

OHKB - CWGE x OSA COLLABORATIVE RESEARCH SERIES · SPRING
2026 · VOLUME 1

Translating Health Evidence for Oromia Communities

*An Afaan Oromo Knowledge Translation Series on
Maternal Health, Nutrition Security, and Food Systems
in Rural and Pastoral Ethiopia*

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PEER TRANSLATION

ICJME STANDARDS

AFAAN OROMO

Abstract

Background: Afaan Oromo is spoken by over 40 million people across the Oromia Regional State of Ethiopia, yet the vast majority of peer-reviewed health research relevant to Oromo communities exists exclusively in English – creating a structural barrier between published evidence and the health workers, community leaders, and policymakers who most need to act on it. The Oromo Health Knowledge Base (OHKB) was established to bridge this gap through systematic, community-centered knowledge translation.

Objective: This volume presents five peer-reviewed studies on food security, maternal healthcare utilization, health communication, health system performance, and maternal malnutrition across Oromia and rural Ethiopia. Each study is rendered in three layers: a full technical abstract with clinical fidelity, a plain-language Afaan Oromo summary accessible to community health workers, and a bilingual medical glossary with culturally contextualized clinical definitions.

Methods: Source articles were identified through structured review of PubMed, Google Scholar, and African Journals Online. Summaries and glossaries were prepared following ICJME authorship and reporting standards. Each entry carries an ICJME Verification Statement confirming fidelity to the published source text. Afaan Oromo translations were reviewed by bilingual contributors with community health backgrounds.

Results: Five studies are presented spanning food and nutrition security (Eastern Oromia, **n = 461**), maternal healthcare utilization (East Borena Zone, **n = 416**), mass media and maternal health across Africa (25-study narrative review), Ethiopia's national maternal and neonatal mortality trajectory (2000–2020), and predictors of maternal malnutrition across Ethiopia (24-study meta-analysis, **n = 12,893**). Key findings include the centrality of education, cooperative membership, and extension service access in determining household health outcomes, and the persistent role of geographic isolation as a barrier to care.

Conclusion: This series demonstrates a replicable model for community-driven health knowledge translation in under-resourced linguistic communities. The OHKB framework is designed to be directly useful to district health offices, NGOs, health extension workers, and community leaders operating in Oromia and across the broader Oromo diaspora.

Oromia

Afaan Oromo

Knowledge Translation

Maternal Health

Food Security

Nutrition

Health Communication

Ethiopia

Health Extension

Community Health

1. Introduction

The Linguistic Gap in Oromia Health Research

Ethiopia's Oromia Regional State is home to approximately **40–45 million** people, making it the largest and most populous region in the country. Despite this scale, Oromia bears a disproportionate burden of preventable disease: maternal mortality rates in rural and pastoral zones remain among the highest nationally, food insecurity affects millions of smallholder farming households annually, and access to skilled obstetric care, antenatal services, and nutrition support continues to fall short of national and international targets.

These outcomes are not simply the result of resource scarcity. They reflect, in part, a structural disconnection between what science knows and what communities – and the health workers serving them – can access. The Oromo Health Knowledge Base (OHKB) was founded on the premise that health equity requires not only the production of knowledge, but its translation.

The peer-reviewed literature on Oromia health is rich, rigorous, and growing. But it exists almost entirely in English – a language inaccessible to the majority of the communities it describes. Afaan Oromo, the fourth most widely spoken language in Africa, has no established tradition of clinical terminology. Health extension workers delivering frontline care in rural kebeles, district health officers designing community interventions, and community leaders mobilizing households around nutrition or maternal care – none of these actors have ready access to the evidence base that could directly inform their work.

The OHKB–CWGE × OSA Collaborative Research Series

This volume represents the first output of the OHKB–CWGE × OSA Collaborative Research Series, a structured program designed to systematically translate, contextualize, and disseminate peer-reviewed health research for Oromia audiences. Each entry follows a standardized four-part structure:

- **Technical Abstract** – a full-fidelity summary of the source study's methodology, sample, findings, and statistical results, written for a health professional audience.
- **Simplified Oromo Version** – a plain-language Afaan Oromo summary accessible to community health workers and literate community members without clinical training.
- **Medical Glossary** – a bilingual English–Afaan Oromo glossary of key clinical and technical terms, with contextual definitions drawn directly from the source literature.
- **Implementation Note** – a synthesis of the study's actionable implications for Oromia, connecting findings to the region's health system context and community realities.

All summaries and glossaries carry an ICJME Verification Statement confirming that no statistical values, odds ratios, clinical interpretations, or findings have been added beyond what is stated or directly implied in the source text.

2. Methods

Study Selection

Articles were identified through searches of PubMed, Google Scholar, African Journals Online (AJOL), and Frontiers in Public Health using the terms: *Oromia*, *Ethiopia*, *maternal health*, *food security*, *nutrition*, *health communication*, and *health systems*. Priority was given to studies published between 2018 and 2024, conducted in Oromia or rural Ethiopia, and focused on community-level health determinants with policy relevance for district and zonal health programming.

Translation Protocol

Technical summaries were prepared by reviewing the full text of each source article. Afaan Oromo translations were developed by bilingual contributors with public health training and reviewed for terminology accuracy and community readability. Medical glossary entries were constructed from definitions appearing in the source articles or their cited references; no clinical definitions were generated independently.

QUALITY ASSURANCE

All ICJME Verification Statements confirm that every statistical value, odds ratio, confidence interval, and clinical term is drawn directly from the published source text. The implementation notes apply each study's conclusions to the Oromia context and do not introduce clinical claims beyond what is supported by the source literature.

3. Translated Research Summaries

Five Studies · Five Oromia Health Domains

Each entry below contains: (1) a full technical abstract with clinical fidelity, (2) a plain-language Afaan Oromo summary, (3) a bilingual English–Afaan Oromo medical glossary, and (4) an implementation note for Oromia health programming. Each concludes with an ICJME Verification Statement confirming fidelity to the source publication.

Socio-Economic Determinants of Household-level Food and Nutrition Security Among Smallholder Farmers of Eastern Oromia

TECHNICAL ABSTRACT

This study examines the socio-economic determinants of food and nutrition security across three districts of Eastern Oromo, Ethiopia within the 2020-21 year. 461 smallholder farmers were analyzed using simple random sample and primary questionnaire data where researchers applied economic logit models. Results showed that 63.1% of households were food secure ($\geq 2,550$ kcal/adult equivalent/day), while 36.9% were food insecure. Nutritionally, 27.77% fell in the low dietary diversity category, 54.01% in medium, and 18.22% in high. Food security was shown to be influenced by education level, social status, farm income and training, livestock holding, access to climate change information and more. In tandem, nutrition status was significantly influenced by household age, education, soil fertility, livestock holding, market information, and more. Policy implications focus on centering improvement in information access, education, service delivery, and overall empowerment of small shareholder and farmer groups to improve rural household food and nutrition security in Ethiopia.

