AT needs and associated factors among children with SB in Ethiopia

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About RAF

- Established in ETH since 2009 G.C.
- Since 2023G.C our organization is working closely on the prevention(LSFF, HRPP)
- Treatment(Shunts, ETV/CPC, Operating microscope)
- Aftercare(PT, bladder and bowel care, ultrasound, EBA)

Cont


Mek'ele
Gondar
Bahir Dar
Addis Ababa
Harar
Jimma
Hawassa


PEDIATRIC NEUROSURGERY CENTER OF EXCELLENCE

Since 2009G.C.

- www.reachanother.org
- 1. Working with 8 COE hospitals in 6 regions, contributing to a total of 15000 surgeries, with 6 other member hospitals.
- 2. Renovated and initiated work at ZMH as PNS Centre.
- 3. Trained more than 400 Health care providers, in SBH children care in different care service points.
- 4. Visualizing Food fortification, with double salt fortification on the way.
- 5. Founding member of Ethiopia's birth defect taskforce.

Why the research?

- Ethiopia has one of the highest prevalence rates of SB globally (33.99/10,000 births).
- Despite surgical progress through RAF and MOH, rehabilitation and AT access remain under-addressed.
- Many children live with severe mobility limitations and are excluded from school/community life.
- The proper inauguration of PT units all over showcases the significant un mat needs in AT.
- Gap identified: Limited data on AT needs and barriers for children with SB in Ethiopia.

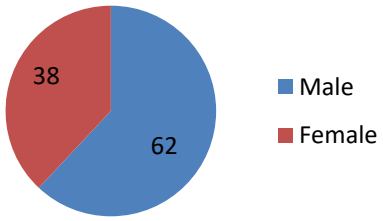
Research objective

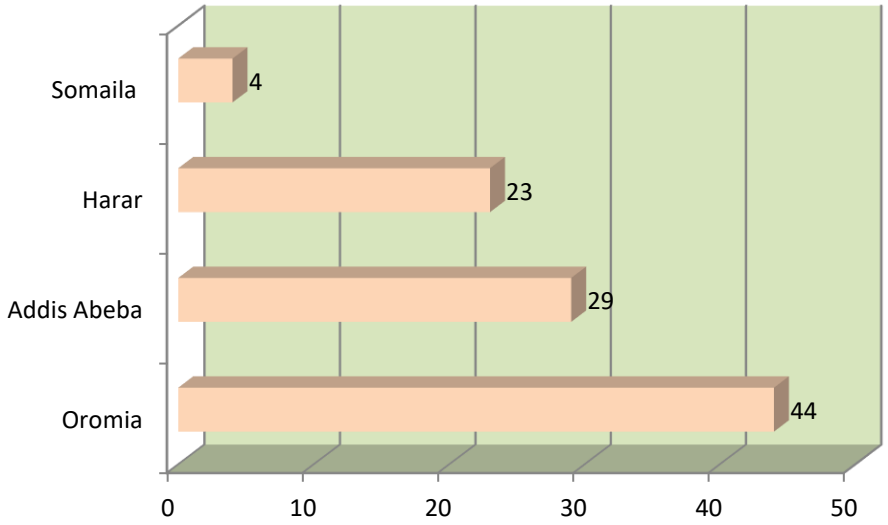
- ***Main Objective*:**
  Assess the need for assistive technology and identify associated factors among children with SB in Ethiopia.
- ***Specific Aims*:**
- Describe socio-demographic and clinical characteristics of children with SB and families.
- Identify types of AT required.
- Analyse factors associated with AT need.

