

## **AUTOBIOGRAPHY:**

Zakaria Amidu is a senior nursing officer (ophthalmic) at Kumbungu health center in the Kumbungu district of Ghana. He was born at Gnani, a rural community in Yendi district. He started basic education at Gnani but later moved to Yendi where he completed both his basic, junior high and secondary school education. He was inspired to become a nurse by a community health nurse who used to visit rural communities on an AG motor bike to immunize children and educate pregnant women on good nutrition, personal hygiene and to attend antenatal clinics early and regularly. The way she interacted with the women and the children especially inspired Mr. Zakaria to love her work and he decided he would be a nurse when he grow up.

Fast forward to 2013, he qualified as a registered general nurse from Tamale Nurses and Midwives Training College and did his national service at Walewale District hospital. He got his first appointment with the Ghana health service in July 2014 and was posted to Kings medical Centre in Kumbungu district. At the hospital, he was made the focal person for health education at the Out Patient Department every day by the then director of nursing Mrs. Amina Mumuni, where he educated patients and relatives on various medical conditions. He was also made a research study nurse (Data collection) for the Ghana access and affordability program, a quasi-experimental study to examine the effects of differential pricing on improving access to innovator medicines for the control of diabetes and hypertension at Kings medical centre by the then medical superintendent Dr. James Duah from Feb 2015 to July 2017.

After the research, mr Zakaria realized that there were a lot of people who were having visual challenges that could lead to partial or permanent loss of vision.

At that time there was not even a single ophthalmic nurse in the district who could support these clients or link them to the higher level for treatment.

After serving for three years, rotating from outpatient department to medical and emergency wards, he left in December 2017 to the ophthalmic nursing school Korle-Bu to pursue two years BSc in ophthalmic nursing. Upon his return to the district after completion of the ophthalmic nursing course, he was reposted to the Kumbungu health center by the district director at the time, Dr. Barchisu Seidu, because she wanted to upgrade the health centre to a polyclinic. Mr. Zakaria quickly wrote a proposal detailing the requirements and importance of having a well-equipped eye clinic to the district director of health services but it was not implemented due to resource constraints. He therefore started the clinic with self-acquired arc light ophthalmoscope, magnifying Loup and torch light in August, 2020. As a result of low attendance, he carried out mobile eye services in the various sub-districts health centers and later

added community health planning and services (CHPS) zones to increase coverage and by December 2020 he had booked 55 cataracts and 15 pterygia cases making a total of 70 cases for surgery. With the above figures he was able to convince the regional Ophthalmologist Dr. Seth Wanye to solicit for support from Swiss Red Cross under their VISION FIRST program to perform surgery at the Kumbungu health Centre in April 2021. Out of the total cases booked, only 31 patients came for the surgery because surgical acceptance rate was still low. By August 2021 he had already booked another 60 surgical cases and 42 clients came for the surgery at the health Centre.

Mr. Zakaria's dedication to providing eye care to the rural areas was demonstrated when he added communities in Nantong District where there is no ophthalmic nurse to his outreach points. The regional ophthalmologist noticing this decided to add him to the northern region surgical outreach team where they have been traveling to the various districts in Northern, North East, Savannah and upper west regions to perform surgeries quarterly every year under the national cataract outreach program supported by CURE BLINDNESS PROJECT. His roles in the team include serving as a scrub nurse, giving retrobulbar anesthesia and sterilization of instruments. In addition, Dr. Wanye also gave him slit lamp microscope, two ophthalmoscopes, minor surgical set and a trial lens set making his eye clinic a well-equipped one. As a result of these, kumbungu health Centre has been chosen as one of the network of practice model health Centres in the district. He is currently the outreach coordinator for free eye surgeries at FRIENDS EYE CENTRE in Tamale and he collaborates with assembly members, pastors, colleague nurses and other opinion leaders to make his work successful.