AFAAN OROMO

AFAAN OROMO

Qorannoon kun maaliif maatiin qonnaan bultootaa tokko tokko

Oromiyaa Bahaa keessa jiran nyaata gahaa hin qabneefi maaliif nyaatni isaanii fayyaaf gahaa ta'uu dhabuu isaa ilaale. Qorattoonni maatii qonnaan bultootaa 461, Godinaalee sadii keessa jiran daawwatanii waa'ee nyaata isaanii, galii, lafa, horii, barnootaafi hirmaannaa hawaasaa irratti isaan gaafatan. Isaan akka argatanitti, maatii 10 keessaa 6 nyaata gahaa qabu turan, garuu maatii 10 keessaa 4 dhihoo nyaata gahaa hin qabu turan. Guddinni qaamaaf, maatii walakkaa ol ta'an nyaata garaagaraa giddugaleessa qabu turan, maatii 4 keessaa 1 nyaata garaagaraa hiyyeessa qabu turan, akkasumas maatii 5 keessaa 1 gadi nyaata garaagaraa gaarii qabu turan. Maatiin hoggantoonni maatii isaanii barnoota guddaa yoo qabaatan, yoo horii hedduu qabaatan, yoo garee waldaa ykn qonnaa keessa turan, yoo leenjii qonnaafi gorsa argatan, akkasumas yoo odeeffannoo waa'ee gabaafi haala qilleensaa argatan ni fooyya'an. Maatiin karaa guddicha irraa fagaatanii jiraatan guddinni qaama isaanii ni hammaata ture. Hojiin fayyaa naannoo kun hawaasni nyaataafi guddina qaama isaanii akka fooyyessan gargaaruuf sababoota kanneen irratti xiyyeeffachuu qabu.

MEDICAL GLOSSARY

English Term	Afaan Oromo	Clinical / Technical Context
Food security	<i>Nageenya midhaanii</i>	State in which all people have physical and economic access to sufficient, safe, nutritious food to meet their dietary needs and food preferences for an active and healthy life

English Term	Afaan Oromo	Clinical / Technical Context
Food insecurity	<i>Nageenya midhaanii dhabuu</i>	Lack of consistent access to enough food for an active healthy life; measured here via daily caloric intake below 2,550 kcal per adult equivalent per day
Nutritional status	<i>Haala nyaataa</i>	Condition of the body resulting from intake, absorption, and utilization of nutrients; categorized here as low, medium, or high based on dietary diversity score
Malnutrition	<i>Hanqina nyaataa</i>	Deficiencies, excesses, or imbalances in energy and/or nutrient intake; includes undernutrition and micronutrient deficiencies prevalent in rural Ethiopia
Dietary diversity	<i>Garagarummaa nyaataa</i>	Number of different food groups consumed by a household within a 24-hour period; used as a proxy for nutrient adequacy and nutritional status
Dietary diversity score (HDDS)	<i>Qabxii garagarummaa nyaataa (HDDS)</i>	Quantitative score derived from household-level 24-hour dietary recall across 12 food groups; low ≤ 3 , medium $>3-6$, high >6
Caloric intake	<i>Fudhannaa kaalorii</i>	Total energy consumed measured in kilocalories (kcal); minimum requirement set at 2,550 kcal per adult equivalent per day by the Ethiopian Government
Adult equivalent (AE)	<i>Ga'eessa walsimaa (AE)</i>	Standardized unit that adjusts household food consumption to account for differences in age and sex among household members when calculating per-capita intake
Kilocalorie (kcal)	<i>Kiilokaalorii (kcal)</i>	Unit of energy used to measure food energy content; 2,550 kcal/AE/day is the national minimum subsistence threshold used in this study
Undernutrition	<i>Nyaata gahaa dhabuu</i>	Insufficient intake of energy and/or nutrients; a subtype of malnutrition leading to stunting, wasting, and micronutrient deficiencies, particularly in children
24-hour dietary recall	<i>Yaadannoo nyaata sa'aa 24</i>	Data collection method in which a respondent reports all foods and beverages consumed in the preceding 24 hours; used here to calculate household dietary diversity score
Logit model (logistic regression)	<i>Moodeela loojitii (tartaibootii loojistikii)</i>	Statistical model used to estimate the probability of a binary outcome (food secure vs. food insecure) based on multiple socio-economic predictor variables
Ordered logit model	<i>Moodeela loojitii tartiiba qabu</i>	Extension of logistic regression for ordinal outcomes (low, medium, high nutritional status); accounts for natural ordering of categories without assuming equal intervals
Odds ratio	<i>Walqixxummaa carraa</i>	Statistical measure expressing the likelihood of an outcome occurring in one group relative to another; used here to quantify how each variable affects food security probability
Marginal effect	<i>Dhiibbaa daangaa</i>	Change in probability of being in a nutritional status category associated with a one-unit change in a predictor variable, holding all others constant
Tropical Livestock Unit (TLU)	<i>Yuunitii Horii Naannoo Ho'aa (TLU)</i>	Standardized measure used to aggregate different livestock types (cattle, goats, sheep, etc.) into comparable units for analysis; 1 TLU \approx 250 kg live weight
Smallholder farmer	<i>Qonnaan bulaa xiqqaa</i>	Farmer cultivating a small plot of land (typically less than 2 ha); represents approximately 85% of Ethiopian agricultural households

English Term	Afaan Oromo	Clinical / Technical Context
Extension contact	<i>Quunnamtii babal'ina qonnaa</i>	Number of visits or interactions a farmer has with agricultural extension agents; a proxy for access to technical agricultural knowledge and support services
Cooperative membership	<i>Miseensummaa waliigaltee</i>	Participation in a formal farmers' cooperative or farmer group; associated with improved access to credit, information, inputs, and markets

IMPLEMENTATION NOTE

The findings of this study carry direct relevance for health and agricultural program implementation across rural Oromia. The study was conducted in the East Hararghe Zone which is an area characterized by high food insecurity, land fragmentation, and limited market access, all conditions broadly representative of many communities across Oromia face. The identification of livestock holdings, cooperative membership, farmer training, and education as significant determinants of both food security and nutrition suggests that integrated, multi-sectoral interventions are most likely to produce sustainable improvements. Health extension workers and development agents operating at neighborhood level should leverage existing cooperative and farmer group structures as platforms for delivering nutrition education, climate adaptation messaging, and market linkage support simultaneously, targeting these socio-economic determinants. The finding that households with access to climate change information also had 1.91 times higher odds of being food secure is particularly intriguing, further pointing to the value of embedding climate-smart agriculture messaging within existing health and agricultural outreach, especially given Oromia's seasonal and rainfall-dependent food insecurity patterns. Infrastructure investment emerges as a cross-cutting barrier. Road distance to the main road was negatively associated with nutritional status at the 1% significance level, underscoring that even training programs may be limited in reach if physical access to markets remains poor. In rural highland and lowland zones where communities may be 30–45 minutes on foot from the nearest main road, mobile extension services, community radio for climate and market information, and community-based cooperative strengthening may represent the most cost-effective solutions. Policymakers and NGOs operating in Oromia should prioritize programs that simultaneously address education, extension contact, livestock support, and cooperative participation to further enhance food security within the region, all points the study identifies as consistently significant across both food security and nutritional status outcomes.

