenyonyi	Assoc. Prof.	Bachelor of Dental Surgery,(Makerere University	Conservative Dentistry
			Masters in Public Health, University of Bergen	
			Doctor of Philosophy in Dentistry, University of Bergen, Norway	
4	Dr Okullo Isaac	Senior lecturer	Bachelor of Dental Surgery,(Makerere University	Dental Public Health
			Masters in Public Health, University of Nairobi	
			Doctor of Philosophy in Dentistry, University of Bergen, Norway	
5	Dr. Annet Kutesa	Senior Lecturer	Bachelor of Dental Surgery ,Makerere University, Masters in Science, Dentistry, University of Western Cape.	Conservative Dentistry
			PhD, Mak	
6	Dr. Eriab Moses Nkamba	Senior Lecturer	Bachelor of Dental Surgery, Makerere University, Masters in Dental Public Health, Leeds Univesity.	Dental Public Health

7	Dr. Catherine Mwesigwa	Senior Lecturer	Bachelor of Dental Surgery, Makerere University.	Dental Public Health & Anatomy
			Masters in Dental Public and Primary Health University of Western Australia.	
			Master of Science, Human Anatomy, Makerere University.	
8	Dr. Barbara Ndagire	Lecturer	Bachelor of Dental Surgery, Makerere University. Masters in Science, Dentistry, University of Western Cape	Conservative Dentistry
9	Dr. Francis Ocheng	Lecturer	Bachelor of Dental Surgery, Makerere University	Conservative Dentistry
			Masters in Science, Dentistry, University of Western Cape	
10	Dr. Muhammad Mbabali	Lecturer	Bachelor of Dental Surgery, Makerere University.	Periodontologist
			Masters of Dentistry in Clinical Periodontology, University of Nairobi.	
11	Dr. Juliet Ntuulo	Lecturer	Bachelor of Dental Surgery, Makerere University. Masters in Public Health, Makerere University	Public Health
12	Dr. Margaret Wandera	Lecturer	Bachelor of Dental Surgery, (Makerere University. Masters in Public Health, University Bergen	Public Health
			PhD in Public Health, University of Bergen	
13	Dr. Patience Nassimbwa	Lecturer	Bachelor of Dental Surgery, Makerere University. Masters of Dentistry in Clinical Periodontology, University of Nairobi.	Periodontologist
14	Dr. Fahad Mubarak	Lecturer	Bachelor of Dental Surgery, Makerere University. Masters in Dentistry in Orthodontics, Wuhan University.	Orthodontics
15	Dr. Norman Musinguzi	Lecturer	Bachelor of Dental Surgery, Makerere University. Master of Dental Surgery in Paediatric Dentistry. University of Nairobi.	Paediatric Dentistry
16	Dr. Samantha Murungi Kachwinya	Lecturer	Bachelor of Dental Surgery, Makerere University. Master of Dental Surgery in Paediatric Dentistry. University of Nairobi.	Paediatric Dentistry
17	Dr. Allan Edward Kalyesubula	Assistant Lecturer	Bachelor of Dental Surgery, Makerere University. Masters in Public Health, Umea University.	Public Health

18	Dr. Mary Juliet Nanozi	Assistant Lecturer	Bachelor of Dental Surgery ,Makerere University. Masters in Public Health, Makerere University	Public Health
19	Dr. Phenehas Bwambale	Assistant Lecturer	Bachelor of Dental Surgery, Makerere University. Masters of Medicine in Pathology	Pathologist
20	Dr. Kugonza Gonzaga	Assistant Lecturer	Bachelor of Dental Surgery, Makerere University	Oral & Maxillofacial Surgeon
			Masters of Dentistry Oral & Maxillofacial Surgery, Makerere University.	
21	Dr. Margret Annah Biira	Assistant Lecturer	Bachelor of Dental Surgery, Makerere University. Masters of Dentistry Oral & Maxillofacial Surgery, Makerere University.	Oral & Maxillofacial Surgeon
22	Dr. Umaru Kizito	Assistant Lecturer	Bachelor of Dental Surgery ,Makerere University	Conservative Dentistry
			Masters in Science, Dentistry, University of Nairobi	
23	Abdul Seguya	Assistant Lecturer	Bachelor of Dental Surgery , Makerere University	Orthodontist
			Masters in Orthodontics, University of Alexandria	
24	David Nono	Principal Dental Technologist	Bachelor of Dental Laboratory Technology	Dental Laboratory Technologist
			Master of science in Dental Technology	
25	Picho Ali	Principal Dental Technologist	Bachelor of Dental Laboratory Technology	Dental Laboratory Technologist
			Master of Science in Maxillofacial Prosthetic Rehabilitation	
26	Ernest Mwebesa	Principal Dental Technologist	Bachelor of Dental Laboratory Technology	Dental Laboratory Technologist
			Masters in Health services Research	
27	Ambrose Agumenaitwe	Principal Dental Technologist	Bachelor of Dental Laboratory Technology	Dental Laboratory Technologist
28	Julius Kyambadde	Principal Dental Technologist	Bachelor of Dental Laboratory Technology	Dental Laboratory Technologist