Between April 2021 to January 2025, Mr. Zakaria has screened and transported 530 patients to Tamale to benefit from free cataracts and pterygia surgeries at FRIENDS EYE CENTRE and Tamale Teaching Hospital together, 386 patients from Kumbungu district and 144 patients from Nantong District. Also, as part of his school health program, he worked with the nutrition unit of the health Centre during their routine vitamin A supplementation programs for children under-five to provide free eyes' screening to the pupils and school staff alike. On this program, 15 pupils with Vitamin A deficiency were identified and treated and 30 pupils with refractive errors referred to Tamale for refraction and dispensing of spectacles. Outside his official duties, he has been volunteering for Global Medical Brigades Ghana, a non-Governmental Organization providing health care services to hard-to-reach areas in the Northern and Savannah regions of Ghana for the past two years. On the brigades, Mr. Zakaria provides eye health education, treatment of eye condition, booking surgical cases and referring when appropriate. He also participated in a month long 'Life Times Wells' and 'Friends Eye Center free cataract screening and surgeries from 8<sup>th</sup> March 2025 to 15 April 2025 to over 72 rural communities in the following districts; Kadjebi, Biakoye, Nkwanta South, Kpandai, Wulensi, Bimbila, Yendi, Zabzugu and Saboba district. In

all, 14,036 people were attended to, 13,397 people received eye medications, 841 received reading glasses and 1, 531 patients had successful surgeries of various eye conditions done for them.

At his leisure times, Mr. Zakaria listens to news around the world and reads his Quran.

As someone who aims to impact and improve the quality of life of the people he serves, he plans to pursue a masters of public health in eye care so as to equip himself with advanced managerial and clinical skills in eye health and contribute to the achievement of Vision 2030 by the World health organization which seeks to increase access to effective treatment for preventable vision impairment.

## **RURAL EYE CARE**

### **Background**

Vision is the most important of our senses and it plays a significant role in every stage of our lives. Without vision, we struggle to learn, to walk and to participate in school or work.

Globally, at least 2.2 billion people have vision impairment or blindness, of which at least 1 billion have a vision impairment that could have been prevented or is yet to be addressed (WHO, 2019). In Sub-Saharan Africa, there are about 20 million people with vision impairment that could have been prevented or is yet to be addressed and in Ghana, there are about 300,000 blind people and about 332000 people also have severe visual impairment. The major causes of blindness are cataract (54.5%), Glaucoma 19.4% Posterior Segment Disease including diabetic retinopathy 12.9% and Corneal related causes 11.2%. (Boateng, 2015).

### **WHY RURAL EYE CARE**

The burden of vision impairment is not borne equally; it tends to be greater in low and middle-income countries and underserved populations such as women and rural communities. Also, the causes of avoidable blindness are often associated with poverty and lack of access to quality eye health services and these are common in most rural areas.

In addition, as part of his first year clinical attachment as an ophthalmic nurse at Tamale Teaching Hospital, Mr. Zakaria observed evisceration (removal of the content of an eye) being done for two

patients from Kumbungu district who suffered endophthalmitis as a result of their eye being “couched”( traditional cataract removal) by a traditional healer. This meant that more awareness needed to be done upon his completion and hence the reason for the rural eye care program he embarked on. Also, growing up in his village there were some old blind people who were being led to occasions by their grandchildren and that prevented those children from going to school. He therefore wants to prevent this by making sure that, eye services are available to the ‘poorest of the poor’ in society as most of the conditions the aged are suffering from can either be prevented or treated by eye care personnel.

## COMPONENTS OF RURAL EYE CARE

### **a. Setting up of the eye clinic.**

This was the first step to achieving an integrated people centered rural eye care program and the requirements included a well-lit standard room, Snellens charts, ophthalmoscope, torch light, slit lamp microscope, trial lens set, minor surgical set and diagnostic medications. All these requirements were presented to the District director of Health Services and the Member of Parliament for Kumbungu in a written form. But as a result of resource constraints these things were not provided. Mr. Zakaria also visited Kumbungu ‘Ataaya’ Group, a youth group that engages in community development to solicit for their support to help him renovate an abandoned two bedroom quarters for it to be used as eye clinic but they could not support because they were building a three classroom block in one of the communities and didn’t have enough funds.

The clinic was therefore started by the ophthalmic nurse with self-acquired arc light ophthalmoscope, magnifying loupe and a torch light in a cubicle at medical store. He left the medical stores to the OPD of the health Centre and worked from the detention room because he wasn’t getting patients at the store which was a little distant from the health center. He is currently working from a room designated for use by the laboratory with a full complement of eye clinic equipment that he has solicited for from the Northern regional Ophthalmologist, Dr. Seth Wanye.

