

PCF7 - Use of Mobiles for Breastfeeding Counselling
By James Achanyi-Fontem, CEO, Cameroon Link
P.O. Box 1460 Douala, Littoral Region, Cameroon
Tel: +00237 77758840 - Email: camlink99@gmail.com

PCF7 Presentation – Cameroon Link (2.679 words)

Abstract

This presentation examines the sustainability, ethics, and quality, as well as the role of health development co-operation of citizen breastfeeding counsellors in Cameroon. It defines this kind of counselling as that produced by non-professionals, community health workers and notes that it makes use of a wide range of tools including social media, the internet, and mobile phones to fill existing gaps in conventional news information coverage, communication and the strive for behaviour of attitudes. According to a recent study, new media platforms are changing how people communicate with each other. However, computer ownership and internet access are still the prerogative of the wealthy in much of Cameroon, but mobile internet access is on the rise and if current growth rates continue, Cameroon mobile phone penetration will reach 60 per cent by 2014. Both mobile phones and the internet provide exciting new opportunities for one-to-one as well as one-to-many communication. One concern raised in this context is the matter of quality standards and a code of ethics. The effectiveness of the use of mobiles for counselling aims at improving breastfeeding Indicators to steps for Improving Infant & Young Child Feeding Practices, including Peer counselling, mother support groups, counselling by health care providers and UNICEF's 10 steps

Cell Phone Counselling would Work during the period of Pregnancy & Lactation, which are unique phases that result often to High morbidity and mortality. Most delivered women do not leave the home for 6 weeks during the postnatal period. In Cameroon, nuclear families are increasing and women depend on family support to visit health care facilities. In this situation, the cell phone can potentially empower women to obtain timely consultations for themselves and for their infants from home.

Presentation

Although the developments of multimedia technology and internet networks have contributed to immense improvements in the standard of learning as well as distance learning in developed world, the developing world is still not in position to take advantage of these improvements because of limited spread of these technologies, lack of proper management and infrastructure problems. Unless we succeed in solving these problems to enable people of developing countries to take advantages of these technologies for distance learning the vast majority of the world population will be lagging behind. In this paper we explore how to use mobile technology to provide distance learning in an efficient way using advanced multimedia tools.

On the other hand, despite improvements in educational indicators, such as enrolment, significant challenges remain with regard to the delivery of quality health information and education in developing countries, particularly in rural and remote regions. In the attempt to find viable solutions to these challenges, much hope has been placed in new information and communication technologies (ICTs), mobile phones being one example. We have reviewed the evidence of the role of mobile phone-facilitated e-Learning in contributing to improved health care outcomes in the developing countries like Cameroon.

This paper also examines the sustainability, ethics, and quality, as well as the role of health development co-operation of breastfeeding counsellors in Cameroon. It defines “Mobiles for Breastfeeding Counselling” as the kind of counselling by non-professionals and community health workers.

In particular, it examines the extent to which the use of mobile phones helps to improve mother and child health care educational outcomes in two specific ways:

- 1) in improving access to health care within the community, and
- 2) in promoting new learning.

Analysis of the initiative indicates that while there is important evidence of mobile phones facilitating increased access, much less evidence exists as to how mobiles promote new learning. It makes use of a wide range of tools including social media, the internet, and mobile phones to fill existing gaps in conventional health news information coverage, communication that strives for behaviour change of attitudes.

Participating in the community of learning through story design programming which calls for interaction between the listener-target and the radio producer, we learned from the Commonwealth of Learning initiative in Cameroon that emphasis is the paramount role of distance learning that brings about sustainable socio-economic development. Goal 2 of the United Nations Millennium Development Goals (MDGs) aims to achieve universal primary education for children everywhere; boys and girls alike by 2015, but significant challenges remain. Goal 4 and 5 aim at maternal and child health care protection.