Appendix 7. Staff of the Department of Nursing

NAME OF STAFF	DESIGNATION	STATUS
1. Dr. Patience Muwanguzi	Senior Lecturer/Ag. HOD	Full-time

2.	Mr. Tom Denis Ngabirano	Senior Lecturer	Full-time
3.	Mr. Charles Peter Osingada	Senior Lecturer	Study leave
4.	Dr. Gorette Nalwadda	Lecturer	Full-time
5.	Dr. Elizabeth Ayebare	Lecturer	Full-time
6.	Ms. Connie Olwit	Lecturer	Study leave
7.	Dr. Joyce Nankumbi	Lecturer	Full-time
8.	Dr. Muhindo Richard	Senior Lecturer	Full-time
9.	Ms. Mariam Namutebi	Assistant Lecturer	Full-time
10.	Dr. Scovia Nalugo Mbalinda	Lecturer	Full-time
11.	Ms. Lydia Kabiri	Assistant Lecturer	Full-time
12.	Ms. Harriet Namakoye	Admin. Secretary III	Full-time
13.	Ms. Bisereko Jennipher	Messenger/ Cleaner	Full-time
14.	Ms. Nakato Susan	Cleaner	Full-time

Appendix 8. Staff of the Department of Pharmacy

No.	Staff Name	Staff rank/position	Employment status
1.	Dr. Kamba Pakoyo Fadhuru	Senior Lecturer/ outgoing Head of Department/ Dean SHS	Permanent
2.	Prof. Richard Odoi Adome	Professor	Post-retirement contract
3.	Dr. Joan Kalyango Nakayaga	Assoc. Prof	Permanent
4.	Dr. Robert BD Otto	Senior Lecturer	Permanent
5.	Dr. Kitutu Freddy Eric	Senior Lecturer	Permanent
6.	Dr. Pamela Purity Blessed	Lecturer	Permanent
7.	Dr. Lutoti Stephen	Lecturer	Permanent
8.	Dr. Anyama Norbert	Lecturer	Permanent
9.	Dr. Kyeyune Henry	Assistant Lecturer	Contract
10.	Dr. Mike Mugisha	Assistant Lecturer	Permanent
11.	Dr. Hussein Oria	Lecturer	Permanent
12.	Dr. Kaggwa Bruhan	Lecturer	Permanent
13.	Dr. Munanura Edson Ireeta	Lecturer	Permanent
14.	Dr. Kalidi Rajab	Lecturer	Permanent
15.	Dr. Winnie Nambatya	Lecturer	Permanent
16.	Dr. Kibumba George	Lecturer	Permanent
17.	Dr. Paul Kutyabami	Lecturer	Permanent
18.	Dr. Aguma Bush Herbert	Lecturer	Permanent
19.	Dr. Noah Mutebi	Assistant Lecturer	Contract
20.	Ms. Damalie Namusabi	Copy typist	Permanent
21.	Ms. Regina Nakirya	Library Assistant	Permanent
22.	Mr. Sabila Bosco Levi	Medical Lab Technician	Permanent
23.	Ms. Tusiime Francisca	Lab Assistant	Permanent
24.	Ms. Nazziwa Misa	Cleaner	Permanent
25.	Ms. Mbabazi Joyce	Cleaner	Permanent
26.	Mr. Okello Thomas	Gardener	Permanent