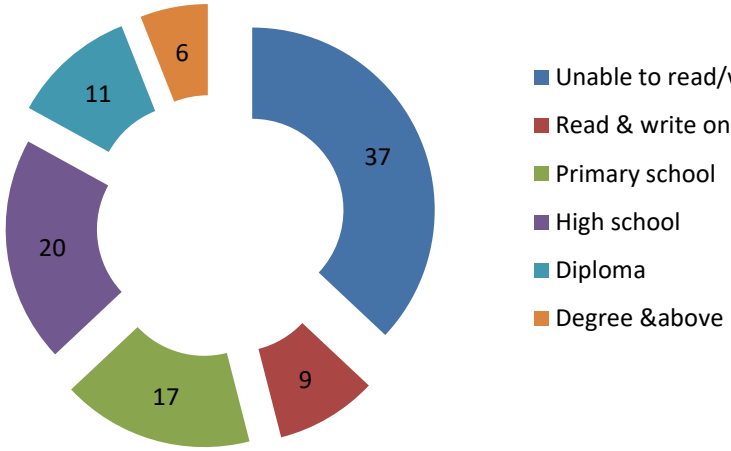
Methods

- **Design:** Analytical cross-sectional, mixed methods.
- **Sites:** St. Peter Specialized Hospital (Addis Ababa) and Hiwot Fana Comprehensive Specialized Hospital (Harar).
- **Participants:** 100 children (0–18 years) with SB.
- **Data:** Clinical records, physiotherapy assessments, caregiver interviews.
- **Analysis:** Descriptive + regression.
- **Ethics:** Approved by ERC, informed consent obtained.

Demographic information

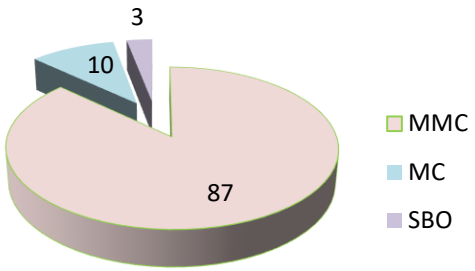


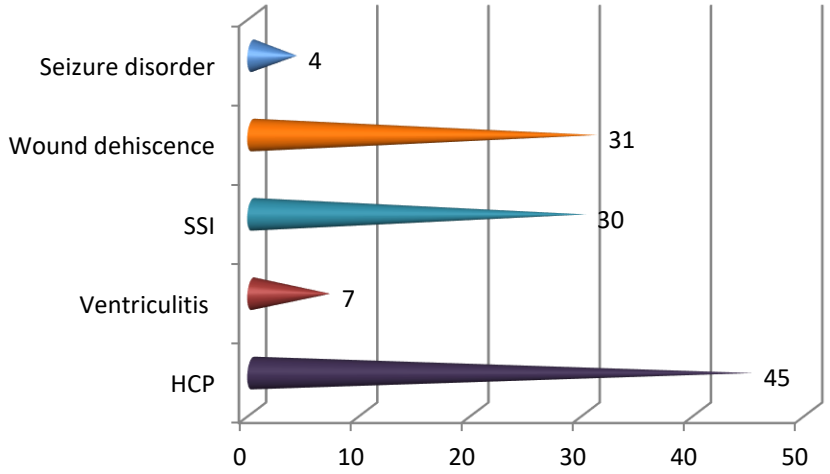


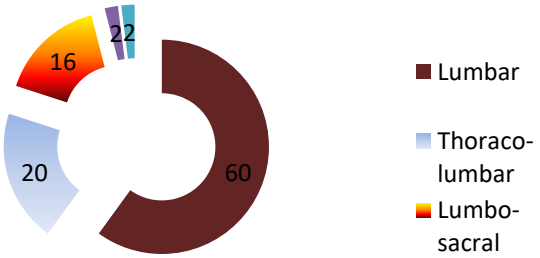


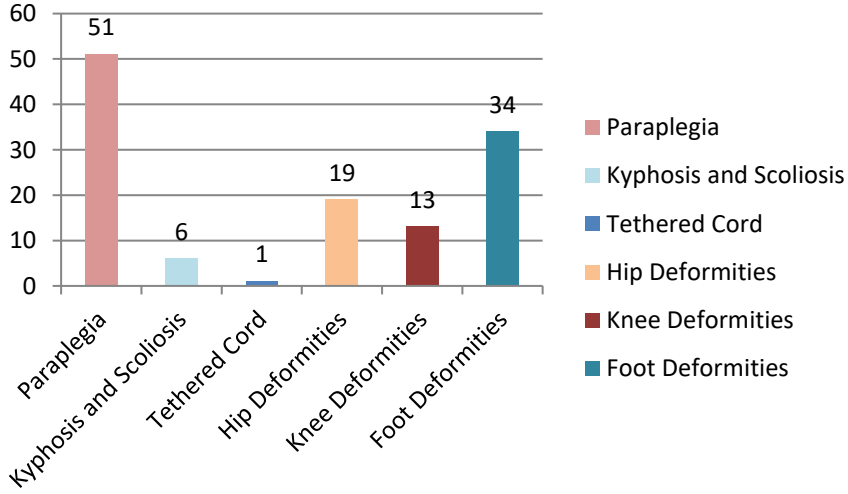
Age Of Visit	
Average	21.9 mth
Range	1-108mth

