Nourishing Beginnings

Food Security, Nutrition and the Forgotten Preschool Child in South Africa

Lessons from Community-Based Participatory Research with Early Childhood Development Centres in Makhanda

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Presentation overview

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Understand child nutrition challenges

02

Explore ECD food security realities

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Present key findings

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Discuss community-led solutions

The Research Journey

Research Journey Informing This Study

Chakona and Shackleton *Agric & Food Secur.* (2017) 6:66
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Agriculture & Food Security

RESEARCH Open Access

Voices of the hungry: a qualitative measure of household food access and food insecurity in South Africa

Gamuchirai Chakona* and Charlie M. Shackleton

Abstract

Background: South Africa is rated a food secure nation, but large numbers of households within the country have inadequate access to nutrient-rich diverse foods. The study sought to investigate households' physical and economic access and availability of food, in relation to local context which influences households' access to and ability to grow food which may affect the dietary quality. We sought to understand self-reported healthy diets, food insecurity from the perspective of people who experienced it, barriers to household food security and perceptions and feelings on food access as well as strategies households use to cope with food shortages and their perceptions on improving household food security.

nutrients MDPI

Article

Minimum Dietary Diversity Scores for Women Indicate Micronutrient Adequacy and Food Insecurity Status in South African Towns

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Abstract: The lack of dietary diversity is a severe problem experienced by most poor households globally. In particular; women of reproductive age (WRA) are at high risk of inadequate intake of micronutrients resulting from diets dominated by starchy staples. The present study considered the diets, dietary diversity, and food security of women aged 15–49 years along the rural-urban continuum in three South African towns situated along an agro-ecological gradient. A 48 h dietary

frontiers in Nutrition

ORIGINAL RESEARCH
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Household Food Insecurity along an Agro-Ecological Gradient Influences Children's Nutritional Status in South Africa

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National Bureau of Plant Genetic Resources (ICAR), India

The burden of food insecurity and malnutrition is a severe problem experienced by many poor households and children under the age of five are at high risk. The objective of the study was to examine household food insecurity, dietary diversity, and child nutritional status in relation to local context which influences access to and ability to grow food in South Africa and explore the links and associations between these and household socio-economic status. Using a 48-h dietary recall method, we interviewed 554 women from randomly selected households along a rural-urban continuum in three towns situated along an agro-ecological gradient. The Household Dietary Diversity Scores

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Food insecurity in South Africa: To what extent can social grants and consumption of wild foods eradicate hunger?

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ABSTRACT

As the world continues to face widespread food insecurity, achieving food security for all at all times is increasingly complicated. In South Africa, social grants and the use of wild foods have been reported as some ways to improve household food insecurity and reduce poverty. The study examined if social grants and consumption of wild foods alleviate food insecurity in South Africa. Household surveys and focus group discussions were conducted along the rural-urban continuum in three South African towns situated along an agro-ecological gradient. We explored the differences in household food security indicators, mean monthly food expenditure and wealth index between households receiving social grants, households consuming wild foods, and those who did not. Households receiving social grants were more food insecure with lower mean monthly food expenditure and wealth index than those who did not. Overall all towns, the use of wild foods improved household food security

Building the Evidence Base

nutrients MDPI

Article

Food Taboos and Cultural Beliefs Influence Food Choice and Dietary Preferences among Pregnant Women in the Eastern Cape, South Africa

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Abstract: A well-nourished and healthy population is a central tenet of sustainable development. In South Africa, cultural beliefs and food taboos followed by some pregnant women influence their food consumption, which impacts the health of mothers and children during pregnancy and immediately afterwards. We documented food taboos and beliefs amongst pregnant isiXhosa women from five communities in the Kat River Valley, South Africa. A mixed-methods approach was used, which was comprised of questionnaire interviews with 224 women and nine focus group discussions with 94 participants. Overall, 37% of the women reported one or more food practices shaped by local