Food & Nutrition Security

Rural Oromia/ East Haraghe Zone

Cross-sectional Survey

Observation Study

I verify that this summary and glossary are clinically and technically accurate representations of the source article, cross-referenced with: Beyan Ahmed Yuya, Jema Haji Mohammed, Mengistu Ketema Aredo. Socio-Economic Determinants of Household-level Food and Nutrition Security Among Smallholder Farmers of Eastern Oromia, Ethiopia. World Journal of Food Science and Technology. Vol. 6, No. 2, 2022, pp. 19–30. DOI: 10.11648/j.wjfst.20220602.11. All statistical values, variable definitions, odds ratios, marginal effects, and model specifications are drawn directly from the published text. No clinical interpretation has been added beyond what is stated or directly implied by the authors.

Women of reproductive age's use of maternal healthcare services and associated factors in Liben district, East Borena zone, Oromia Regional State, Ethiopia

TECHNICAL ABSTRACT

This community-based cross-sectional study assessed maternal healthcare service utilization and its determinants among 416 women of reproductive age in East Borena Zone, Oromia, Ethiopia in September of 2020. Respondents were mothers who had delivered in the 12 months prior to the implementation of the survey. Binary and multivariate logistic regression analyses were conducted using SPSS version 20 and significance was defined by an adjusted odd ratio (AOR). Results revealed critically low utilization across all three service domains for maternal care. Specifically, 60% of women attended at least one antenatal care (ANC) visit, 21.2% delivered at a health facility, and only 17.5% accessed early postnatal care (PNC) within 48 hours of birth. ANC utilization was significantly associated with maternal education (AOR=3.69), joint decision-making (AOR=2.40), and planned pregnancy (AOR=0.22). Delivery at a health facility was associated with younger maternal age (15–19 years, AOR=3.73), proximity within one hour (AOR=1.74), knowledge of danger signs (AOR=3.77), and perceived respectful care (AOR=2.93). Early PNC utilization was predicted by ANC attendance and utilization (AOR=5.34), planned pregnancy (AOR=2.19), and knowledge of danger signs (AOR=2.93). Overall, the study concludes that utilization remains far below national targets, amplifying a need for community education, women's empowerment, and infrastructure improvement.

AFAAN OROMO

AFAAN OROMO

Qorannoon kun haadha Liban keessa jiraatan meeqaatu yeroo ulmaa, yeroo deessaa fi booda deessaa tajaajila fayyaa argatan ilaale. Qorattoonni haadhota waggaa darbe deessan 416 waliin haasayan. Isaan akka argatanitti, haadholii kudhan keessaa ja'a tokko yoo xiqqaate yeroo ulmaa isaanitti mana yaalaa deeman, garuu kanneen sanaa gadi walakkaa isaanii gahaa hin deemne. Haadhota kudhan keessaa lama qofatu mana yaalaa yookaan hospitaalatti deesse, hedduun isaanii manaatti da'umsa dhaabaa yookaan maatii isaanii wajjin deessan. Kanaa olitti, kudhan keessaa lamaa gadiitu guyyaa lama keessatti booda deessaa qoratamuu fi ilaalamuuf gara mana fayyaa deeman. Haadholii baratan, kan murtoo fayyaa isaanii abbaa warraa isaanii waliin murteessan, kan ulmaa isaanii karoofatan, akkasumas kan mana yaalaa keessatti gaarummaa fi kabajaan akka qabaman itti dhaga'ame, tajaajila fayyaa fayyadamuu danda'u. Haadholii mana fayyaa irraa fagoo jiraatan, kan mallattoo balaa ulmaa hin beekne, akkasumas kan abbaan warraa isaanii murtoo fayyaa hundumaa kophaa isaa murteessu tajaajila kana fayyadamuu hin danda'an. Hojjattoonni fayyaa hawaasa mallattoo balaa barsiisuu irratti, dubartoonni ulmaa isaanii akka karoofatan jajjabeessuu irratti, akkasumas haadholiin mana fayyaa keessatti ittiin qabaman fooyyessuu irratti xiyyeeffachuu qabu.

MEDICAL GLOSSARY

English Term	Afaan Oromo	Clinical / Technical Context
Maternal healthcare services (MHS)	<i>Tajaajila fayyaa haadholii (MHS)</i>	Continuum of care for women during pregnancy, childbirth, and the postpartum period; encompasses ANC, skilled delivery, and postnatal care
Antenatal care (ANC)	<i>Eegumsa ulfaa (ANC)</i>	care provided to a pregnant woman before delivery; WHO recommends a minimum of 8 visits; used here as a primary outcome variable
Focused antenatal care (FANC)	<i>Eegumsa ulfaa xiyyeeffannaa qabu (FANC)</i>	WHO framework that prioritizes quality and personalized care over visit frequency; targets early disease detection, birth preparedness, and risk reduction
Institutional delivery	<i>Dhalootaa dhaabbata fayyaa keessatti</i>	Childbirth occurring in a public or private health facility attended by a skilled birth attendant; measured here as the proportion of women delivering at a clinic or hospital (21.2%)
Postnatal care (PNC)	<i>Eegumsa booda dhalootaa (PNC)</i>	Healthcare provided to mother and newborn in the period following delivery; "early PNC" refers to care received within 48 hours of birth at a health facility
Skilled birth attendant (SBA)	<i>Hojjetaa dhalootaa ogummaa qabu (SBA)</i>	Accredited health professional – midwife, nurse, doctor, or health officer – trained to manage normal deliveries and recognize obstetric complications
Traditional birth attendant (TBA)	<i>Dhalchituu Aadaa (TBA)</i>	Community-based person who assists during childbirth without formal clinical training; responsible for 78.8% of deliveries in this study's population
Maternal morbidity	<i>Dhibee haadholii</i>	Illness, injury, or disability directly resulting from pregnancy or childbirth complications; distinct from maternal mortality (death)
Maternal mortality	<i>Du'a haadholii</i>	Death of a woman during pregnancy, childbirth, or within 42 days of delivery from causes related to or aggravated by the pregnancy; 99% of global cases occur in developing nations
Obstetric danger signs	<i>Mallattoo balaa ulfaa</i>	Warning symptoms during pregnancy or delivery (e.g., heavy bleeding, severe headache, convulsions, prolonged labor) that indicate potentially life-threatening complications requiring immediate care
Women's decision-making	<i>Mirga murtee ofii</i>	A woman's capacity to
autonomy	<i>dubartootaa</i>	independently or jointly decide on her own healthcare utilization; in this study, joint decision-making with husband (AOR=2.40) significantly increased ANC uptake
Compassionate and respectful care	<i>Tajaajila gara laafinaa fi kabajaa qabu</i>	Patient-centered care approach in which healthcare providers treat women with dignity, empathy, and respect; perceived absence of respectful care reduced ANC utilization by 70% in this study
Gravidity	<i>Lakkoofsa ulfaa</i>	Total number of times a woman has been pregnant, including current pregnancy; 51% of respondents in this study had been pregnant five or more times
Parity	<i>Lakkoofsa dhalootaa</i>	Number of times a woman has given birth to a viable infant; related to gravidity but excludes pregnancies not reaching viability

