



Research Summary

The impact of caregiver training on children with developmental delay in Malawi | May 2020

Introduction

In December 2016 – August 2017, as part of its work to promote disability rights and inclusion, Sightsavers conducted **a study to evaluate the impact of disability inclusion training for caregivers at community-based childcare centres (CBCCs)** in Thyolo District, southern **Malawi**. CBCCs provide care and education for pre-school children up to six years of age and are largely run by volunteer caregivers. The two-week training programme was based on an existing national training programme for caregivers and included additional modules on how to improve the inclusion and participation of children with disabilities in CBCCs. The **study measured the impact of caregiver training on children’s language and social development outcomes**. The research team also collected data on children’s school readiness, caregiver job satisfaction and CBCC learning environments.

The study was a cluster-randomised controlled trial (CRCT) that involved 48 CBCCs. Caregivers at 24 CBCCs received the additional training, and those at the other 24 CBCCs did not. Researchers used the **UNICEF/Washington Group Child Functioning Module (CFM)** to assess children at the CBCCs for functional difficulties, i.e. disabilities. These children were also assessed for developmental delays using the **Malawi Developmental Assessment Tool (MDAT)**: a tool designed specifically to assess child development in rural African settings.

What is a cluster-randomised controlled trial (CRCT)?

A study in which a treatment or intervention is tested on groups of people (e.g. schools or villages), rather than individuals. ‘The intervention group’ has the intervention being tested and ‘the control group’ has an alternative intervention, a dummy intervention (placebo), or no intervention at all. Outcomes are measured at specific times and any difference in response between the groups is assessed statistically.

The study was conducted in partnership between Sightsavers; the University of Birmingham; and Chancellor College, University of Malawi. It was funded by the Economic and Social Research Council (ESRC) and the UK Department for International Development as part of the Raising Learning Outcomes funding scheme.

Why is this issue important?

Early childhood, from 0-8 years of age, is a critical phase in human development, laying the foundation for a person’s entire life. Evidence shows that developmental stimulation in the first few years of life not only affects a child’s growth in their early years but can also make a significant difference to long-term economic and psycho-social outcomes in adulthood. Although high levels of developmental delays and disabilities have been recognised in children living in low- and middle-income countries, these children are often either excluded from development programmes or their needs are not appropriately catered for.

New interventions are being developed to improve the stimulation, nutrition and health of early years children, with a focus on the poorest and most marginalised groups of people.

However, rigorous evidence on which interventions work, for whom and in which settings, remains very limited.

What do the research findings tell us?

Key messages

- The training of caregivers in how to integrate more disability-inclusive practices into the daily activities of a CBCC had positive effects on the development of pre-school children and resulted in a lower proportion of these children experiencing social and/or language-related delays.
- The main improvements in the groups where caregivers received training were noted in social interactions, communications, caregiver engagement, support of children with disabilities, and some aspects of teaching literacy and numeracy.

Summary

- Evidence from the study suggests that **the training of caregivers had some positive effect on the development of children attending CBCCs**. The proportion of children with any (either social or language) delay in the group where caregivers received training decreased from 11.6% to 6.3%. The proportion also decreased in the group where caregivers did not receive training, but the change was very small, from 11.8% to 10%.
- Overall, **the areas of the CBCC environment that could be more easily managed by individual caregivers (including social interactions, caregiver engagement, communication and styles of teaching), were more likely to be adopted** following the training than those areas which would require wider system changes, such as changing established routines and staff-to-children ratios.
- The caregivers who received the training were 36% **more likely to encourage positive interactions between children and help children to develop appropriate social behaviour with peers** during play time and other activities (50% vs 14% in the group that didn't receive training).
 - They were more likely to spend at least one hour directly interacting with the children (82% vs 50%) and were more likely to ensure that all children were engaged in CBCC activities (41% vs 18%).
 - These caregivers were **also more likely to demonstrate good communication practices with the children**. These included listening attentively, making eye contact, encouraging children to listen when adults speak (36% vs 9%), creating natural speaking opportunities, and using games and other activities to encourage communication (32% vs 18%).
- A higher proportion, although still only 32%, of CBCCs in the group that received training **showed good practices in including children with disabilities in CBCC activities**

and responding to their needs. By contrast, only 5% of CBCCs demonstrated these practices in the group where caregivers did not receive training.

- There were **differences between the groups in how literacy and numeracy were taught.** Caregivers at the CBCCs where training was provided were more likely to teach the alphabet and counting in relation to common objects shown to or handled by the children (41% vs 5%, and 27% vs 5%, respectively). These caregivers were also more likely to facilitate role-play (55% vs 32%).
- The training **had little impact on routine and structure.** The majority of CBCCs in both groups continued to work with one collective group of children and had very limited or no use of activity corners. Researchers also observed **little difference in the approaches used to control children's behaviour, involve parents of children with disabilities in CBCC activities, or in reading with/to the children.** Improvement in this area would probably require broader system changes, such as improving staff-to-children ratios.

Limitations and suggestions for future research

The impact of the project was only observed over a short period, nine months after the training was delivered. Future studies need to explore what impact short training programmes have on the development of skills in the medium to long term.

Future studies should also consider larger sample sizes and longer caregiver training programmes to allow for the disaggregation of results by disability and other characteristics, including measures to account for factors such as stunting.

The prevalence of disability at the end of the nine-month project (endline) was significantly lower than at the start (baseline) in both groups – those where caregivers received training and those where they did not. However, most children's functional difficulties reported at the time of the initial (baseline) survey were of a psycho-social nature (anxiety, behavioural problems, adapting to change). Some of these difficulties may have stemmed from exposure to stressful environmental experiences (such as famine following extensive flooding in the region). It is possible that the reduction of these environmental stress factors during the duration of the project led to results showing lower prevalence of disability in the final (endline) survey. Further research applying the CFM in similar settings over time would be useful to assess these propositions.

CBCCs only operate for three to four hours a day; the majority of a child's life is spent at home and in the community. Collecting data about the lives of children with disabilities in these settings is important to form a more well-rounded understanding. Similarly, future studies should seek to include children who don't attend CBCCs to improve the evidence base for degrees of developmental delay and/or disability affecting all children in a community.

Future studies should be designed with evidence gaps in mind: understanding the long-term effects and impact of different experiences in early life on different children would provide important evidence for policymakers but would require a longitudinal research design. Following large cohorts of children from birth to adulthood is common practice in health research, but is rarely used to understand social or economic outcomes. However, a combination of dedicated resources and collaborative approaches could allow such studies to be conducted cost-effectively.

Learn more

- This summary is based on the final report of the research project 'Tikule limodzi (let's grow together): The impact caregiver training has on children with disabilities in Malawi'. Learn more and read the full report [here](#).
- Papers based on this research have been published in the journal '[Child: Care, health and development](#)', and '[Sustainability](#)'.
- Learn more about the UNICEF/Washington Group Child Functioning Module [here](#).
- Learn more about the Malawi Developmental Assessment Tool (MDAT) [here](#).
- Learn more about research at Sightsavers [here](#).
- Learn more about Sightsavers' work in Malawi [here](#).

About this summary

- This summary was produced by [Anna Ruddock](#), Global Advisor for Research Uptake and Learning at Sightsavers. The original report was produced by:
 - Emma Jolley, Elena Schmidt, Stevens Bechange: Sightsavers
 - Paul Lynch, Anita Soni, Michael McLinden: University of Birmingham
 - Mika Mankhwazi, Jennifer Mbukwa, Foster Kholowa: Chancellor College, University of Malawi

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