Clinical characteristics

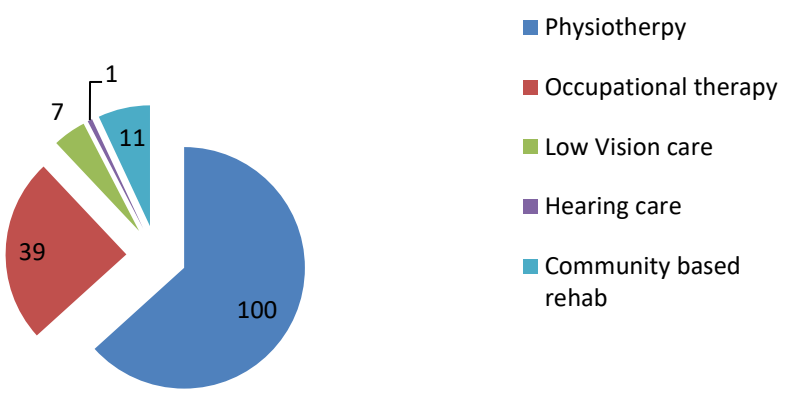




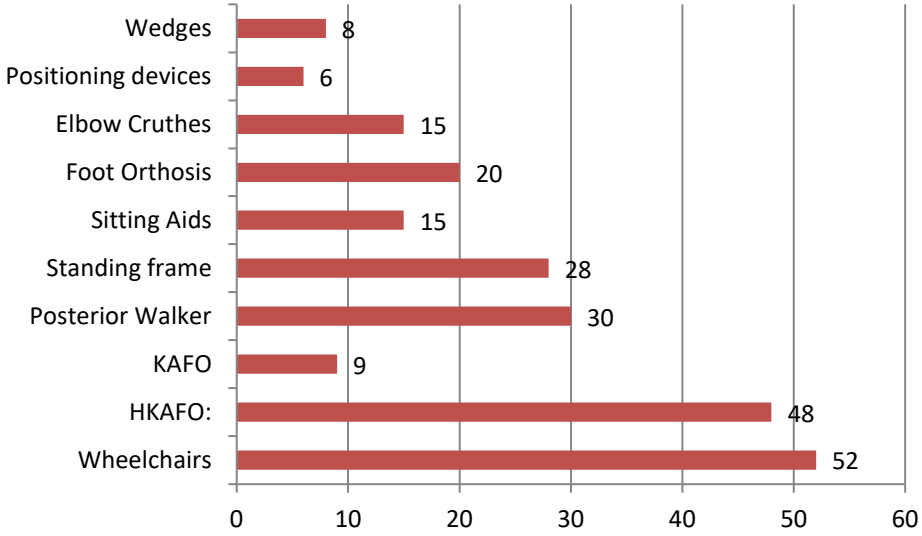




AT needs clinical Cxs



- One child could have more than one mobility AT need.



- ONLY 4% of children had access to AT, which was Wheelchair.

Associated factor

- Among the independent variables Mobility DXS and Level OF Lesion were strongly associated with AT need with P-values of 0.001.

- Due to the small sample size, we were unable to conduct further logistic regressions.

Cont.

- From Age-appropriate group 3% to have any access to educations, with half of them due to school access and the other due to AT access.

Conclusion

- AT need is very high but access is alarmingly low.
- PT is universally needed for children with SB, Yet critical shortage of trained rehabilitation professionals.
- Educational barriers are severe, with only 3% of school aged children attending school.

