

1st Somaliland RESEARCHERS CONFERENCE

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HIR Background

The HIR Institute for Research and Development is an independent, non-profit, and non-partisan organization dedicated to social research, policy analysis, strategy development, advocacy, learning, and capacity-building. Our focus is on fostering comprehensive social development in Somaliland and the broader Horn of Africa region.

Vision

To transform Somaliland's socio-political landscape through dialogue and research.

Mission

To conduct high-quality, independent research and dialogues that offer trusted insights into socioeconomic issues, informing stakeholders and shaping policy

agendas for the betterment of all Somalilanders. We achieve this through evidence-based research and dialogue:

Our Objectives

The HIR Institute for Research is a policy think tank focused on the following areas of work:

- Organizing and facilitating policy dialogues
- Publishing and disseminating policy briefs
- Providing capacity building for development research and programming
- Conducting economic, social, and governance research and policy analysis
- Undertaking action research and policy studies
- Bridging research with actionable insights
- Enhancing capacity



Thematic Areas:

Thematic Areas:

To focus and give direction to the range of research activities undertaken within the HIR Institute for Research and Development, we have identified 6 key research thematic areas and two cross-cutting themes that seek to address the needs of our society.

- Governance and public policy development
- Peace Building and conflict resolution
- Social development and inclusion
- Democratization enhancement and civic engagement
- Institutional strengthening and capacity building
- Community safety and local governance

Annual Researchers Conference

The Somaliland Annual Research Conference is an academic conference that covers all academic fields and is also an opportunity for researchers from all disciplines to showcase their research and creative activities

Purpose of The Conference The conference seeks to provide a research platform and opportunity for the researchers from a wide spectrum such as academics, government officials, representatives, private sector, civil Society and local organizations with interest on research topics related to three different Area.

The major purposes of the conference are:

- To witness the current researchers product,
- Evaluate the Somaliland research field,
- Suggest innovative policy solutions for Somaliland Education System through Research,
- Discuss strategies for achieving desired goals and targets and Provide a forum for innovative concepts and findings from research, and finally
- Talk about real-world problems and how academic fields have addressed them.

Where will the Conference take place?

The 1st Annual Research Conference will be held on the Mansoor Hotel, Hargeisa Somaliland on Wednesday and Thursday May 08-09 , 2024 from 8:30 a.m.-12:20 Pm each day.

Who can Participate?

The Annual Research Conference is open to all invited researchers and scholars, as well as, undergraduate and graduate students all are welcome!

Conference core activities

1. Research Papers Presentations in areas of Health, Socioeconomic and Governance.
2. Three panel discussions about conference research Area.
3. Closing Ceremony.

Expected Outcomes of the conference

The conference is expected to produce policy briefs that provide an overview of the main conclusions and suggestions, in addition to research papers and panel discussions. The HIR website will host the online publication of the final briefing recommendations.

Summary Report of the Somaliland Researchers Conference

Introduction

The Somaliland Researchers Conference, organized by the HIR Institute for Research and Development, brought together scholars and experts to discuss critical issues pertaining to healthcare development, educational quality, and state fragility in Somaliland. The conference featured three panel discussions, each addressing a significant area of concern with in-depth analyses and explanations by the participating experts.

Message from the Director



Abdulkadir Mohamed Nuh
Director of HIR institute for Research
and Development

Ladies and gentlemen, distinguished guests
I extend my warmest greetings and heartfelt gratitude to each and every one of you for joining us here today. Your presence is a true testament to your unwavering dedication to the pursuit of knowledge and the advancement of research.

It is with great pleasure that I welcome you all to the inaugural Somaliland first Researchers' Conference. Under the theme of "How Research is Important for the Advancement of Society," this conference represents a significant milestone in our journey towards fostering a research and development in Somaliland. We firmly believe that research holds the key to addressing the multifaceted challenges that our society faces, while also unlocking the untapped potential within our nation.

I would like to emphasize the significance of this conference, as it marks the beginning of an annual Conference that will serve as a prominent platform for Somaliland researchers. Over the course of the next two days, we will have the privilege of witnessing the presentation of research papers in the fields of health and education. Furthermore, we have organized three panel discussions, which will

bring together esteemed experts to delve into the critical topics of health, education, and governance and diplomacy.

Dear participants, let us embark on this academic journey together, exploring the vast possibilities that lie ahead in advancing knowledge and research for the betterment of our society. This conference serves as an opportunity not only to share our findings and insights but also to foster collaboration and inspire one another in our pursuit of excellence.

I extend my heartfelt gratitude to the organizing technical committee, sponsors, and volunteers whose unwavering commitment and tireless efforts have made this conference a reality. Without your dedication, this gathering would not have been possible. Your support and contributions are deeply appreciated. Once again, I warmly welcome you all to the first Somaliland Researchers' Conference. May these two days be filled with enlightening discussions, fruitful exchanges of ideas, and a shared commitment to harnessing the power of research for the advancement of our society?