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Nutrition Journal

RESEARCH Open Access

Social circumstances and cultural beliefs influence maternal nutrition, breastfeeding and child feeding practices in South Africa

Gamuchirai Chakona

Abstract

Background: Maternal and child undernutrition remain prevalent in developing countries with 45 and 11% of child deaths linked to poor nutrition and suboptimal breastfeeding, respectively. This also has adverse effects on child growth and development. The study determined maternal dietary diversity, breastfeeding and, infant and young child feeding (IYCF) practices and identified reasons for such behavior in five rural communities in South Africa, in the context of cultural beliefs and social aspects.

From Household Food Insecurity to ECD Nutrition

NUTRITION PATHWAY

Household poverty and unemployment → Household food insecurity, poor dietary diversity and suboptimal feeding practices

↓

Children enter ECD centres already nutritionally vulnerable → ECD centres become critical nutrition safety nets

↓

Limited budgets affect meal quality and dietary diversity → Suboptimal feeding practices

Key Question: Can ECD programmes break the cycle?

International Journal of Environmental Research and Public Health

MDPI

Article

Nourishing Beginnings: A Community-Based Participatory Research Approach to Food Security and Healthy Diets for the "Forgotten" Pre-School Children in South Africa

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Abstract: Adequate and diverse diets are essential for children's physical and cognitive development, yet food insecurity and malnutrition continue to threaten this fundamental right, which remains a pressing concern in many resource-poor settings. This study investigated food and nutrition security in Early Childhood Development (ECD) centres in Makhanda, South Africa, through a community-based participatory research approach. Using a mixed-methods approach combining questionnaire interviews, focus group discussions, direct observations, and community asset mapping across eight ECD centres enrolling 307 children aged 0–5 years, the study engaged ECD facilitators and analysed dietary practices across these centres. Results indicated that financial constraints severely affect the quality and diversity of food provided at the centres, thus undermining the ability to provide nutritionally adequate meals. The average amount spent on food per child per month at the centres was R90 ± R25 (South African Rand). Although three

Why this study was needed

South Africa's Child Nutrition Challenge

Child Nutrition Challenges: A growing crisis

Global Burden

150.8 million stunted
50.5 million wasted
38 million overweight

South Africa

Triple burden of malnutrition
Childhood stunting
Micronutrient deficiencies
Overweight and obesity

Eastern Cape

Highest stunting burden
24.8% stunting rate
871 acute cases reported

Drivers of Child Malnutrition

Poverty + Unemployment → Food Insecurity → Poor Dietary Diversity → Compromised Immunity

Key Message: Without targeted nutrition and ECD interventions, malnutrition will continue to fuel developmental inequality and poorer education outcomes.

The Forgotten years: Why ages 2-5 Matter

A critical window linking early nutrition to school success

First 1,000 Days

Pregnancy to Age 2
Policy focus, health support, nutrition programmes

Ages 2–5: Forgotten Years

Brain growth
School readiness
Social skills
Healthy growth

Next 1,000 Days

Foundation for school success

Risks if neglected

- Overlooked in nutrition policies
- Continued food insecurity
- Low dietary diversity
- Dependence on ECD meals
- Developmental delays

ECD Centres can change trajectories

✓ Learning & school readiness
✓ Nutrition support
✓ Health monitoring
✓ Care & protection
✓ Early intervention

Key message: Children entering preschool nutritionally vulnerable face widening developmental inequalities unless ECD centres are adequately resourced.