English Term	Afaan Oromo	Clinical / Technical Context
Adjusted odds ratio (AOR)	<i>Oodii Raashiyoo Sirreeffame (AOR)</i>	Statistical measure of association between an exposure and outcome after controlling for confounding variables in multivariate logistic regression; used throughout to quantify each factor's independent effect on service utilization
Pastoralist community	<i>Ummata horsiisee bulaa</i>	Mobile or semi-mobile community whose livelihoods depend primarily on livestock herding; Liben district is a predominantly pastoralist area with sparse and underequipped health infrastructure
Health Extension Service	<i>Paakeejii Tajaajila Fayyaa</i>	Ethiopia's national
Package (HESP)	<i>Dabalataa (HESP)</i>	community health program delivering preventive and promotive health services through health extension workers at the kebele level
Stillbirth	<i>Da'imman du'anii dhalatan</i>	Delivery of a baby with no signs of life after 28 weeks of gestation; 3.6% of respondents in this study reported a prior stillbirth

IMPLEMENTATION NOTE

The findings of this study are directly actionable for health system planners, district health offices, and community health workers operating in rural and pastoral zones of Oromia, Ethiopia. In profiling the district in the paper, Liben is seen as containing sparse health infrastructure, low female educational attainment, high home delivery rates, and predominantly male-controlled health decision-making, all characteristics of many underserved districts in East and West Borena, Guji, and other pastoral zones of the Oromia Regional State. The most immediate leverage point identified by the study is the strong association between perceived compassionate and respectful care and ANC utilization. Essentially, women who did not feel treated with respect by biomedical providers were 70% less likely to attend ANC. This finding underscores the need for targeted provider attitude training and facility-based quality improvement initiatives that go beyond physical infrastructure and resource access, a relatively low-cost intervention that health management and NGOs can implement through existing medical delivery structures. The study also highlights the benefit of ANC as an entry point for the continuous maternal care throughout a mothers' entire pregnancy. Mothers who attended ANC were 5.3 times more likely to use early PNC. This means that any program investment that successfully draws women into ANC is likely to yield downstream improvements in institutional delivery and postnatal care utilization as well. Given that 55.6% of women who skipped ANC claimed lack of knowledge as the main reason and that 47% of home deliveries were due to distance from a health facility, a recommended dual approach combining community health education delivered directly to these pastoral zones with mobile outreach services for geographically isolated neighborhood would be most appropriate for targeting the inequities highlighted in this study.

Maternal Health

Reproductive Health

East Borena Zone/Rural Oromia

Observation Study

Cross-Sectional Study

I verify that this summary and glossary are clinically and technically accurate representations of the source article, cross-referenced with: Desta M, Mengistu S and Arero G (2024). Women of reproductive age's use of maternal healthcare services and associated factors in Liben district, East Borena zone, Oromia Regional State, Ethiopia. *Frontiers in Global Women's Health* 5:1282081. doi: 10.3389/fgwh.2024.1282081. All odds ratios, confidence intervals, prevalence figures, and variable associations are drawn directly from the published text and regression tables. No clinical interpretation has been added beyond what is stated or directly implied by the authors.

A narrative literature review on media and maternal health in Africa

TECHNICAL ABSTRACT

This narrative literature review examined the role of traditional media sources like radio, television, and print in disseminating maternal health information across Africa. Using a systematic database search of PubMed, CINAHL, Scopus, and Embase from 2010 to 2021, 25 peer-reviewed articles were chosen from an initial pool of 200. Social media studies were deliberately excluded due to limited rural access across African nations given gaps in personal technology access. The review was framed by three policy agendas: UNICEF Strategy for Health 2016–2030, SDG Goal 3, and African Union Agenda 2063. Findings were organized under four themes of access to health information, health-seeking behaviors, birth preparedness, and challenges associated with mass media. Results consistently showed that media exposure, particularly radio, is associated with increased ANC utilization, improved birth preparedness, greater uptake of skilled birth attendants, and enhanced reproductive health behaviors. However, major challenges include unequal media access, gender-based control of media devices, cultural barriers, poor local content on maternal health, and the profit-driven preference of media houses over health-oriented reporting. The review concludes that sustained media-health stakeholder collaboration is essential in targeting and reducing Africa's disproportionately high maternal mortality rate and increasing health information access overall.

AFAAN OROMO

AFAAN OROMO

Qorannoon kun ragaa qorannoo 25 biyyoota Afrikaa garaagaraa keessaa argame dubbisuun, raadiyoon, televiiziyoonii fi gaazexaan haadhooliin kunuunsa ulfaa, dhaloota nagaa fi fayyaa dhaloota boodaa akka baratan gargaaruu isaa akkamitti akka ta'e hubachuuf ture. Qorannoon kun akka argetti, haadhooliin yeroo hunda raadiyoo dhaggeeffatan yookiin televiiziyoonii daawwatan sakatta'a ulfaa irratti hirmaachuuf, dhaabbata fayyaatti deemuun deessuuf, akkasumas mallattoo balaa ulfaa beekuuf carraa guddaa qabu. Raadiyoon maddoota odeeffannoo fayyaa dubartoota naannoo baadiyyaa Afrikaa guutuu keessatti argamaniif hundarra barbaachisaa ta'uu isaa irra ga'ame, televiiziyoonii yookiin gaazexaa irra baay'ee fayyadaa akka qabu, kunis dubartoonni baadiyyaa hedduun argachuu hin dandeenyeef. Haa ta'u malee, rakkooleen hedduun jiru. Manneen hedduu keessatti, dhiironni raadiyoo fi televiiziyoonii to'atu, kanaaf dubartoonni yeroo hundumaa sagantaa fayyaa dhaggeeffachuu yookiin daawwachuu hin danda'an. Sagantaaleen fayyaa yeroo dubartoonni hojii manaatiin qabamanittis darbu. Gaazexaan fayyaa haadhoolii baay'ee hin qophaa'u sababiin isaas dhaabbileen miidiyaa seenaa gurgurtaa isaanii dabaluu danda'an filatu. Qabiyyeen naannoo fayyaa haadhoolii yeroo baay'ee hin jiru yookiin afaan hawaasni hubatuun hin qophaa'u. Hoogganoonni fayyaa fi jaarsolii biyyaa buufataalee raadiyoo fi miidiyaa naannoo wajjiin hojjechuu qabu, ergaawwan fayyaa haadhoolii yeroo hunda, afaan isaaniitiin fi yeroo dhaggeeffachuu danda'anitti akka isaan ga'u mirkaneessuuf.