Thank you, and welcome once again

1st Somaliland Researchers Conference



Presentation Papers



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Papers



Governance Research
Papers



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PANEL 1 THE ROLE OF RESEARCH IN HEALTHCARE DEVELOPMENT

Date: May 15 Day 1

Panelists: 4 expert Scholars and Doctors

Summary

The first panel focused on the pivotal role that research plays in the development of healthcare systems.

The discussion highlighted several key points:

- **Importance of Evidence-Based Practices:** Experts emphasized the necessity of utilizing research findings to inform healthcare policies and practices. Evidence-based approaches lead to better health outcomes and more efficient use of resources.
- **Healthcare Challenges in Somaliland:** The panelists identified major healthcare challenges, including limited access to healthcare services, inadequate healthcare infrastructure, and a shortage of trained medical professionals.
- **Research Priorities:** The need for targeted research to address prevalent health issues such as maternal and child health, infectious diseases, and non-communicable diseases was underscored.
- **Collaborative Research Efforts:** The panel highlighted the importance of collaboration between local researchers, international partners, and governmental bodies to enhance research capacity and resource allocation.
- **Policy Implications:** The discussion concluded with a call for the integration of research findings into national health policies to ensure sustainable and impactful healthcare development.



PANEL 2

IMPROVING EDUCATIONAL QUALITY THROUGH CURRICULUM DEVELOPMENT

Date: May 16 Day 2

Panelists: 4 Expert Scholars and Doctors

Summary

The second panel addressed the crucial issue of improving educational quality through curriculum development. Key points from the discussion included:

- **Current State of Education in Somaliland:** The panelists provided an overview of the educational landscape, noting deficiencies in curriculum content, teaching methodologies, and learning outcomes.
- **Curriculum Reform:** Experts stressed the need for a comprehensive review and reform of the existing curriculum to make it more relevant, inclusive, and aligned with international standards.
- **Teacher Training and Development:** The importance of continuous professional development for teachers was highlighted as a critical factor in implementing and sustaining curriculum reforms.
- **Integration of Technology:** The panel discussed the potential of integrating technology into the curriculum to enhance learning experiences and improve student engagement.
- **Stakeholder Involvement:** Effective curriculum development requires the involvement of various stakeholders, including educators, students, parents, and policymakers, to ensure that reforms meet the needs and expectations of the community.
- **Assessment and Evaluation:** The need for robust assessment and evaluation mechanisms to monitor the impact of curriculum changes and ensure continuous improvement was emphasized.



PANEL 3

SOMALILAND:

HOW TO OVERCOME STATE FRAGILITY

Date: Day 2

Panelists: 4 Expert Scholars and Doctors

Summary

The third panel explored strategies for overcoming state fragility in Somaliland. The discussion covered several critical aspects:

- **Definition and Context:** The panelists provided a comprehensive understanding of state fragility, highlighting its historical, political, and socio-economic dimensions in the context of Somaliland.
- **Institutional Strengthening:** Strengthening state institutions was identified as a fundamental step towards reducing fragility. This includes improving governance, enhancing transparency, and promoting accountability.
- **Economic Development:** Economic stability and development were deemed essential for overcoming fragility. Panelists discussed the need for diversified economic policies, investment in infrastructure, and support for small and medium-sized enterprises (SMEs).
- **Security and Rule of Law:** Ensuring security and upholding the rule of law were highlighted as critical components of a stable state. The panel called for comprehensive security sector reforms and stronger judicial systems.

- **Social Cohesion and Inclusive:** Promoting social cohesion and inclusive was emphasized as a means to address underlying social tensions and conflicts. This involves fostering a sense of national identity and ensuring equal opportunities for all citizens.
- **International Support and Partnerships:** The role of international support and partnerships in providing technical assistance, financial aid, and capacity building was acknowledged as vital for achieving long-term stability and development.

Conclusion

The Somaliland Researchers Conference provided valuable insights and actionable recommendations across three crucial areas: healthcare development, educational quality, and state fragility. The expert panelists' in-depth analyses and discussions underscored the importance of research, collaboration, and comprehensive reform in addressing the challenges faced by Somaliland. The conference highlighted the need for continued efforts and stakeholder engagement to ensure sustainable progress in these critical sectors.



MAGNITUDE AND DETERMINANTS OF ADHERENCE TO IRON-FOLIC ACID SUPPLEMENTATION AMONG PREGNANT WOMEN IN AHMED-DHAGAH DISTRICT, SOMALILAND



Ahmed Ismail Mohamed
BSc, MSc Human Nutrition,
University of Hargeisa

Introduction

Iron deficiency is a predominant cause of anemia worldwide, significantly impacting pregnant women in low-income countries. Despite recommendations from global health authorities for iron-folic acid (IFA) supplementation during pregnancy, adherence rates remain suboptimal. This study, conducted by Mohamed et al., assesses the adherence to IFA supplementation among pregnant women attending antenatal care (ANC) services in the Ahmed-Dhagah district of Hargeisa, Somaliland.

Methods

A cross-sectional study was undertaken from May to July 2022 involving 320 pregnant women selected through systematic sampling. Data were collected using the Kobo Collect Android app and analyzed using SPSS. The study employed descriptive statistics, bivariate analysis, and multivariable logistic regression to identify factors associated with adherence to IFA supplementation.

