



Biomedical Counseling and Public Health Enlightenment Service in Primary Health Center Esierebom Calabar South, Cross River State

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ABSTRACT

This study explores the impact of integrating biomedical counseling and public health enlightenment services into primary health center Esierebom in Calabar south, Cross River state. By providing patients with accurate information on disease prevention, management, and treatment, these services empower individuals to take control of their health. The study highlights the importance of trained healthcare professionals in delivering effective counseling and enlightenment services, ultimately contributing to improved health outcomes and community well-being in Cross River State. Educating patient on prevailing health problems and methods of control, implementing measures to prevent locally endemic and epidemic disease. By integrating biomedical counseling and public health enlightenment services, the primary health centre esierebom can be better in promoting healthy behaviour and improving overall well-being.

Keyword: Biomedical counseling, public health enlightenment, primary health center, community health, health outcomes.

Review Article

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INTRODUCTION

Primary Health Centers (PHCs) are the cornerstone of the healthcare delivery system, particularly in low- and middle-income countries. These centers serve as the first point of contact for individuals within the community and play a vital role in both curative and preventive healthcare, Bassey Ekeng Effiom, Cyril Bisong Abuo, Brenda Akpan (2020). Among their essential functions are biomedical counseling and public health enlightenment services, which are key to improving health outcomes and ensuring sustainable community health. Biomedical counseling refers to the guidance provided to patients based on scientific medical knowledge, aimed at enhancing their understanding of diseases, treatments, and health-related decisions, B.E. Effiom, M.O. Ebuara, M.L. Ekwok, Anyin N. N., Queen B.B., Prof. P. N. Asuquo (2022). Counseling on conditions such as hypertension, diabetes, and asthma. Educating patients on how and why to properly use prescribed medications (WHO, 2003). Providing advice to individuals or

families affected by or at risk of genetic disorders. For diseases like HIV/AIDS, tuberculosis, hepatitis, etc. (UNAIDS, 2019).

Public health enlightenment refers to organized health education programs designed to inform the public about disease prevention, healthy living, and available health services. Delivered in PHC waiting rooms, schools, and community centers. Health Campaigns focused on vaccination, sanitation, malaria prevention, maternal health, and nutrition (Adepoju et al., 2020). Behavior Change Communication (BCC) Use of culturally tailored messages to influence behaviors (FMOH, 2016). Outreach Programs targeting underserved populations with information and screening services. Biomedical counseling and public health enlightenment are critical services provided by Primary Health Centers that ensure community-based, holistic healthcare. When effectively implemented, they enhance disease prevention, promote healthy behaviors, and improve overall public health outcomes, Effiom Bassey Ekeng *et al* (2025). Policymakers and healthcare

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administrators must strengthen these services through adequate training, funding, and community involvement.

Biomedical Counseling

Biomedical counseling refers to a health-oriented counseling approach that integrates biomedical knowledge and psychological techniques to support patients in understanding, accepting, and managing medical conditions, BE Effiom, CB Abou, BQ Bassey (2021). It is often provided by healthcare professionals such as doctors, nurses, and trained counselors to guide patients through the psychological and behavioral challenges of diagnosis, treatment, and long-term disease management. Helps individuals and families understand genetic conditions and inherited disorders (e.g., sickle cell, Down syndrome) Biesecker, B. B., & Peters, K. F. (2001) Assists patients in managing chronic illnesses like diabetes, hypertension, cancer, and HIV/AIDS. It includes medication adherence, lifestyle changes, and emotional support Wagner, E. H., *et al.* (2001). Integrates brain science with therapeutic techniques to manage conditions like depression, schizophrenia, or PTSD, Insel, T. R. (2009). Provides emotional and informational support to patients and families facing terminal illness. Emanuel, E. J., & Emanuel, L. L. (1998).

In primary health centers (PHCs), biomedical counseling plays a critical role in early diagnosis, preventive education, and chronic disease management. Counselors act as a bridge between clinical practice and community understanding, B.E. Effiom, M.O. Ebuara, M.L. Ekwok, Anyin N. N., Queen B.B., Prof. P. N. Asuquo (2022). Biomedical Counseling blends medical understanding with psychological and social support to help people manage health conditions holistically—grounded in the biopsychosocial model, first proposed by George L. Engel in 1977. This model asserts that biological, psychological, and social dimensions equally influence health and illness.

Public health enlightenment service in primary health center Esierebom Calabar south, Cross River state.

Esierebom PHC is one of 22 Primary Healthcare Centres in Calabar South designated for modernization. The formal handover of “Lot 1” sites—including Esierebom—occurred on 27 January 2025, marking the start of infrastructure and service upgrades. In Cross River State, only 196 out of 1,045 PHCs are currently functional, underscoring the pressing need for reinforcement of systems like public health enlightenment. Public health enlightenment—comprising community outreach, education, and awareness raising—is foundational to primary healthcare. Historically, Cross River has leveraged tools like town-criers and church announcements, especially during outbreaks like COVID-19, to disseminate information. Studies in Calabar South show that functional health literacy among schoolchildren

significantly improves health practices, underlining the value of education-driven outreach.