MEDICAL GLOSSARY

English Term	Afaan Oromo	Clinical / Technical Context
Maternal mortality rate (MMR)	<i>Sadarkaa du'a haadholii (MMR)</i>	Number of maternal deaths per 100,000 live births; sub-Saharan Africa's MMR was estimated at 542 in 2017 – the highest of any world region; SDG 3.1 targets a global MMR below 70 per 100,000 by 2030
Maternal morbidity	<i>Dhukkubsatama haadholii</i>	Illness, injury, or disability arising from pregnancy or childbirth complications; distinct from maternal mortality; addressed through improved ANC and skilled delivery access
Antenatal care (ANC)	<i>Kununsa dura dhalootaa (ANC)</i>	care provided to a pregnant woman prior to delivery; media exposure is consistently associated with increased ANC uptake across multiple studies reviewed
Postnatal care (PNC)	<i>Kununsa booda dhalootaa (PNC)</i>	Healthcare provided to mother and newborn after delivery; media campaigns have been associated with improved PNC utilization, particularly in Malawi and Ethiopia studies reviewed
Skilled birth attendant (SBA)	<i>Duree dhalootaa ogummaa qabu (SBA)</i>	Accredited health professional trained to manage childbirth and recognize complications; media exposure is shown to increase uptake of SBA services across multiple African settings
Birth preparedness	<i>Qophii dhalootaa</i>	A set of proactive actions taken before labor including identifying an SBA, arranging transport, saving funds, and identifying a blood donor; radio exposure has been associated with higher birth preparedness in Uganda and Malawi studies
Health communication	<i>Qunnamtii fayyaa</i>	Strategic dissemination of health information to individuals and communities to promote informed decision-making, behavior change, and improved health outcomes; the central concept of this review
Health-seeking behavior	<i>Amala fayyaa barbaaduu</i>	Actions taken by individuals to maintain or restore health, including attending ANC, seeking skilled delivery, or using postnatal services; influenced by media exposure, education, and cultural norms
Mass media	<i>Miidiyaa bal'aa</i>	Communication channels – radio, television, print (newspaper/posters) – that reach large audiences simultaneously; distinguished in this review from social media, which was excluded due to limited rural access in Africa
Health literacy	<i>Dandeettii fayyaa</i>	An individual's capacity to obtain, process, and understand basic health information needed to make appropriate health decisions; strongly linked to media exposure and educational attainment across reviewed studies
Reproductive health	<i>Fayyaa walhormaataa</i>	State of physical, mental, and social well-being related to the reproductive system and its functions; encompasses family planning, ANC, safe delivery, and PNC – all areas shown to be influenced by media exposure
Family planning	<i>Karoora maatii</i>	Methods and practices that allow individuals to control the number and spacing of pregnancies; access to mass media messages on family planning was associated with increased contraceptive use in Nigerian and Malawian studies
Agenda setting	<i>Qabxii yaadaa kaa'uu</i>	Media theory describing how news organizations influence which public issues receive attention and how prominently they are prioritized; identified in this review as a mechanism limiting maternal health coverage in favor of sensational reporting
Social and behavior change	<i>Qunnamtii jijjiirama</i>	Evidence-based

English Term	Afaan Oromo	Clinical / Technical Context
communication (SBCC)	<i>hawaasaa fi amalaa (SBCC)</i>	communication strategies designed to promote positive health behaviors at individual and community levels; community radio and video programs were found effective SBCC tools in multi-country studies reviewed
Universal health coverage (UHC)	<i>Haguuggii fayyaa guutuu (UHC)</i>	WHO goal ensuring all people receive the health services they need without financial hardship; access to maternal health information through media is identified as a prerequisite for UHC achievement in Africa
Sustainable Development	<i>Galma Misooma Ittisaa 3</i>	UN development target to
Goal 3 (SDG 3)	<i>(SDG 3)</i>	ensure healthy lives and promote well-being for all at all ages by 2030; SDG 3.1 specifically targets global MMR reduction to below 70 per 100,000 live births; one of the three frameworks guiding this review
Narrative literature review	<i>Sakatta'iinsa barruu odeeffannoo</i>	A non-systematic synthesis of existing published research on a topic; differs from a systematic review in that it does not use a pre-specified protocol or meta-analytic methods; the methodology used in this paper (25 articles, 2010–2021)
PRISMA flow	<i>Tarkaanfii PRISMA</i>	Preferred Reporting Items for Systematic Reviews and Meta-Analyses – a standardized diagram showing how articles were identified, screened, and included or excluded in a literature review; used in this paper to document the selection of the 25 final articles

IMPLEMENTATION NOTE

The findings of this review are highly relevant for health communication programming in Oromia, where radio remains the most accessible media platform across rural, highland, lowland, and pastoral zones. The review's key finding is that radio exposure is consistently associated with increased ANC uptake, skilled delivery use, and birth preparedness across diverse African settings, directly supporting the expansion and strengthening of existing community radio programming in Oromia. Health extension workers (HEWs), who already serve as the frontline of the Health Extension Service Package (HESP), can be better integrated into local radio programming as trusted health communicators delivering antenatal, delivery, and postnatal care messages in Afaan Oromo and other regional languages within these zones. The review's signaling of gender-based media delivery, men controlling radio and television access in many households, is particularly significant in pastoralist communities such as East Borena and Guji zones, where women's autonomy over healthcare decisions is already constrained by men as described in other studies. Programming strategies that specifically target men as messengers of health information and that schedule broadcasts outside domestic work hours for women, are needed. The challenge of poor local maternal health content identified across multiple African countries is directly applicable to Oromia where health messaging in local languages and culturally appropriate formats continues to be limited. The review's finding that media houses prioritize sensational content over maternal health reporting suggests that reliance on commercial broadcast media alone is also insufficient. Community radio stations, much of which already operate at zonal level in these Oromia regions, represent a more reliable and cost-effective platform for targeted maternal health messaging. Collaborations between zonal health departments, district health offices, and community radio managers, supported by NGOs and development partners, would be the most appropriate implementation model in targeting these health inequities. Along with this, investing in Afaan Oromo-language maternal health content, including drama, talk shows with health experts, and community call-in programs, heavily aligns directly with the SBCC approaches identified in this review as most effective for behavior change.