Results

Adherence to IFA Supplementation

Out of the 306 respondents, only 74 (24%) adhered to $\geq 65\%$ of the recommended IFA doses, equivalent to taking the supplements more than four days a week. Non-adherence was mainly due to forgetfulness (47.1%) and fear of side effects (42.5%).

Socio-Demographic Characteristics

The mean age of participants was 27.56 years, with nearly half (47.7%) aged between 25-34 years. A significant portion (57.5%) had no formal education, and most (92.8%) were housewives. Household income for 45.1% of the respondents ranged between 100-200 USD monthly.

Obstetric and Health Service Factors

Most mothers (58.2%) had fewer than four children, and the mean gestational age was 25.34 weeks. Around two-thirds (78.3%) attended ANC fewer than four times, and 54.2% started ANC in the first trimester. A majority received information on the importance (86.3%) and duration (78.4%) of IFA supplements.

Knowledge About Anemia

Knowledge about anemia was generally low, with 64.1% of women having inadequate knowledge about the condition.

Determinants of Adherence

Several factors were identified as significantly influencing adherence to IFA supplementation:

1. **Husband's Education:** Women whose husbands had university-level education were eight times more likely to adhere to IFA supplements compared to those with illiterate husbands (AOR = 8.468, 95% CI: 3.436, 20.87).
2. **ANC Visits:** Women who attended ANC four or more times were three times more likely to adhere to the supplementation (AOR = 3.385, 95% CI: 1.55, 7.39).
3. **Maternal Knowledge About Anemia:** Good knowledge about anemia increased the likelihood of adherence by approximately 3.53 times (AOR = 3.534, 95% CI: 1.739, 7.194).

Discussion

The study highlights the low adherence rate to IFA supplementation among pregnant women in Ahmed-Dhagah, which is below the levels recommended by the WHO. The significant factors influencing adherence include the husband's educational status, frequency of ANC visits, and maternal knowledge about anemia. These findings suggest that improving

education and awareness, both for women and their spouses, as well as increasing the frequency of ANC visits, could enhance adherence rates.

Conclusion

Adherence to IFA supplementation among pregnant women in Ahmed-Dhagah district is notably low. Strategies to improve adherence should focus on educational interventions targeting both women and their husbands, increasing ANC visit frequency, and enhancing maternal knowledge about anemia. Addressing these factors is crucial for improving maternal and neonatal health outcomes in Somaliland.

Recommendations

1. **Educational Programs:** Implement comprehensive educational programs about the importance of IFA supplementation for both pregnant women and their partners.
2. **Increase ANC Visits:** Encourage more frequent ANC visits through community outreach and incentives.
3. **Awareness Campaigns:** Develop and disseminate information on anemia and its implications for maternal and child health.
4. **Address Barriers:** Identify and mitigate common barriers to adherence, such as fear of side effects and forgetfulness, possibly through reminders and counseling.





REPORT ON ANTIBIOTIC RESISTANCE OF UROPATHOGENIC ESCHERICHIA COLI IN PATIENTS OF HARGEISA GROUP HOSPITAL, HARGEISA, SOMALILAND



Hassan Mohamed Abdi
MSc in Medical Laboratory Science,
Hargeisa Group Hospital

Abstract

Urinary tract infection (UTI) is a prevalent disease in Somaliland, primarily caused by *Escherichia coli*. This study investigates the antibiotic resistance of uropathogenic *E. coli* in patients at Hargeisa Group Hospital. By analyzing urine samples, the research evaluates the efficacy of commonly prescribed antibiotics against *E. coli*, employing methodologies such as the Kirby Bauer disc diffusion method and Clinical and Laboratories Standard Institute (CLSI) guidelines.

The study reveals significant resistance to antibiotics like Tetracycline, Ampicillin, and Cotrimoxazole, while *E. coli* shows sensitivity to Amikacin, Nitrofurantoin, Levofloxacin, and Gentamicin. The findings emphasize the need for public awareness and periodic antibiotic resistance evaluations to improve UTI management.

Introduction

Urinary Tract Infection (UTI) is a bacterial infection that affects the urinary tract, causing symptoms such as fever, dysuria, and lower abdominal pain. UTIs can be community-acquired or nosocomial, with *Escherichia coli* being the most common causative agent, accounting for 75% of cases. The increasing resistance of uropathogenic *E. coli* to antibiotics is a global health concern, complicating the treatment of UTIs.

Previous studies in India, Kenya, and Somalia have reported a significant rise in antibiotic resistance among uropathogenic organisms. In Mogadishu, for example, *E. coli* showed high resistance to cephalosporins like Ceftriaxone (97%) and Cefixime (61%). This research aims to provide data on antibiotic resistance in Somaliland, aiding in the development of effective treatment guidelines.

Materials and Methods

Study Design

A cross-sectional study was conducted at Hargeisa Group Hospital, involving 98 patients with UTI symptoms. Urine samples were cultured and analyzed to identify *E. coli* and assess its antibiotic resistance.