Why Makhanda Matters: Study Context & Relevance

Community Context

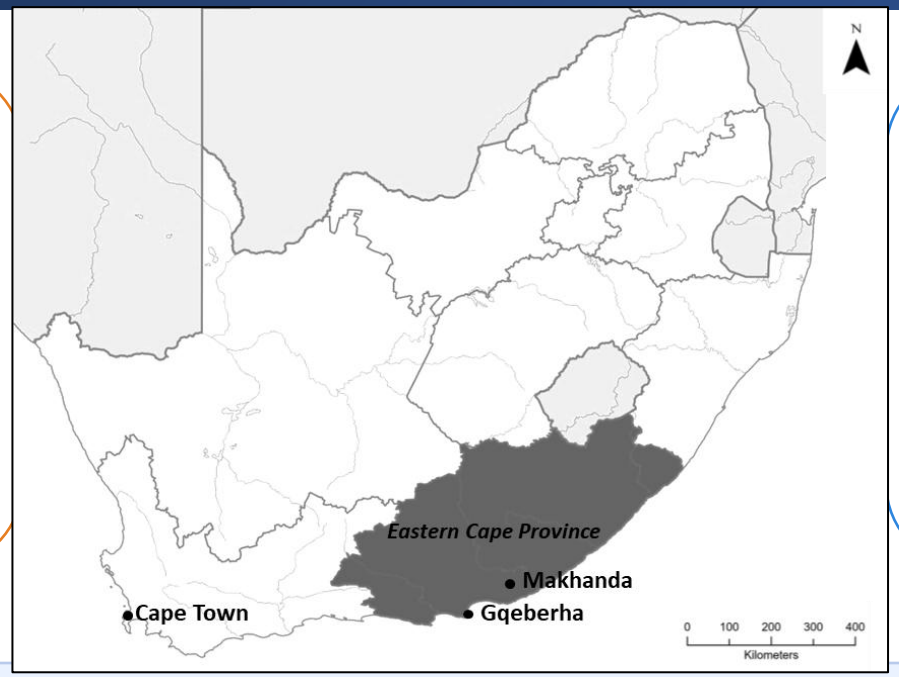
Multiple socio-economic challenges

63.2% live in poverty

~60% living below food poverty line

17.9% unemployment

53% female-headed households



Why Study Makhanda?

Represents resource-constrained communities

Highlights ECD challenges - funding pressures

Provides opportunity for sustainable nutrition solutions

Study Sample: 8 ECD centres | 307 children | Ages 7 months to 5 years | All centres registered with the Department of Basic Education

ECD centres are a critical platform for improving nutrition, supporting vulnerable children and families, and reducing developmental inequalities.

Research Aim

- The central issue we needed to address was food and nutrition insecurity among children enrolled in the ECD centres in Makhanda.
- This CBPR study explored and aimed to improve food systems in ECD centres in Makhanda thus bringing visibility to those often overlooked in policy and practice.
- This study sought to understand food security, feeding practices, dietary diversity and barriers to nutrition within ECD centres and opportunities for community-led interventions.
- Importantly, the study moved beyond problem identification to working collaboratively with communities to develop practical solutions.

Main Research Questions

The study sought to answer three co-designed questions:

1. Can ECD centres provide an effective nutritional safety net for vulnerable children?
2. What community-led interventions can sustainably improve dietary diversity in ECD centres in Makhanda?
3. How can participatory partnerships between communities, universities, government departments and policymakers strengthen resilience in ECD centres?

Why Community-Based Participatory Research Approach

CBPR positions ECD facilitators as co-researchers throughout the study process

Greater trust and transparency
Shared decisions strengthen ownership and credibility
stronger community relationships,
realistic interventions - practical, locally relevant and sustainable.

CBPR Approach
Community-Based Participatory Research (CBPR) Approach to ensure the study was conducted *with* and *for* the community, not just about it.

Values
Core CBPR Principles and values of **equity**, **co-learning**, and **shared power** were applied to guide all phases of the research process.

Collaborative Partnerships
Diverse Stakeholder Collaboration including RUCE researchers, ECD facilitators, some parents, and Department of Health dieticians were the co-creators of knowledge in the research journey.

Methods
We used questionnaires, focus group discussions, observations, and community asset mapping. We co-designed tools for data collection with the ECD facilitators and held participatory workshops with the facilitators and some parents.