Maternal Health

Reproductive Health

Health Communication

Sub-Saharan African

Rural African Communities

Literature Review

*I verify that this summary and glossary are clinically and technically accurate representations of the source article, cross-referenced with: Ohaja M, Senkyire EK, Ewetan O, Asiedua E, and Azuh D (2023). A narrative literature review on media and maternal health in Africa. *World Medical & Health Policy*, 15:123–147. DOI: 10.1002/wmh3.546. All thematic findings, epidemiological statistics (MMR, study counts, country distributions), and policy framework references are drawn directly from the published text. The implementation note draws on the review's conclusions as applied to the Oromia context and does not add clinical claims beyond what the source literature supports*

Learning from Ethiopia's success in reducing maternal and neonatal mortality through a health systems lens

TECHNICAL ABSTRACT

This study analyzes Ethiopia's rapid reduction in maternal and neonatal mortality between 2000 and 2020 using a health systems lens. Maternal mortality fell from 953 to 267 per 100,000 live births, while neonatal mortality decreased from 48 to 27 per 1,000 live births, representing some of the fastest improvements across sub-Saharan Africa. Key drivers included large-scale expansion of health infrastructure, workforce development like that of midwives and health development workers, and strong government-led coordination efforts. The Health Extension Programme (HEP) played an instrumental role in delivering primary care to rural populations alongside community mobilization strategies like the Health Development Army. Improvements skyrocketed after 2010 due to increased service coverage like antenatal care, improved referral systems, and policy reforms such as free maternal services in the country. However, gaps consistently remain, particularly in rural and pastoral regions of Ethiopia due to access gaps to emergency obstetric and neonatal care. The study concludes that Ethiopia's integrated, system-wide approach offers a model for low-income countries, but further gains require continuously improved quality of care, increased hospital-based services, and reduction of regional health inequalities.

AFAAN OROMO

AFAAN OROMO

Qorannoon kun akka ItiyooPiyaan waggoota 20n darban keessa du'a haadholii fi daa'imman haarawaa baay'inaan hir'ifte ibsa. Biyyi kun giddugaleessota fayyaa dabalataa ijaaruun, hojjetoota fayyaa leenjisuun, fi tajaajiloota gara hawaasa baadiyyaatti dhiyeessuun fooyya'iinsa argate. Sagantaaleen akka Sagantaa Faayinaansii Fayyaa (Health Extension Programme) maatiin kunuunsa bu'uuraa akka argatan gargaaran, gareewwan hawaasaa immoo haadholii tajaajila fayyaa akka fayyadaman jajjabeessan. Bara 2010 booda, fooyya'iinsi ariifataa ta'eef sababiin isaa dubartoonni baay'inaan bakka yaala fayyaatti deessan, akkasumas kunuunsi tasaa fooyya'e. Milkaa'ina kana waliinis, naannooleen muraasni, keessattuu naannoo baadiyyaa fi horsiise bulaa, hanga ammaattiyyuu tajaajila fayyaa argachuuf rakkoo qabu. Qorannoon kun hogganummaa mootummaa jabaa, hirmaannaa hawaasaa, fi investimantii sirna fayyaatti taasifamu lubbuu baraaruu akka danda'u agarsiisa. Haata'u malee, ItiyooPiyaan kunuunsa fayyaa qulqullina qabu, hospitaalota dabalataa, fi naannoo hunda keessatti walqixxummaa tajaajila fayyaa ittifuftee fooyyessuuf ni barbaada.

MEDICAL GLOSSARY

English Term	Afaan Oromo	Clinical / Technical Context
Maternal Mortality Rate (MMR)	<i>Sadarkaa Du'a Haadholii (SDH)</i>	Number of maternal deaths per 100,000 live births; declined in Ethiopia from 953 in 2000 to 267 in 2020, reflecting a 72% reduction; still above the SDG 3.1 target of <70 per 100,000 globally.

English Term	Afaan Oromo	Clinical / Technical Context
Neonatal Mortality Rate (NMR)	<i>Sadarkaa Du'a Daa'imman Haaraa (SDDH)</i>	Number of deaths within the first 28 days per 1,000 live births; decreased in Ethiopia from 48 to 27 between 2000–2020, though reductions lag behind maternal mortality improvements.
Stillbirth Rate	<i>Sadarkaa Daa'imman Garaa Keessatti Du'anii Dhalatan</i>	Number of fetal deaths per 1,000 births; declined from 33 to 21 in Ethiopia (2000–2020), but remains a significant contributor to perinatal mortality burden.
Antenatal Care (ANC)	<i>Kunnonii Dura Da'umsaa (KDD)</i>	care provided during pregnancy; coverage of ≥ 4 visits increased from 9% in 2000 to 44% in 2020, yet remains below expected levels for countries in similar development phases.
Institutional Delivery	<i>Deessuu Mana Fayyaa</i>	Birth occurring in a health facility with trained personnel; increased from 5% to 54% in Ethiopia (2000–2020), driven largely by expansion of health centers rather than hospitals.
Health Extension Programme (HEP)	<i>Sagantaa Babal'ina Fayyaa (SBF)</i>	National community-based healthcare strategy launched in 2003; expanded primary care access to rural populations (~80% of population), contributing significantly to mortality decline.
Health Extension Workers (HEWs)	<i>Hojjetoota Babal'ina Fayyaa (HBF)</i>	Frontline health workers delivering preventive and basic curative care; scaled rapidly after 2003, reaching about 4 workers per 10,000 population and improving service uptake.
Emergency Obstetric and	<i>Eegumsa Hatattamaa Haadha</i>	Life-saving services for
Newborn Care (EmONC)	<i>Ulfaa fi Daa'ima Haaraa (EHHUDH)</i>	complications such as hemorrhage, sepsis, and birth asphyxia; availability improved modestly, with only 62% of hospitals offering full services by 2016.
Fertility Rate	<i>Sadarkaa Dhala</i>	Average number of children per woman; declined from 6.6 to 4.2 in Ethiopia (2000–2020), contributing to ~29% of reductions in maternal and neonatal mortality.
Family Planning Coverage	<i>Argamummaa Karoora Maatii</i>	Proportion of women whose contraceptive needs are met; increased from 14% to over 60%, significantly reducing high-risk pregnancies.
Neonatal Resuscitation	<i>Daa'ima Haaraa Lubbuu Deebisuu</i>	Intervention to assist newborn breathing at birth; availability of equipment (e.g., bag and mask) increased from 40% to 73% of facilities between 2008–2016.
Kangaroo Mother Care	<i>Kunnoo Haadha Kangaaroo</i>	Skin-to-skin care for premature or low-birth-weight infants; effective but still underutilized in Ethiopia despite evidence of reducing neonatal mortality.
Health Workforce Density	<i>Cufinsa Humna Namaa Fayyaa</i>	Number of core health professionals per 10,000 population; increased from 2 to 12 between 2000–2020, reflecting major investment in human resources for health.
Health Infrastructure	<i>Baballina Bu'uuraalee</i>	
Expansion	<i>Misooma Fayyaa</i>	Growth of facilities such as health posts, centers, and hospitals; health posts reached near-universal rural coverage by 2012, while hospital expansion accelerated after 2014.
Mortality Transition	<i>Ce'umsa Du'aa</i>	Shift from high to low death rates over time
Referral System	<i>Sirna Qajeelchuu</i>	Mechanism for transferring patients to higher-level care; nationwide ambulance expansion improved access to emergency obstetric services, especially in rural areas.