Data Collection

Data were collected using a form that recorded patient demographics, UTI symptoms, history of UTIs, and previous antibiotic use. Laboratory analysis involved culturing urine samples on CLED and Chromogenic agar media, followed by biochemical tests to identify bacteria. Antibiotic susceptibility was tested using the Kirby Bauer disc diffusion method, adhering to CLSI guidelines.

Study Area and Population

Hargeisa Group Hospital, a national referral hospital in Somaliland's capital, was the study site. The hospital's diverse patient population provided a suitable sample for the research.

Sampling Method

Non-probability convenient sampling was used to select patients with UTI symptoms.

Examination of Samples

Urine samples were cultured to isolate *E. coli*, which was then tested against antibiotics including Ciprofloxacin, Nitrofurantoin, Ceftriaxone, Levofloxacin, Cotrimoxazole, Nalidixic acid, Tetracycline, Ampicillin, Gentamicin, and Amikacin.

Data Processing and Analysis

Data were analyzed using SPSS Version 16 and presented in tables and bar charts for clarity.

Ethical Consideration

The study adhered to ethical standards, ensuring that data were used solely for academic purposes.

Results

Demographics and Clinical Characteristics

The study included 98 participants aged 15-80 years. The majority were over 50 years old (29.6%), followed by those aged 15-25 (27.6%). Female participants constituted 72.4% of the sample.

UTI Symptoms and History

61.2% of participants exhibited UTI symptoms, while 49% had a history of UTIs. Those with previous UTIs had a higher resistance to antibiotics.

Bacterial Isolates

E. coli was the predominant pathogen (55%), followed by *Klebsiella* spp (15%), *Candida* spp (15%), *Enterococcus* spp (10%), *Staph* spp (2.5%), and *Pseudomonas* spp (2.5%).

Antibiotic Resistance

E. coli showed high resistance to Tetracycline (70%), Ampicillin (64%), and Cotrimoxazole (61%). Moderate resistance was observed for Ceftriaxone (43.5%), Nalidixic acid (43%), and Ciprofloxacin (36%). The bacteria were highly sensitive to Amikacin (100%), Nitrofurantoin (96%), Levofloxacin (73%), and Gentamicin (74%).

Discussion

The high resistance rates observed for Tetracycline, Ampicillin, and Cotrimoxazole align with findings from other regions. The sensitivity of *E. coli* to Amikacin, Nitrofurantoin, Levofloxacin, and Gentamicin suggests these antibiotics are still effective for treating UTIs in Somaliland.

Conclusion

The study highlights a significant issue of antibiotic resistance among uropathogenic *E. coli* in Hargeisa. Continuous monitoring and public education on the prudent use of antibiotics are crucial for managing UTIs effectively.

Recommendations

1. Public Awareness: Educate the public on the risks of antibiotic misuse.
2. Treatment Guidelines: Develop clear guidelines for UTI treatment in healthcare institutions.
3. Culture and Sensitivity Testing: Encourage clinicians to perform bacterial culture and sensitivity tests before prescribing antibiotics.
4. Further Research: Investigate the factors contributing to antibiotic resistance in more detail.



Photo

1



Photo

2



Photo

3

HEALTH RESEARCH SYSTEMS IN SOMALILAND: A QUALITATIVE STUDY ON PERSPECTIVES OF GOVERNMENT AND NON-GOVERNMENTAL STAFF



Dr. Soheir Hassan Ahmed
Medical Doctor and PhD, Assistance
Professor of University of Hargeisa

Background

Globally, the importance of effective national health research systems has gained considerable attention. Literature indicates that Africa contributes only 2% of the world's research output and 1.3% of global publications, which highlights a significant disparity. In Somaliland, where the provision of quality healthcare services is crucial, understanding and enhancing the health research system is a critical endeavor. This study explores the perspectives of government and non-governmental stakeholders on the health research systems in Somaliland.

Aim

The study aims to explore the perspectives of governmental and non-governmental stakeholders regarding the health research systems in Somaliland. Methodology An exploratory qualitative study design was employed, involving in-depth interviews with thirty-four participants from key sectors including academia, government, and international and local

non-governmental organizations involved in health research systems. A semi-structured interview guide facilitated the collection of data, which was analyzed thematically.

Findings

The study revealed several key issues:

1. **Lack of a National Health Research Center:** Somaliland does not have a centralized national health research institute, resulting in disorganized research efforts and poor data collection.
2. **Absence of a National Health Research Policy:** There is no overarching national health research policy or strategy, leading to fragmented efforts and lack of clear research priorities.
3. **Limited Funding:** Research activities in Somaliland are significantly underfunded, with most funds coming from international sources or researchers' personal finances.



4. **Ill-Equipped Staff:** There is a notable lack of trained personnel with the necessary skills and capacity to conduct high-quality health research.
5. **Need for National Health Research Governance:** Effective governance structures for health research are lacking, which impedes coordination and strategic planning.

Conclusion

This study underscores the critical need for robust health research systems in Somaliland. To address the identified gaps, the study recommends establishing a national health research institute, developing a national health research policy, securing sustainable funding, building research capacity among staff, and strengthening governance structures.