Activities at Esierebom Primary Health Centre

Since its revitalization, Esierebom Primary Health Centre has ramped up public health awareness through:

- **Routine immunization drives** for children, coordinated with Calabar South LGA and overseen by the Cross River State PHC Development Agency.
- **Malaria, typhoid, and fever campaigns**, educating residents on prevention, early symptoms, treatment-seeking behavior, and vector control.
- **Maternal-child health sessions**, including antenatal talks, safe childbirth preparedness, and skilled attendance promotion—aligned with the broader national Midwives Service Scheme.
- **School outreach**, providing age-appropriate lessons to pupils. A 2019 study in Calabar South found literacy-led interventions improved sustainable health practices among children.
- **Community engagement**, involving town criers, local influencers, and faith leaders to convey key messages on hygiene, sanitation, vaccination, and outbreak warning signs.

Community Involvement & Health System Support

The Alma Ata principles of Community-Directed Interventions (CDI) are reflected in local practices: community volunteers, faith leaders, and town criers help co-design and deliver health campaigns—an approach validated by descriptive studies in Cross River State. This participatory model boosts trust and behavior adoption.

Despite progress, hurdles remain:

- **Understaffing:** Many facilities, including Esierebom, still operate with skeleton crews (e.g., eight personnel) and are slated for new retirements
- **Infrastructure deficits:** Poor WASH, unreliable power, and broken equipment limit outreach capacities.
- **Funding constraints:** Enlightenment programs depend on external funding from government, donors, and NGOs; more sustainable funding is needed.
- **Monitoring effectiveness:** There is a need for systematic tracking of behavior change, immunization uptake, and health literacy impact.

Esierebom Primary Health Centre’s public health enlightenment efforts exemplify grassroots primary care: blending facility-based services with education and community partnerships. Still, scaling this impact requires addressing staffing, infrastructure, funding, and evaluation gaps. Strengthening PHC functions in Calabar South—especially through sustained enlightenment—will be crucial to advancing health outcomes and universal coverage in Cross River.

Public Health Enlightenment Services in Primary Health Centers

Public health enlightenment services are essential components of primary health care. Primary Health Centres, aimed at increasing awareness and promoting healthy behaviors among community members. These services play a vital role in preventing diseases, encouraging early treatment, and fostering a culture of health literacy. In Nigeria, Primary Health Centres are the first point of contact for most individuals within the healthcare system, making them a strategic platform for public health education and community engagement.

Definition and Objectives

Public health enlightenment refers to organized efforts to educate and inform the public about health issues, risks, and preventive measures. These services aim to:

- Improve community understanding of disease prevention and health promotion.
- Encourage timely use of health services.
- Promote behavioral change and healthy lifestyles.
- Support national and local health goals such as immunization, maternal health, and sanitation.

Components of Public Health Enlightenment Services

1. Health Education and Counseling

Primary Health Centers routinely conduct health talks during clinic hours, focusing on topics such as:

- Personal hygiene
- Nutrition and breastfeeding
- Immunization
- HIV/AIDS prevention
- Malaria control
- Family planning

2. Community Outreach Programs

Health workers engage with community members through:

- Home visits
- School health programs
- Religious and community meetings
- Traditional communication methods (e.g., town criers, posters)

3. Health Campaigns

Targeted campaigns are organized around national health days and priority programs such as:

- National Immunization Days (NIDs)
- Malaria control programs
- Handwashing and sanitation weeks
- World AIDS Day events

Importance of Public Health Enlightenment in PHCs

1. Disease Prevention

Studies have shown that public health enlightenment significantly reduces the incidence of

preventable diseases such as cholera, measles, and malaria when communities adopt recommended practices (Ajayi *et al.*, 2020).

2. Improved Health-Seeking Behavior

Enlightenment programs increase utilization of PHC services, especially among women and children. Knowledge of antenatal care, safe delivery, and child immunization boosts attendance at health centers (WHO, 2018).

3. Enhanced Community Participation

Health education fosters trust and collaboration between healthcare providers and the community, enabling more responsive and people-centered care (Oluwole *et al.*, 2017).

Challenges in Delivering Health Enlightenment at Primary Health Centres

Despite its benefits, several challenges limit the effectiveness of enlightenment services in PHCs:

- **Limited manpower:** Many PHCs in rural areas are understaffed, reducing their capacity to conduct community outreach.
- **Inadequate funding:** Lack of financial resources hampers the production of educational materials and transport for outreach activities.
- **Cultural and language barriers:** Health messages may not be well understood due to illiteracy or language differences.
- **Infrastructure gaps:** Lack of electricity, water, and communication tools hinders the delivery of effective education services.

Strategies for Improvement

To enhance public health enlightenment services, the following are recommended:

1. **Capacity building** for health workers in communication and behavioral change strategies.
2. **Integration of technology**, such as mobile health (mHealth), for wider reach.
3. **Community involvement** in designing and delivering messages tailored to local beliefs and practices.
4. **Government and donor support** for funding and logistical resources.

Case Study: Public Health Enlightenment in Cross River State

In Cross River State, especially in Calabar South Local Government Area, public health enlightenment has been utilized to fight infectious diseases and improve maternal and child health outcomes. During the COVID-19 pandemic, the state used town criers and churches to disseminate public health messages effectively (Premium Times, 2020). Community health workers from local PHCs, including those in Esirebom, have been instrumental in delivering malaria education, immunization updates, and antenatal care messages in markets and schools (Guardian, 2025).

Public health enlightenment services are fundamental to effective primary health care. When well-coordinated, they empower communities, improve health outcomes, and reduce the burden of preventable diseases. Strengthening these services in Nigeria's PHCs requires sustained investment in infrastructure, training, and partnerships with communities and civil society.

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