### **b. Operating an outreach clinic.**

Under this component, rotational outreach clinics were instituted in the various sub-District health Centers and Community Health Planning and Services (CHPS) zone to raise awareness of prevailing eye conditions and the opening of the eye unit at the District to community members and health workers as well. The health centers included; Dalung, Gbullung, Voggu and Mbanaayili health centres while the CHPS zone were made up of Kpulyin, Logshegu, Jakpahi, Gizaa, Gupanarigu, zangbalung, Tibung, Singa, Zugu Dabogni, Gumu, Kuli, Jegbo and Cheshegu . Also the following communities in Nantong

District were covered; Gbruma, Wavogu, Balshei, Fazini, Zieng , Nantong, Jana, Janjori kukuo, Gbungbum and Kparigalana yilyi . Mr. Zakaria instituted the outreach clinics as part of his contribution to achieving the first four goals of the sustainable development goals, which are, No Poverty, Zero Hunger, Good Health AND Well-being and Quality education. This outreach clinics led to improved access to quality eye care services in these communities which consequently contributed to overall health and well-being and poverty reduction. It also increases education attainment for kids and economic activity of community members

As part of the screening, Cataract and Glaucoma cases which are all blinding conditions were common and to dealt with these, Mr. Zakaria made sure he participated in any free eye outreach services that was either at 'Friends eye center' or Tamale teaching hospital so as to get his cherish client benefits

#### BENEFIT OF THE EYE CLINIC TO THE HEALTH CENTRE

- Increased OPD attendance
- Increased revenue generation
- Enhanced patient care
- Helps in professional development
- Reduce healthcare cost
- Reduce referrals

#### BENEFITS TO PATIENTS

- Reduces risk of complication
- Increase access to quality eye care
- Reduce cost of treatment
- Early detection and treatment
- Better management of chronic condition
- Increased productivity

- Improved quality of life of patients

## **KEY SUCCESS POINTS**

1. Set up the Kumbungu Health Center eye unit with equipment worth of about GHC 65,000 including Slit lamp, trial lens set, Ophthalmoscope and a minor surgical set received from Dr. Seth Wanye, Northern regional Ophthalmologist (Consultant)
2. Conducted free Cataract and glaucoma screening to about 3000 people across the 5 Health Centers and 13 CHPS zones in Kumbungu District between August 2020 and January 2025 while about 700 people from 10 communities in Nantong district were attended to.
3. Facilitated free cataract and pterygia surgeries worth of about GHC 1,060,000 for 530 patients (386 patients from Kumbungu and 144 from Nantong District) since April 2021 by transporting them to Tamale through the help of West African Humanitarian Aid and NOOR Dubai foundation
4. Collaborated with Global Medical Brigades to cater for the cost of monthly anti-glaucoma medication for 30 patients at 'Friends Eye Centre' for the past two years
5. Provision of free anti-glaucoma medications to 130 glaucoma patients in the Kumbungu district. This was done in Collaboration with MPhil Nursing student of KNUST who is also a tutor of Tamale Nurses and Midwives Training College in April 2025.
6. Conducted refraction and dispensing of reading glasses to over 200 people and this included Imams, Teachers, Pastors and traders within the Kumbungu district.
7. Assisted in over 50 life changing surgical operations across northern, Savannah, North East and Upper West Regions of Ghana.

## **BREAKDOWN OF OPD ATTENDANCE FOR EYE CARE SERVICES FROM 2020 TO 2025**

SN	NUMBER OF OPD ATTENDANCE	PERIOD
1	53	August to December, 2020.
2	189	January to December, 2021.
3	108	January to December, 2022.
4	122	January to December, 2023.
5	162	January to December, 2024.
6	75	January to April, 2025.

## CHALLENGES OF RURAL EYE CARE SERVICES

The following were some of the challenges encountered during the provision of rural eye care services.

- Lack of support for transportation.
- Poor health seeking behavior.
- Misconceptions about certain eye care intervention.
- Eye care not properly integrated into the health system.
- Limited National health insurance coverage for eye care services.
- Lack of requisite equipment.
- Inadequate skilled personnel to provide special services including eye

## RECOMMENDATION

- Ghana Health Service (GHS) should have a dedicated source of funding specifically for eye care services
- Ophthalmic nurses in collaboration with other health workers should raise awareness of people and communities about their eye care needs.
- GHS should make Eye care services an integral part of the primary health care system.

- GHS should collaborate with National health insurance Authority to expand their coverage to include eye care services at the health centers.
- GHS should try to procure the necessary equipment and logistics for eye care services.

## CONCLUSION

Blindness and visual impairments are significant public health issues worldwide because they constitute a major economic and social cost to individuals, families and communities. As a result, providing timely access to quality eye care and rehabilitation can help mitigate this cost.