Introduction

Global and regional tools such as the World Health Assembly and the WHO Regional Committee for Africa emphasize the need for strong national health research systems (NHRS). Effective NHRS can lead to better health outcomes by providing governance, capacity building, knowledge generation, and evidence-based decision-making platforms with sustainable funding mechanisms. However, Africa's research output remains low due to factors such as misaligned funding priorities, inadequate coordination, and limited research capacity.

Study Context

Somaliland, a self-declared state, faces numerous health challenges including communicable and non-communicable diseases, maternal, neonatal, and nutritional conditions. The healthcare sector is under-resourced, and there is limited capacity for research and evidence-based policy-making. Understanding the current state of NHRS in Somaliland is therefore essential for improving health outcomes.

Methodology

The study employed an exploratory qualitative design with in-depth interviews conducted from April to August 2020. Thirty-four participants were purposively selected from various sectors including government bodies, academia, regional hospitals, health profession associations, and international and local NGOs. The interviews, conducted in Somali and later transcribed into English, were analyzed using NVIVO 12 software through a thematic inductive approach.

Findings

The findings highlight several critical areas for improvement:

1. **Lack of a National Health Research Institute:** Participants indicated the absence of a centralized research body to coordinate and conduct health research.
2. **Absence of a National Health Research Policy:** There is a need for a clear policy to guide research priorities, governance, and resource allocation.
3. **Limited Funding:** Research in Somaliland is largely underfunded, with most resources coming from international donors rather than national budgets.
4. **Ill-Equipped Staff:** The lack of qualified researchers and inadequate training impede the quality of health research.
5. **Need for Improved Governance:** A multidisciplinary committee to oversee and coordinate health research efforts is essential for effective governance.

Discussion

The absence of a national health research institute and policy significantly hampers Somaliland's ability to produce high-quality health research. Establishing a dedicated research institute and developing a comprehensive national health research policy could provide the necessary framework for prioritizing research needs, allocating resources, and ensuring effective governance. Additionally, securing sustainable funding and building research capacity among staff are crucial for improving health research outputs.

Conclusion

This study highlights the critical need for a robust health research system in Somaliland. Implementing the recommended measures could significantly improve the quality and impact of health research, ultimately leading to better health outcomes for the population.

Recommendations

To strengthen the health research system in Somaliland, the study recommends:

1. Establishing a National Health Research Institute to coordinate research activities.
2. Developing a comprehensive National Health Research Policy to guide research priorities and governance.
3. Allocating sufficient and sustainable funding for health research.
4. Building the capacity of researchers through training and development programs.
5. Strengthening national health research governance through a multidisciplinary committee.





CHALLENGES FOR INFLUENCING EXCLUSIVE BREASTFEEDING PRACTICE AMONG LACTATING MOTHERS WITH INFANTS AGED 0–6 MONTHS IN BORAMA DISTRICT, SOMALILAND: A CROSS-SECTIONAL STUDY”



Mohamed Said Hassan
MSc in Tropical Medicine
and Infectious Diseases
Amoud University

5. Report on the Study:

Challenges for Influencing Exclusive Breastfeeding Practice among Lactating Mothers with Infants Aged 0–6 Months in Borama District, Somaliland: A Cross-Sectional Study”

Authors:

Mohamed Said Hassan^{1,2} and Md. Moyazzem Hossain³

Affiliations:

1. Department of Public Health, Amoud University, Borama, Awdal Region, Somalia
2. Department of Public Health, Horn International University, Borama, Somalia
3. Department of Statistics, Jahangirnagar University, Savar, Dhaka, Bangladesh

Correspondence:

Md. Moyazzem Hossain, Department of Statistics, Jahangirnagar University, Savar, Dhaka 1342, Bangladesh. Email: hossainmm@juniv.edu

Abstract:

The research explores the barriers to exclusive breastfeeding (EBF) among lactating mothers in Borama town, Somaliland, focusing on infants aged less than six months. The study utilized primary data from 153 mothers, employing descriptive statistics and multivariable logistic regression for analysis. Key findings include a lack of awareness about EBF’s benefits, with educational level, marital status, employment status, perceptions of milk quantity, and baby’s acceptance of breastfeeding significantly affecting EBF practices.

Introduction

Exclusive breastfeeding (EBF) is critical for the survival, growth, and development of infants and the health and well-being of mothers. Major health organizations recommend initiating breastfeeding within an hour of birth and continuing it exclusively for the first six months of life. Despite its benefits, EBF rates are suboptimal globally, particularly in developing regions. This study aims to identify challenges affecting EBF practices among mothers in Borama, Somaliland.

Methodology

Research Design:

A cross-sectional survey was conducted among lactating mothers with infants aged 0–6 months attending Mother and Child Health Centers (MCHs) in Borama District, Somaliland.

Sample Size:

Using a formula based on the prevalence of EBF in Somaliland, the required sample size was calculated to be 156, but the final analysis included 153 participants due to incomplete responses.