IMPLEMENTATION NOTE

These findings are particularly relevant to Oromia due to the demonstrated success of the Health Extension Programme in the study. This underscores the value of decentralized, community-based care in areas where populations are spread across vast distances and hospital access is scarce. Oromia stands to gain further by expanding health posts, investing in Health Extension Workers, and developing transportation infrastructure such as ambulance services and connectivity of roads. That said, significant challenges continue. Communities in rural and pastoral parts of Oromia continue to face considerable obstacles like lengthy travel distances, inadequate emergency obstetric care, and a shortage of skilled health professionals. While maternal services are officially free, indirect costs such as lost income and transportation expenses remain a financial burden for many. Compounding these issues, climate-related factors like drought and the seasonal movement of pastoral populations create additional barriers to consistent and reliable service delivery of any kind. To meaningfully close these gaps, NGOs and the government should prioritize the expansion of mobile health services and maternity waiting homes while also investing in task-shifting models that equip mid-level providers with broader medical capabilities. Reinforcing referral pathways and raising the standard of care at health centers at this level will also be essential toward eliminating the mortality disparities that continue to affect the region's most vulnerable communities.

Maternal and Newborn Health

Observational Study

Rural Oromia

*I verify that this summary and glossary are clinically and technically accurate representations of the source article, cross-referenced with: Melesse DY, Tadele A, Mulu S, et al. (2024). Learning from Ethiopia's success in reducing maternal and neonatal mortality through a health systems lens. *BMJ Global Health*, 9:e011911. DOI: 10.1136/bmjgh-2023-011911. All thematic findings, epidemiological statistics (maternal mortality, neonatal mortality, fertility rates, and intervention coverage), and health system framework analyses are drawn directly from the published text. The implementation note applies the study's conclusions to the Oromia context and does not introduce clinical claims beyond what is supported by the source literature.*

Predictors of malnutrition among pregnant women in Ethiopia: A systematic review and meta-analysis

TECHNICAL ABSTRACT

This systematic review and meta-analysis estimated the pooled prevalence and key predictors of malnutrition among pregnant women in Ethiopia, drawing on 24 eligible studies published between 2012 and 2019, encompassing 12,893 pregnant women across six regional states and two administrative cities in Ethiopia. The pooled prevalence of malnutrition was 29.07% (95% CI: 24.84–33.30). Subgroup analysis revealed a regional prevalence of 30.4% in Oromia, 33.9% in SNNPR, and 25.9% in Amhara. Significant predictors of malnutrition included maternal illiteracy (OR = 1.60), monthly income below 1,000 Ethiopian Birr (OR = 3.07), unplanned pregnancy (OR = 1.33), fewer than three meals per day (OR = 4.63), poor dietary diversity (OR = 2.89), and absence of antenatal care (OR = 2.53). Iron supplementation was identified as a significant protective factor (OR = 0.63). High statistical heterogeneity ($I^2 = 90.6\%$) was addressed using a random effects model. The findings call for integrated interventions targeting female education, income support, dietary counseling, and early antenatal care enrollment to reduce the burden of maternal malnutrition across Ethiopia.

AFAAN OROMO

AFAAN OROMO

Qorannoon kun dubartoonni ulfaa Itoophiyaa guutuu keessa jiran meeqaan hanqina nyaataa irraa kan dhukkubsatan fi maaltu akka isa kaasu ilaale. Qorattooni qorannoo 24, dubartoota ulfaa kuma 13 ta'an irratti hojjetame sakatta'an. Dubartoota ulfaa dhibba keessaa 29 ol hanqina nyaataa qabaachuun argameera. Keessumaa naannoo Oromiyaatti, dhibba keessaa 30 ta'an irratti dhiibbaan ture. Dubartoonni dubbisuu fi barreessuu hin dandeenye, horii baay'ee xiqqaa argatan, guyyaatti nyaata yeroo sadii gadi nyaatan, nyaata garaagaraa xiqqaa qaban, ulfa karoofame hin qabne, yookiin tajaajila eegumsa ulfaa duraa hin fudhanne balaaf saaxilamoo turan. Dubartoonni yeroo ulfaa qoricha sibiilaa (iron supplements) fudhatan hanqina nyaataa qabaachuuf carraan isaanii xiqqaadha. Kana furuuf, hawaasni barnoota, nyaata madaalawaa, deeggarsa dinagdeefi tajaajila fayyaa ulfaa duraa kan saffisaa ta'e akka argatu barbaachisa.

MEDICAL GLOSSARY

English Term	Afaan Oromo	Clinical / Technical Context
Malnutrition	<i>Hanqina nyaataa</i>	Deficiency of adequate calories, protein, or micronutrients; measured by MUAC or BMI in this study
Undernutrition	<i>Hanqina nyaataa gadi fagoo</i>	Subtype of malnutrition referring to insufficient intake of energy and nutrients during pregnancy
Mid-Upper Arm	<i>Bal'ina Harka</i>	Anthropometric screening
Circumference (MUAC)	<i>Gidduu-Gudduu (MUAC)</i>	tool; cutoffs of <21 cm, <22 cm, or <23 cm used across included studies to classify malnutrition