In the attempt to find viable solutions to these challenges, much hope has been placed in new information and communication technologies (ICTs). It is believed that ICTs can empower health workers, lactating mothers and their partners by facilitating communication and interaction, offering new modes of delivery, and generally transforming teaching and learning processes. Of the many different forms of ICTs, mobile phones are thought, for several reasons, to be a particularly suitable tool for advancing distance learning in rural areas. First, mobile phones are the most prevalent ICT in the developing world, and the penetration rate is rising rapidly everywhere

The Role of Mobiles in Promoting New Learning

Others suggest that the benefits of mobile phones are not merely limited to increased access to information and educational services. Mobile Learning, many observe, can also facilitate changes in the character of learning modalities that in turn impact educational outcomes. In this regard, Mobile Learning represents more than a mere extension of traditional forms of education; Mobile Learning facilitates alternative learning processes and instructional methods that the theories of new learning identify as effective for learning..

According to a study carried in Douala, the economic capital of Cameroon, new media platforms are changing how people communicate with each other. Though computer ownership and internet access are still the prerogative of the wealthy in much of Cameroon, mobile internet access is on the rise and if current growth rates continue, Cameroon mobile phone penetration will reach over 65 per cent by next year (2014). Four mobile phone operators exist in Cameroon and over 10 Million are subscribed to the different services.

Both mobile phones and the internet provide exciting new opportunities for one-to-one as well as one-to-many communication. One concern raised in this context is the matter of quality standards and a code of ethics.

Use of mobile phone for counselling

The effectiveness of the use of mobiles for counselling that target lactating mothers for the promotion of child health care aims at improving breastfeeding Indicators and steps for Improving Infant & Young Child Feeding Practices, Peer counselling, mother support groups, counselling by health care providers on UNICEF's 10 steps to successful breastfeeding.

Cell Phone Counselling would work during the period of Pregnancy & Lactation, which are unique phases to reduce high morbidity and mortality.

Traditionally, most delivered women do not leave their homes for 6 weeks during the postnatal period. Nuclear families are increasing and women depend on family support instead of visiting health care facilities. In this situation, the cell phone can potentially empower women to obtain timely consultations for themselves and for their infants from home.

This paper is to demonstrate the efficacy of cell phones for lactation consultation and support, to improve the following infant feeding indicators:

- Exclusive breastfeeding during the first six (6) months after delivery of the baby
- Timely initiation of breastfeeding within the first (1) hour after birth
- Reduction of bottle feeding
- Timely initiation of complimentary feeding
- Reduction of infant morbidity
- Benefit of the cost effectiveness

Lessons Learnt during the survey in Cameroon revealed the following:

- Personalized cell phone counselling showed an unprecedented improvement in infant and young child feeding indicators.
- It was well accepted and was found useful by the entire family
- It provided timely intervention
- It enhanced rapport and confidence in the health worker
- Trained front line health workers (Auxiliary nurses and midwives) can successfully implement cell phone lactation counselling
- Solve programmatic implications
- There is a possibility of scalability in the public and private health systems
- Public private partnership and corporate social responsibility can ensure sustainability.

Community Radio Broadcasters' engagement

- **Content development for trainings:** Community radio monitoring/Stakeholder interviews/Content development meetings with broadcasters is promoted.
- **Capacity building activities target:**
 - **Trainings:** Regional and national on the use of mobile phone and counselling
 - **Orientations:** involvement of broadcasters and community health workers

- **Fellowships:** to facilitate deeper coverage of IYCF issues
- **Study circles:** to assist with on-going training and capacity building
- **Field visits:** to witness IYCF interventions first-hand

Role of broadcasters

We evaluated the community radio broadcasters' engagement strategy of the advocacy activities in Cameroon and its impact. The purpose of the evaluation was:

- to document the influence of community radio broadcasters' engagement strategy on coverage of IYCF and nutrition
- to document perceptions among broadcasters on factors that influence their ability to cover issues such as IYCF and nutrition
- analysis on the extent of coverage over time was in relation to intervention activities and events.
- Community radio scanning – qualitative analysis: accuracy, messages conveyed, issue framing, imagery and tone, and sources quoted

Summaries of case study outcome

- About 45% of radio programming on health and nutrition were on IYCF and child malnutrition
- An increasing trend of community radio coverage of IYCF and child nutrition since engagement strategy began with CLP story design workshops – Reporting of IYCF and nutrition was primarily event-based
- Broadcasters in the training and/or fellowship programs appeared to produce more investigative and in-depth reports and story design programmes - Overall reporting quality appeared to be sub-optimal

Why Mobile Phones?