Sampling Technique:

Cluster random sampling was employed, considering each MCH as a cluster. Convenience sampling was used within each cluster due to varying levels of participation interest.

Data Collection Instruments:

A semi-structured questionnaire was developed, covering sociodemographic, maternal, contextual, and physical challenges related to EBF.

Data Analysis:

Descriptive statistics and multivariable logistic regression were utilized to analyze the data, with the significance level set at 5%.

Ethical Considerations:

The study adhered to ethical standards, with informed consent obtained from all participants.

Results

Sociodemographic Characteristics:

- Age: Majority of mothers (76.4%) were between 20-39 years.
- Education: 39.9% had no formal education, while 21% and 24% had primary and secondary education, respectively.
- Employment: More than half (59.5%) were unemployed.
- Income: 30.7% earned between \$100 and \$150 monthly.

Maternal Factors:

- Awareness: Only 28.1% knew that breastfeeding should be the baby's first meal, and 69.3% were unaware of the benefits of EBF for six months.
- Practices: 71.9% initiated breastfeeding after an hour of birth, and 36.6% recognized breastfeeding's protective benefits.

Contextual Factors:

- Delivery: 60.8% delivered at MCHs, and 57.5% had normal deliveries.
- Counseling: 51% did not receive any breastfeeding counseling.

Physical Challenges:

- Problems: 68% reported breastfeeding problems, such as latching issues (56.2%) and nipple engorgement (22%).
- Insufficient Milk: 72.5% perceived insufficient milk as a barrier.
- Baby's Rejection: 62% reported that their babies refused breastmilk.

Challenges Influencing EBF:

The logistic regression analysis identified several significant factors:

- **Education:** Mothers with no formal education or only primary education were significantly less likely to practice EBF.
- **Employment:** Employed mothers had a lower likelihood of practicing EBF.
- **Perceived Insufficient Milk:** Mothers perceiving insufficient milk were less likely to practice EBF.
- **Baby's Rejection:** Perceived rejection by the baby negatively impacted EBF practices.

Discussion and Conclusion

The study highlights key challenges to EBF in Borama District, including lack of education, employment status, perceived insufficient milk, and baby's acceptance of breastfeeding. These findings underscore the need for targeted interventions to promote EBF. Recommendations include enhancing breastfeeding counseling in medical facilities and collaborative efforts by government and NGOs to support vulnerable groups.

Recommendations

1. **Ministry of Health:** Improve the implementation of breastfeeding counseling in healthcare settings.
2. **Government and NGOs:** Develop and execute programs focusing on education and support for lactating mothers, particularly those with low education and income levels.
3. **Community Associations:** Engage in awareness campaigns to educate mothers about the benefits of EBF and address common misconceptions and physical challenges.



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STATUS OF PEDAGOGICAL PRACTICES IN SOMALILAND HIGHER EDUCATION INSTITUTIONS” BY GULLED MOHAMED YASIN AND RACHEL MONDE KABETA



Dr. Gulled M. Yasin

PhD in Education (Curriculum and Policy Studies),
Research Fellow: National Taiwan Normal University

Abstract

The research article “Status of Pedagogical Practices in Somaliland Higher Education Institutions” by Gulled Mohamed Yasin and Rachel Monde Kabeta addresses the pressing issue of teaching strategies in higher education institutions (HEI) in Somaliland. The study reveals that traditional didactic teaching methods dominate the pedagogical landscape, impeding student engagement and lifelong learning. The research advocates for the adoption of innovative teaching methods, specifically the cooperative jigsaw method, to enhance student engagement and academic excellence.

Introduction

Education serves as a pivotal tool for societal transformation, equipping individuals with essential skills, attitudes, and knowledge. Higher education, in particular, plays a critical role in developing skilled professionals and advancing research that benefits society. Despite global advancements in pedagogical

practices, HEIs in Somaliland predominantly rely on traditional teaching methods, such as lectures, which limit student potential and engagement. This study, guided by human capital theory, examines the current pedagogical practices among lecturers at the University of Hargeisa and proposes the adoption of innovative teaching methods to improve educational outcomes.

Literature Review

Historically, teaching methods have evolved significantly, from oral and experiential learning in ancient times to more structured and formalized approaches in modern education systems. The Socratic method, the Gurukul system, and the madrasa system are notable examples of early educational practices that emphasized critical thinking, memorization, and hands-on learning. With the advent of the printing press and subsequent educational reforms, lecture-based teaching became prevalent, eventually giving way to more student-centered approaches.

In Somaliland, the legacy of didactic teaching methods dates back to the colonial era, with a continued emphasis on lecture-based instruction in HEIs. Studies have shown that pedagogical practices significantly impact academic performance, highlighting the need for professional development and training for lecturers to adopt more interactive and engaging teaching methods.

Methodology

The study employed a quantitative research design, using a micro-teaching observation protocol to assess the pedagogical practices of 35 lecturers at the University of Hargeisa. Participants, who had received postgraduate diplomas in education, were observed and evaluated on their teaching methods, student engagement, and instructional behaviors. The micro-teaching sessions were recorded and analyzed to determine the prevalence and effectiveness of various teaching strategies.

