



OBSTETRICS AND NEONATAL QUALITY IMPROVEMENT IN NYACHWA ADVENTIST MISSION HOSPITAL

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RESULTS

- Tremendous rise in the number of total deliveries from 50 in 2015 to a peak of over 2,000 deliveries in 2023 and has fairly remained so since then.
- Establishment of fully functional Newborn Unit in 2024.
- Diminished referral out for sick newborns and high risk obstetrics conditions.
- Awarded the best maternity hospital in the region for quality obstetrics services.
- Growth to have two resident paediatrician.

THE TUNZA MAMA INITIATIVE

THE PROBLEM

Maternal mortality is a key indicator of development and thus forms a major key pillar of the 3rd Sustainable Development goals (SDGs). SDG target 3.1 is to reduce maternal mortality rate to less than 70 maternal deaths per 100 000 deliveries by the year 2030¹. Despite worldwide declines since 1990, the MMR is 15 times higher in developing than developed regions. Sub-Saharan Africa has the highest MMR at 500 per 100,000 live births as compared to developed regions where the MMR is 16 per 100,000 live births².

In Kenya, the MMR has remained at 463 per 100,000 live births over the past decade resulting in little or no progress being made towards achieving SDG³.

In our hospital there were less than 50 deliveries in a year, no specialists, no oxygen source and lack of facilities to conduct caesarian sections. In addition the hospital lacked newborn unit and thus all cases requiring such a service were referred out. This formed the basis of forming Tunza Mama Initiative to offer quality obstetrics services that over the years have made the hospital a premier facility in maternity services and sparked major growth of the hospital from a level 3 to a level 4 specialist hospital.

AIM

To increase the number of safe maternal deliveries and neonatal care for preterms and low birth weight neonates

SWOT ANALYSIS

Strengths

- Resident Gynaecologist
- Sense of belonging to adventists

Weaknesses

- Inadequate infrastructure
- Financial constraints

Opportunities

- Large catchment population.
- Urban location

Threats

- Stiff competition



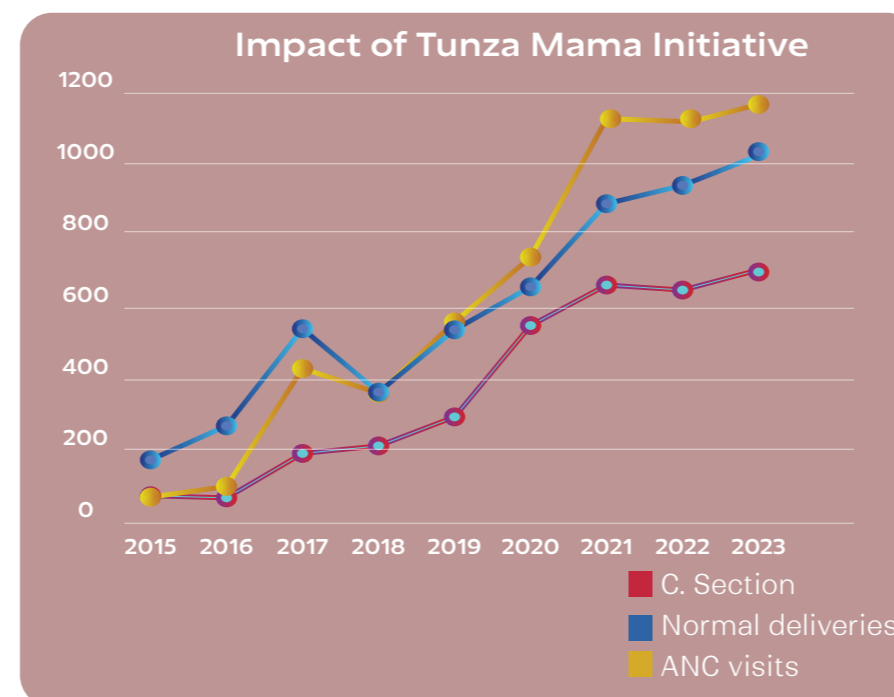
IMPLEMENTATION

Tunza mama emanates from two Swahili words *Tunza* and *Mama* which translates to mother and care respectively. Therefore, this is an initiative meant to take care of the mother and the child. The initiative has multiple activities that aims at recruiting women from the preconception period and follow them until safe delivery and in the peuperium.

The activities under the Tunza Mama Initiative include:

- Enrollment into Antenatal Care Clinic and forming a whatsapp group.
- Contracting a resident obstetrics and gynaecologist.
- Holding Lamaze classes that include pregnancy friendly exercises.
- Linkage to the community through community health volunteers
- Vaccination to mothers and children.
- Mobile short message codes for enquiries and linkage for emergency obstetric services.

DATA



NEW BORN UNIT



FUTURE STEPS

- Acquire a neonatal ventilator machine to become a full Neonatal Intensive Care Unit (NICU)
- Develop a separate Mother-Child complex for specialised obstetrics and neonatal services
- Have two separate theaters dedicated for obstetrics emergencies

¹World Health Organization. Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. World Health Organization; 2023 Feb 22.

²Joseph KS, Boutin A, Lisonkova S, Muraca GM, Razaz N, John S, Mehrabadi A, Sabr Y, Ananth CV, Schisterman E. Maternal mortality in the United States: recent trends, current status, and future considerations. *Obstetrics & Gynecology*. 2021 May 1;137(5):763-71.

³Kilemi B. Threats related to maternal mortality in Kenya: a systematic review. *British Journal of Multidisciplinary and Advanced Studies*. 2023 Mar 6;4(1):129-48.