Recommendation

- Improve access to AT.
- Strengthen rehabilitation services
- Enhance surgical and post op care
- Inclusive education Policies
- Policy and Advocacy
- Multi- Sectorial Collaboration

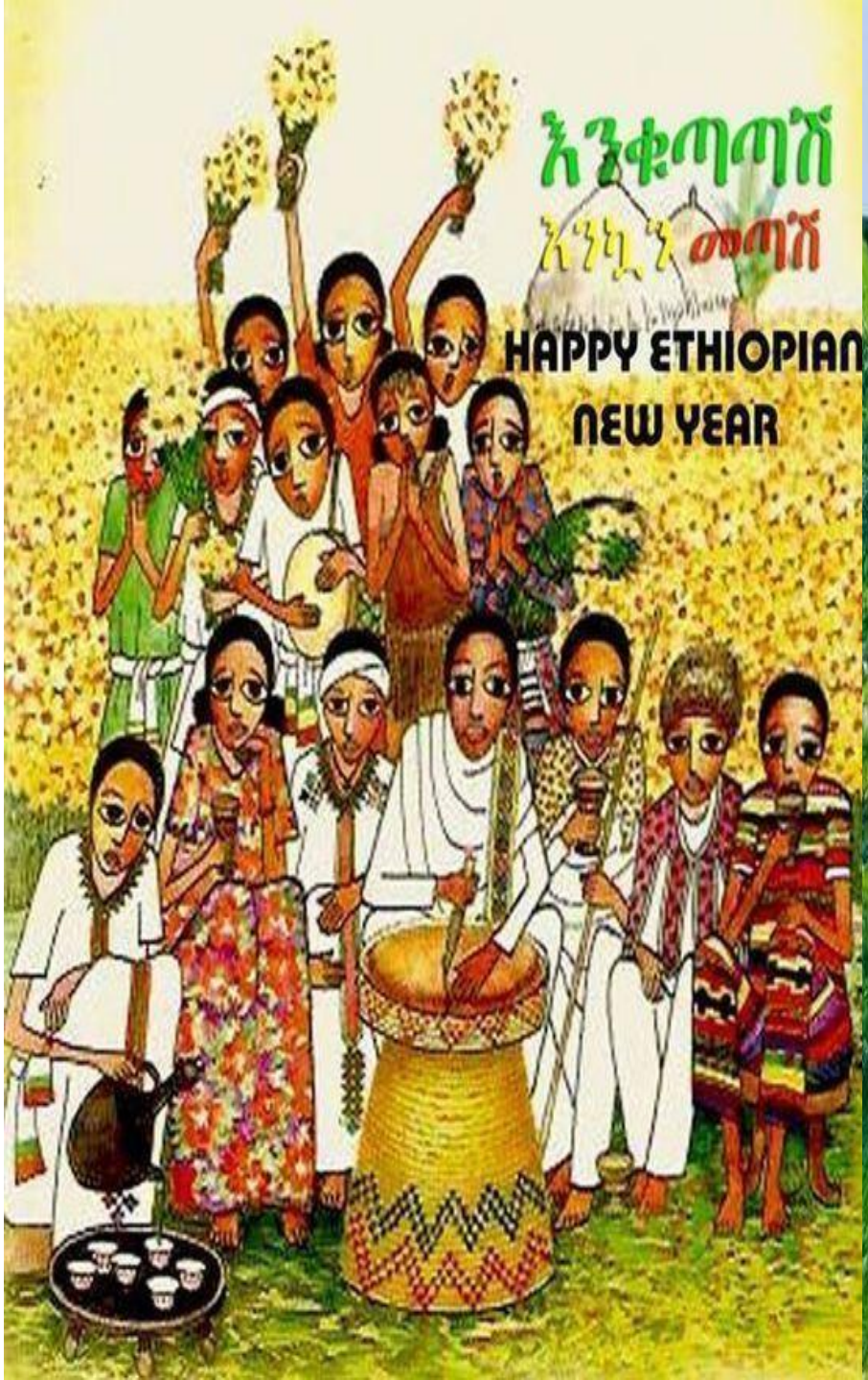
Way Forward

- RAF aspires to strengthen mobility-specific device provision and maintenance through close collaboration with eight Centers of Excellence (COE) hospitals.
- We are preparing to introduce 3D-printed orthoses, alongside conventional manual preparation, while building the capacity of personnel in scanning, design, and distribution processes.
- RAF is committed to actively participating in, and where possible hosting, experience-sharing and learning platforms organized by civil society organizations (CSOs) and hospitals under the guidance of the Ministry of Health (MOH).

Equality begins when every child has the tool to live, learn and thrive.

Thank you.

Any questions???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HAPPY ETHIOPIAN
NEW YEAR