Results

Lecture as the Dominant Instructional Strategy

The findings indicate that the lecture method is the predominant teaching strategy, with 75% of the observed intervals characterized by lecture-based

instruction. This method involves teachers imparting knowledge through short slides, with minimal use of writing or drawing on the whiteboard. Only 14% of the observed teachers employed inquiry-based methods, and a mere 5% used diagrams or visual aids to enhance understanding.

Instructional Behavior

The instructional behaviors of lecturers varied significantly, with inconsistent use of analogies, humor, and other engagement techniques. Only 8% of teachers utilized humor to engage students, and there was limited use of interactive methods to foster a positive student-teacher rapport.

Discussion

The dominance of lecture-based teaching in Somaliland's HEIs highlights a significant gap in the adoption of modern pedagogical practices. The study underscores the need for a shift towards more interactive and student-centered teaching methods to improve student engagement and academic performance. The cooperative jigsaw method, which promotes active participation, critical thinking, and teamwork, is proposed as an effective alternative to traditional lectures.





Conclusion

The research highlights the critical need for a transformation in the pedagogical practices of HEIs in Somaliland. By adopting innovative teaching methods such as the cooperative jigsaw method, universities can significantly enhance student engagement and academic excellence. The proposed recommendations aim to create a more dynamic and effective educational environment, ultimately contributing to the development of human capital and the overall progress of Somaliland.

Recommendations

The study recommends several measures to enhance pedagogical practices in Somaliland's HEIs:

1. **Policy and Guidelines Development:** Establish policies and guidelines that promote innovative teaching methods across universities in Somaliland.
2. **Professional Development:** Provide continuous training, workshops, and seminars for lecturers to familiarize them with modern pedagogical practices.
3. **Implementation of Cooperative Learning:** Adopt the jigsaw method and other cooperative learning strategies to foster a more interactive and engaging classroom environment.
4. **Use of Instructional Aids:** Encourage the use of visual aids, analogies, and other instructional tools to enhance student understanding and retention.
5. **Regular Assessment and Feedback:** Implement regular assessments of teaching practices and provide constructive feedback to lecturers to improve their instructional strategies.



REPORT ON “MICROBIAL ASSESSMENT OF BISCUITS, CHIPS, AND UHT MILK IN HARGEISA, SOMALILAND”



Mohamud Ahmed Sh. Farax
MSc in Medical Laboratory Science,
University of Hargeisa

Introduction

The study titled “Microbial Assessment of Biscuits, Chips, and UHT Milk in Hargeisa, Somaliland” was conducted by Mohamud Ahmed Farah, Hassan Mohamed Abdi, Abdillahi Mohamed Othman, and Ahmed Hussein Essa. This research focuses on the microbial quality of commonly consumed food items: biscuits, chips, and Ultra High Temperature (UHT) milk. These items are popular among different age groups, particularly children and adults. The primary aim was to evaluate whether these food products contain coliforms and *Escherichia coli* (*E. coli*), which are indicators of microbial contamination and potential foodborne diseases.

Objective

The main objective of this research was to assess the microbial quality of biscuits, chips, and UHT milk available in Hargeisa, Somaliland. The study intended to determine the presence or absence of coliforms and *E. coli* in these food products.

Materials and Methods

Study Area and Design The study was conducted in Hargeisa, the largest city in Somaliland, at the University of Hargeisa’s Science and Engineering Laboratory. The study design was a descriptive cross-sectional study, conducted from December 2023 to February 2024.

Sample Collection and Processing A total of 40 samples were collected, consisting of five samples each for different brands of biscuits, chips, and UHT milk. These samples were selected using multistage sampling methods, including purposive and convenience sampling. The samples were processed using standard microbiological techniques, with serial dilutions and plating on Chromogenic Coliform Agar to detect coliforms and *E. coli*.

Results

Microbial Quality of Chips Table 1 of the study presents the bacterial load for chips. All ten samples from two different brands showed no presence of coliforms or *E. coli*, indicating that both imported and locally manufactured chips are free from these bacteria.

Microbial Quality of UHT Milk Table 2 details the microbial analysis of UHT milk. All 15 samples from three different brands (both imported and locally manufactured) demonstrated no growth of coliforms or *E. coli*. This suggests high microbial quality and proper handling during production.

Microbial Quality of Biscuits According to Table 3, all 15 biscuit samples from three different brands showed no presence of coliforms or *E. coli*. This indicates that these biscuits are microbiologically safe and have been produced under good hygienic conditions.

Discussion

The findings of this study are significant for public health and food safety. The absence of coliforms and *E. coli* in all tested samples of biscuits, chips, and UHT milk indicates that these products are safe for consumption and have been produced and handled under hygienic conditions. The study results align with international standards, such as those of the Gulf State Organization (GSO), and are consistent with findings from similar studies conducted in other countries like Bangladesh, Iran, Uganda, Brazil, and Nigeria.