Process
We created safe spaces for iterative and inclusive engagement, adapting our methods to fit local contexts, ensuring relevance, respect, and grounding in lived experience/ realities at ECD centres and their surrounding communities.

Finding 1: The Cost Challenge Behind Child Nutrition

R90 ± R25 per child per month

Reality in ECD Centres

- Limited budgets constrain meal quality
- Fee non-payment
- Meals prioritise filling foods over nutrient-rich foods
- Parental knowledge gaps affect healthy food choices
- Low parental involvement

Key Insight: Good intentions existed, but financial constraints were the dominant barrier to providing nutritionally diverse meals.

Finding 2: Children Were Fed Regularly, But Diets Lacked Diversity

Frequently Consumed

Pap • Mealie meal • Rice • Samp • Potatoes • Bread • Macaroni • Cabbage • Cremora

Moderately Consumed

Beans • Lentils • Peanut butter • Soya mince • Spinach • Carrots

Rarely Consumed

Eggs • Milk • Beef • Animal proteins • Most fruits and vegetables

Children typically received breakfast and lunch at centres, while snacks often came from home. Facilitators frequently shared food so that no child went hungry.

Key Insight: Meals were regular, but heavily dominated by low-cost starchy foods with limited protein and micronutrient diversity.

Voices from ECD facilitators

"sometimes they (meaning children) do not have breakfast because of no resources, gas or if we do not have electricity to cook"

"The reality is that the children do not have many options; they eat whatever food is available."

"sometimes they miss having porridge which really hurt. If the porridge is not available, they always ask why we are no having it and that is not a good thing to experience as a facilitator"

"We normally budget about R1,500 for food, but this is not enough to meet the needs of all the children. Government funding often arrives late, so there are times when we buy food from our own pockets to ensure that the children are fed."

"Another major challenge is that some parents do not pay school fees. As a result, several children are no longer attending the ECD centre and remain at home, which means they may also be missing out on the meals provided at the centre."

Finding 3: Knowledge Was Not the Main Barrier

Facilitators had good nutrition knowledge and understood healthy feeding guidelines

- ✓ Meal preparation and nutrition training received
- ✓ Menus developed with dietitians
- ✓ Healthy feeding principles understood

Reality in Practice

Dieticians' advice not fully implemented

- Beef → Soya mince
- Balanced meals → Rice & cabbage
- Milk → Lower-cost substitutes
- ✓ Reduced dietary diversity

Key insight: The issue was not a lack of nutrition knowledge, but a lack of affordability. Facilitators often knew what children should eat, yet financial constraints forced them to make substitutions as a strategy for survival.

Finding 4: ECD Centres Are Critical Nutrition Safety Nets

Many Children Depend on ECD Meals

- Daily meals reduce hunger
- Some children arrive without snacks
- ECD centres provide critical protection against food insecurity.

School Holidays Reveal Vulnerability

- Children may lose access to regular meals
- Facilitators reported health deterioration during school holidays
- Food insecurity affects many households

Protective Role of ECD Centres

- Food sharing among children
- Consistent feeding routines
- Support for vulnerable families
- Provide early interventions against malnutrition

Key Insight: ECD centres are not only places of learning. They are frontline protections against child hunger and food insecurity.

Voices from ECD facilitators

"we do not usually follow the menu every time because we do not always have the things on the menu, so we improvise. We sometimes cook lentils, mincemeat, or if no meat we use soup with soya (Imana), if no matabela we cook maize porridge or oats. Weet-bix are very expensive and require a lot of milk which is also expensive."

"Most of the children only bring noodles to school, and some do not bring any food at all. When that happens, we encourage sharing among the children, and those who have food share with those who do not. We try to teach the children values such as kindness and caring for one another."