## PHOTO GALLERY



GLOBAL BRIGADES MEDICAL MISSION AT NTERESO

ANTERIOR ASSESSMENT OF A PATIENT EYE



GLOBAL BRIGADES MEDICAL MISSION AT NTERESO, BOLE

PATIENT ASSESSMENT - OPHTHALMOSCOPY



EYE SCREENING AT CK TEDAM UNIVERSITY OF TECHNOLOGY AND APPLIED SCIENCE, NAVRONGO

CHECKING OF INTRA-OCULAR PRESSURE OF A PATIENT



POST OPERATIVE CARE, SALAGA



SCHOOL SCREENING AT SUNIA PRIMARY SCHOOL, KUMBUNGU



SCHOOL SCREENING AT D/A PRIMARY, KUMBUNGU



EYE SURGERIES- FREINDS EYE CENTER



EYE SURGERIES- SALAGA



SCREENING AT DALUN



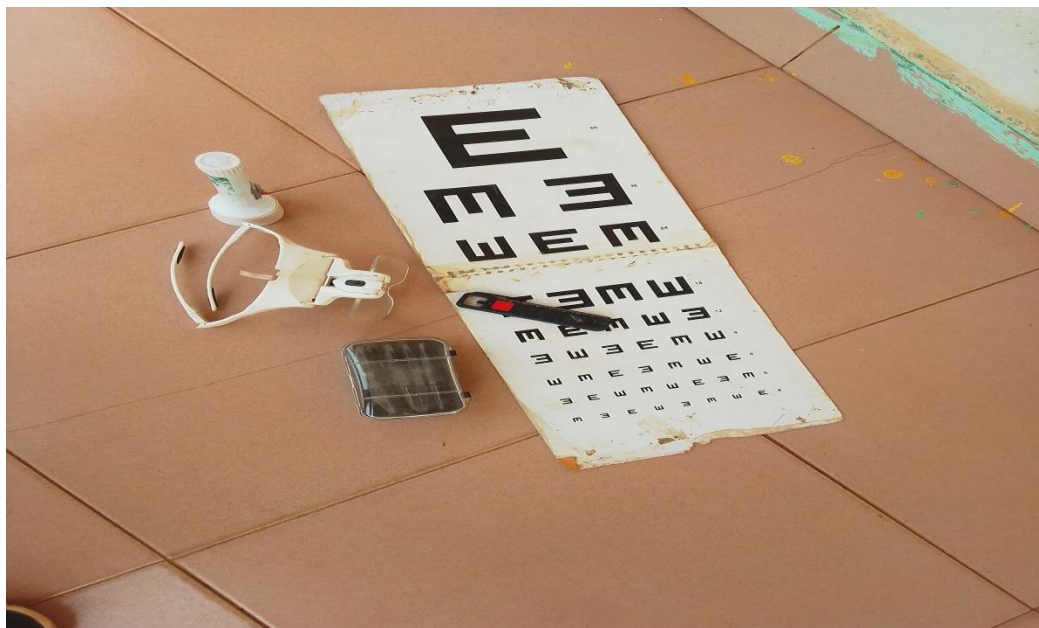
SCREENING AT KUSHIBU



KISSING PTERYGIUM



MATURED CATARACT



SNELLEN'S CHART, LOUP, TORCH LIGHT, AND ARCLIGHT



SLIT LAMP



TRIAL SET



OPHTHALMOSCOPES



THEATRE SET UP FOR CATARACT SURGERIES AT SALAGA



GLOBAL BRIGADES MEDICAL MISSION AT ABASUMAKURA, BOLE



POST OPERATIVE CATARACT REVIEW AT FRIENDS EYE CENTER



POST OPERATIVE CARE AT FRIENDS EYE CENTER, TAMALE



TORCH BEARER INT SCHOOL, KUMBUNGU



GLOBAL BRIGADES FREE SCREENING AT DALOGYILI



patients departing after surgery at Kumbungu health center

SSION AT  
DALOGYIL



PATIENTS ARRIVAL AT KUMBUNGU HEALTH CENTRE FOR SURGERY



POST OPERATIVE DRESSING AT NANDOM



CATARACT CASE CONFIRMATION AT SABOBA HEALTH CENTER



EYE PADS REMOVAL AT NANDOM



EYE PAD REMOVAL



1THEATER SET UP FOR SUEGERIES



**SURGICAL TEAM**



SURGERY ONGOING



#### REFERENCES;

1. Dr. Seth Wanye , MD, MS PhD (Northern regional Ophthalmologist)

Contact ; 0244520799

2. Alhaji Shafiu Shaibu,

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