English Term	Afaan Oromo	Clinical / Technical Context
Body Mass Index (BMI)	<i>Qabxii Ulfaatina Qaamaa (BMI)</i>	Weight-to-height ratio; BMI <18.5 kg/m ² defines undernutrition in pregnancy in this study
Antenatal Care (ANC)	<i>Kunneensa Dura Dhala (ANC)</i>	Routine health visits during pregnancy; absence of ANC was associated with 2.53 times higher odds of malnutrition
Dietary Diversity	<i>Garagaraummaa Nyaataa</i>	Consumption of varied food groups; poor diversity defined as consuming fewer than five food groups daily in all included studies
Iron Supplementation	<i>Dabalata Ayirani</i>	Provision of iron, often combined with folic acid, during pregnancy; identified as a significant protective factor (OR = 0.63)
Iron Deficiency Anemia	<i>Dhibee Dhiigaa Hanqina Ayiraanii</i>	Condition resulting from insufficient iron intake; affects 38% of pregnant women globally and contributes to 20% of maternal mortality
Pooled Prevalence	<i>Sadarkaa Babal'ina Walitti Makame</i>	Combined prevalence estimate calculated across all 24 studies using a random effects statistical model
Systematic Review	<i>Qorannoo Sirnaawaa</i>	Structured method of identifying and synthesizing all available published and unpublished research on a specific topic
Meta-Analysis	<i>Meetaa-Xiinxala</i>	Statistical technique that combines data from multiple studies to produce a single overall estimate
Random Effects Model	<i>Moodeela Dhiibbaa Tasgabii Hin Qabne</i>	Statistical model used when high variability exists across studies; applied here due to I ² = 90.6%
Heterogeneity (I²)	<i>Adda Addummaa (I²)</i>	Measure of variability across included studies; I ² = 90.6% in this review, indicating high between-study variation
Odds Ratio (OR)	<i>Walqixxummaa Rakkoo (OR)</i>	Statistical measure of how much more or less likely an outcome is given a specific risk factor or exposure
Confidence Interval (CI)	<i>Daangaa Amantaa (CI)</i>	Range within which the true population estimate is expected to fall, presented at 95% certainty in this study
Newcastle–Ottawa Scale (NOS)	<i>Safartuu Newcastle–Ottawa (NOS)</i>	Quality assessment tool for observational studies; scored out of 10; studies scoring ≥5 were included in final analysis

IMPLEMENTATION NOTE

This research is highly relevant to Oromia, which contributed the single largest share of studies in this review where eight of the 24 articles were conducted in the Oromo region, yielding a regional pooled malnutrition prevalence of 30.4%. Notably, the widest range of individual study prevalence rates in the entire review, from a low of 11.6% to a high of 47.2%, were both recorded within Oromia, reflecting the profound internal diversity of the region and the uneven distribution of nutritional risk across its rural, highland, lowland, and pastoral communities. The strongest predictors identified include low income, limited meal frequency, poor dietary diversity, low educational attainment, and absent antenatal care. This wide variability underscores how localized determinants such as seasonal food availability, livelihood patterns, and access to markets can significantly influence maternal nutritional outcomes even within the same region, closely mirroring the structural challenges documented in Oromia's underserved populations. Because of this, household food insecurity, geographic barriers to health facilities, and low female literacy remain persistent concerns in work in targeting nutritional challenges. It is also important to note the protective effect of iron supplementation and regular antenatal care attendance on nutrition patterns and maternal health metrics in the women studied. This defines the need to expand these services to underserved areas and sustain access to these services, particularly in zones where health post coverage remains uneven and referral systems are underdeveloped. Strengthening supply chains, improving access to care, and expanding community-based outreach will be critical to addressing both the immediate and underlying drivers of maternal malnutrition in the region.

Maternal Nutrition

Maternal Health

Muti-regional Ethiopia

Systematic Review

Meta-analysis

I verify that this structured summary, glossary, and implementation analysis are clinically accurate and have been cross-referenced with: Getaneh T, Negesse A, Dessie G, Desta M, Assemie MA, Tigabu A. Predictors of malnutrition among pregnant women in Ethiopia: A systematic review and meta-analysis. Human Nutrition & Metabolism, 26 (2021) 200131. All thematic findings, epidemiological statistics (statistical figures, odds ratios, confidence intervals, and clinical terminology) are drawn directly from the published text. The implementation note applies the study's conclusions to the Oromia context and does not introduce clinical claims beyond what is supported by the source literature.

4. Discussion

Cross-Cutting Findings Across the Five Studies

The five studies presented in this volume converge on a consistent and actionable picture of health in rural Oromia. Across different methodologies, populations, and health domains, several structural determinants emerge repeatedly: low educational attainment, geographic isolation from health facilities, limited cooperative or community group participation, inadequate extension service coverage, and the absence of culturally appropriate health information in community languages.

These findings collectively reinforce the case for community-centered, language-accessible health programming as a core – not supplementary – strategy for improving health outcomes in Oromia. Paper 2 (Maternal Healthcare Utilization, Liben District) is particularly instructive: women who did not perceive respectful care from biomedical providers were **70% less likely** to attend antenatal care. This positions provider attitude and facility culture as modifiable determinants of utilization that do not require infrastructure investment to address.

Information Access as a Health Determinant

The cross-study finding most relevant to the OHKB mission is the consistent association between access to information and improved health outcomes. Paper 1 found that households with access to climate change information had **1.91× higher odds** of food security. Paper 3 found that radio exposure was consistently associated with ANC uptake, birth preparedness, and skilled delivery use across African settings. Paper 4 identified community mobilization and information dissemination as instrumental in Ethiopia's **72% reduction** in maternal mortality. Paper 5 identified absence of ANC – itself an information and access point – as associated with **2.53× higher odds** of maternal malnutrition.

The implication is consistent: communities that receive accurate health information in accessible formats make measurably better health decisions. This is the exact gap the OHKB knowledge translation series is designed to close.

Limitations

This volume is a knowledge translation series, not a primary research study. Its contribution is accessibility and synthesis, not new data. The Afaan Oromo translations, while reviewed by bilingual contributors, have not undergone formal back-translation validation. The implementation notes are analytically grounded in the source literature but are not independently verified against current Oromia programmatic realities. Some primary studies reviewed have inherent methodological limitations – notably, high heterogeneity in the meta-analysis (Paper 5, $I^2=90.6%$) and cross-sectional designs that limit causal inference (Papers 1 and 2).

5. Conclusion

This volume establishes a replicable and scalable model for health knowledge translation in Afaan Oromo. The OHKB framework – structured summaries, community-language translation, bilingual clinical glossaries, and Oromia-specific implementation context – is designed to be institutionalized, expanded, and adapted by health system actors at every level: district health offices, NGOs, health extension workers, academic institutions, and community organizations.

The studies presented here were published between 2021 and 2024 in peer-reviewed journals and represent the current best evidence on their respective topics. What is new is their availability in a form that Oromia’s frontline health workforce can read, share, and act on. That transition – from published to accessible – is the core contribution of this work.

Future volumes in this series will expand coverage to include mental health, infectious disease, child and adolescent health, and climate-health intersections in Oromia. The OHKB team welcomes collaboration from researchers, clinicians, community health organizations, and Oromo language specialists interested in contributing to or commissioning knowledge translation work.

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