The study highlights the importance of good manufacturing practices (GMP) in ensuring food safety. It also underscores the need for regular microbial testing of food products to prevent foodborne illnesses. The results also disprove the

hypothesis that imported foods in Somaliland are of poor quality, as both imported and locally produced items were found to be of high quality.

Conclusion

This research concludes that the biscuits, chips, and UHT milk sold in Hargeisa are of high microbial quality, free from coliforms and *E. coli*. The study emphasizes the significance of food safety and the need for continued vigilance and regulation by the government and relevant stakeholders to prevent foodborne diseases. The findings also highlight the effectiveness of good manufacturing practices in ensuring the production of safe food products.

Recommendations

Based on the study's findings, it is recommended that:

1. The government and relevant stakeholders should enforce stringent food safety regulations to ensure the continued production of high-quality food items.
2. Regular microbial testing of food products should be implemented to monitor and ensure their safety.
3. Public awareness campaigns should be conducted to educate consumers and producers about the importance of food safety and hygiene.

Keywords: TCC - Total Coliform Count, TEC - Total *Escherichia coli* Count, UHT - Ultra High Temperature, Sterilization, Chromogenic Coliform Agar, Chips, Biscuits.

This report summarizes the key findings and implications of the research on the microbial quality of biscuits, chips, and UHT milk in Hargeisa, Somaliland. The study contributes valuable data to the field of food safety and provides a basis for further research and policy development in this area.



ROLE OF PROFESSIONAL LEARNING COMMUNITY ON STUDENT BEHAVIOR



Khadar Cabdi Xasan
MA in HRM from PGEDU

1. Background of Study

Education is an evolving field that constantly seeks innovative strategies to enhance student learning outcomes. Among these strategies, the concept of Professional Learning Communities (PLCs) has gained prominence. PLCs involve educators collaborating to analyze and improve their teaching practices, thereby influencing student achievement. This research investigates the role of PLCs in student behavior, emphasizing the relationship between teacher collaboration and student conduct, which is crucial for creating positive learning environments.

2. Problem Statement

High schools in Hargeisa, Somaliland, face significant challenges related to student behavior that adversely affect the overall educational environment. These behavioral issues are multifaceted, including classroom disruptions, absenteeism, disrespect

towards teachers, and conflicts among students. Addressing these complex behavioral problems requires a comprehensive and collaborative approach to identify their underlying causes.

3. Research Questions

1. What are the frequency and types of behavioral problems observed in high schools in Hargeisa, Somaliland?
2. What factors contribute to behavioral issues among students, including socio-economic, familial, psychological, and educational influences?
3. How does student behavior affect the learning atmosphere and teacher morale?
4. What are the existing approaches and policies implemented by schools to manage and mitigate behavioral problems?

4. Methodology

Participants

The study sample comprises 100 teachers, including principals, second-line school leaders, and regular teachers from 10 secondary schools (both public and private) in Hargeisa.

Data Collection

Quantitative data were collected through surveys and behavioral assessments, while qualitative data were gathered through interviews and focus group discussions.

Data Analysis

Statistical analyses, such as regression models and thematic analysis, were employed to identify patterns and relationships between PLC participation and student behavior.

5. Findings

The study identified several key types of behavioral problems in high schools in Hargeisa:

6. Disruptive Behavior: Talking out of turn, making noise, and distracting other students during lessons.
7. Absenteeism: Regular absence from school without valid reasons.
8. Aggressive Behavior: Incidents of physical fights, bullying, and verbal abuse among students.
9. Lack of Respect for Authority: Disobedience towards teachers and school staff, including refusal to follow instructions.
10. Substance Abuse: Cases of students using drugs and alcohol, although these are less frequently reported compared to other issues.

Factors Contributing to Behavioral Problems

1. Socio-Economic Factors: Poverty and unemployment.
2. Familial Influences: Parental absence and family dynamics.

3. Psychological Factors: Mental health issues among students.
4. Educational Influences: Teacher-student ratio, teaching methods, and lack of extracurricular activities.

11. Conclusion

The research highlights several factors contributing to behavioral problems among students in high schools in Hargeisa. Socio-economic conditions, familial influences, psychological health, and educational environment all play significant roles. The study underscores the importance of a collaborative approach, such as PLCs, in addressing these issues effectively.

12. Recommendations

To mitigate student behavioral problems, the following recommendations are proposed:

1. Define specific, measurable goals related to student behavior.
2. Ensure that all members of the PLC understand and are committed to these objectives.
3. Schedule consistent PLC meetings dedicated to discussing student behavior.
4. Encourage administrators to share successful behavior management techniques.
5. Celebrate successes and learn from challenges to continuously improve the PLC's impact on student behavior.
6. Involve parents and guardians in behavior improvement plans.

These recommendations aim to create a structured and supportive environment where educators can collaborate to address and improve student behavior, ultimately enhancing the overall educational experience.



Photo
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Photo
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Photo
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Photo

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HIR Institute for Research & Development



HQ: Imaratul Khair building
Address Road No. 1
Hargeisa, Somaliland



+252 63 4414287
+252 65 4414287



admindept@hircentre.com
www.hircentre.com



@HIR Insitute for research & Development