"Kids' health mostly deteriorates during holidays as they only eat porridge (ACE instant) at home. Parents don't make sure that their children eat vegetables and fruit"

"sometimes, if there is no meat I mix rice with cabbage"

"some children at the ECD are not growing as is expected and in this case I report to the Department of health/ dieticians where they tell me to feed the children with more peanut butter. When I do this, I see change but I do not know if the children are also getting help from home"

"We have also dealt with cases of child malnutrition. For example, one child was identified as being stunted through growth monitoring measurements but the parent was in denial and continued to insist that the child was fine, even though the measurements showed that the child was at risk and needed attention. Situations like these show the importance of working closely with parents to improve awareness."

Community-Led Nutrition Intervention strategies

Community Food Systems

Local Partnerships

- ECD food banks
- Shared procurement
- Gardening networks
- Community food enterprises

Food Production

ECD Food Gardens

- Fresh vegetables
- Lower food costs
- Nutrition learning
- Community participation

Nutrition Education

Participatory Learning

- Parents
- Caregivers
- Facilitators
- Children

Financial Sustainability

Financial Literacy

- Budgeting skills
- Resource management
- Cost planning
- Improved resilience

Beyond the ECD Centre: A Systems Approach to Child Nutrition

Earlier Studies Showed

Household Poverty
↓
Food Insecurity
↓
Poor Dietary Diversity
↓
Child Nutrition Risk

Current Study Shows

Child Arrives at ECD
↓
ECD Faces Resource Constraints
↓
Poor Dietary Diversity
↓
Nutritional Vulnerability Continues

Key Lessons for Action

- ✓ Dietary diversity matters
- ✓ Household food security matters
- ✓ Maternal & child feeding shape outcomes
- ✓ Indigenous foods are resources
- ✓ Multi-sector collaboration is essential

Key Message: ECD centres are a critical part of the solution, but food insecurity and childhood malnutrition is a systems problem that begins in households and requires coordinated action across families, communities, food systems, health services and policy systems. ECD centres cannot solve childhood malnutrition alone

Policy Implications: What needs to change?

Strengthen Government Support

- Need to reflect lived realities of the ECD communities
- Timely subsidy disbursement
- Higher nutrition allocations
- Dedicated ECD nutrition budgets

Sustainable Funding

- Increased public funding
- Fee payment
- Bulk purchasing
- Transparent procurement
- Food bank support

Support Sustainable Food Systems

- ECD food gardens
- Community food banks
- Nutrition-sensitive agriculture programmes

Build Local Capacity

- Financial literacy for ECD managers
- Nutrition education programmes
- Parent engagement initiatives

Multi-Sector Partnership Collaborations

- Government
- Universities & NGOs
- Health & communities
- ECD sector

✓ Accountability to ensure transparency and community oversight

Key Message: Lasting improvements in child nutrition require adequate funding, stronger local food systems, capacity building and coordinated multi-sector partnerships.

Call to Action

Every Child Deserves a Nourishing Beginning

Researchers and community partners

- Generate actionable, community-centred evidence

Communities

- Strengthen local food production and support networks

✓Community-led solutions offer hope.

ECD Practitioners

- Continue championing and strengthening child nutrition and development programmes

Parents and Caregivers

- Partner actively in children's nutrition and wellbeing

Policymakers

- Invest in sustainable ECD nutrition systems

Achieving this requires Departments of Health, Agriculture, Social Development, Education, ECD centres, families, and communities to work together with shared accountability and clear responsibilities to ensure that every child has an equal opportunity to thrive.

Conclusion

- ✓ Child malnutrition begins before children enter ECD centres and cannot be solved by ECDs alone.
- ✓ Affordability and food insecurity are the primary barriers to achieving nutritious diets.
- ✓ ECD centres remain critical platforms for nutrition support and early childhood development.
- ✓ Co-created, community-led solutions are both feasible and contextually relevant.
- ✓ Sustainable change requires coordinated action across households, communities, ECD centres, and policy systems.

Thank you