Rapid increase in usage of Mobile phones in Lebialem, Kumba, Dschang, Melong, Bare Bakem and Bangangte, where the Community of Learning initiative in Cameroon has arrived indicates that:

- It is more time and cost-effective than in-person counselling
- It is potential to implement in rural areas due to improved network coverage
- Cameroon culture puts emphasis on the fact that mothers do not leave the home for first 6 weeks postpartum. This is a period during which mother support should be increased.
- The number of nuclear families is increasing
- This empowers women to obtain timely consultations from home

Case Study: Cell Phone Counselling (CPC) operational model

Strategy: An operational model of using cell phone counselling for improving EBF was developed to counsel 200 under privileged teen mothers of Bonaberi from 2 hospitals: CEBEC and Bonassama District Hospitals that were enrolled in a trial to evaluate its effectiveness.

- Cell phones purchased with prepaid sim cards and recharge vouchers were given to 50 mothers (out of 200) who did not have phones

Weekly phone counselling included:

- On-demand support

- Appointment reminders
- Sending SMS
- Recording Conversations of beneficiaries with the Freedom Fone

Database was developed for the following logs:

- Weekly calls
- Missed calls
- Reminder calls
- Recordings
- SMS reports and templates

Problems Faced During Counselling

- Call switched off - 37%
- Call rejected - 5%
- Call received by relative - 31%
- Call not received - 25%
- Other problems - 2%

Challenges

- Identification documents of telephone-beneficiaries for activation of cell phones
- Unnecessary demands for assistance in other areas than health problems or even crank calls
- Dedicated staff necessary to keep track of unanswered calls and to make follow up calls frequently
- Unavailability of developed widely used operating systems

Lessons Learnt

- Cell phone counselling at home showed an unprecedented improvement in infant and young child feeding indicators in the health district of the Cameroon population
- Trained front line community health workers (Auxiliary nurse midwives) can successfully implement cell phone lactation counselling
- There are programmatic implications
- There is acceptability of scalability in the public as well as private health systems.
- It helped the women and their families by providing timely intervention to avert emergencies and reducing unnecessary hospital visits.

Conclusion

The model for Cell Phone Counselling (CPC) for improving exclusive breastfeeding (EBF) was found to be highly effective and has potential to be scaled up in public and private healthcare systems. Analysis of the case study indicates that while there is important evidence that mobile phones impact educational outcomes by facilitating increased access, much less evidence exists as to how mobiles impact educational outcomes by promoting new learning. Regarding increased access, feedback from participants indicates the convenience of greater flexibility of schedule that CPC affords to mothers. Likewise, participants underscored the benefits of being able to stay with their families during the period of counselling.

Of greatest significance, mobiles can reduce barriers to information and education, while attaining educational outcomes that are, at minimum, comparable to those of traditional educational methods.

The study also reveals, however, that there remain important issues that must be taken into consideration for future mobile phone interventions to indeed facilitate improved access to mother education. It was observed that technological issues such as screen size can remain a barrier to effective learning for many in rural areas.

The collaborative program design based around the use of mobiles also encouraged constructive learning via interaction and participation on the part of the trainees.

Although the project reviewed points to a positive role with respect to mobiles as a tool to either access health information or educational materials or deliver more learner-centred curriculum, future research should investigate the opportunity cost of investing in CPC compared to the costs and benefits of other investments in the health community sector. It is possible that investments in educational infrastructure and materials, as well as more traditional teacher training, might yield more significant beneficial educational outcomes. However, due to the absence of such comparative studies, it is impossible to tell. Moreover, very little research in the developing world has looked at comparing the costs and benefits of the different technologies used to deliver information and educational services – traditional technologies like television and radio, or newer ones such as computers and mobiles – in order to ensure that governments have the appropriate information to make wise investments.

To support what has been said above, India has designed the HealthPhone, which was launched recently by UNICEF Ammaji Channel. HealthPhone features the *Facts for Life videos* filled with engaging educational topics including health, nutrition, sanitation, hygiene and related topics. This application can save and improve on the livelihood of most vulnerable mothers and babies. For more information, visit the web site at – www.healthphone.org/ammaji

The Cameroon Ministry of Health in collaboration with the Ministry of Telecommunication and Mobile Operators now send out mother and child health care reminders through over 10.000.000 mobile subscribers.

UNICEF Cameroon and mobile operators have arranged to distribute free mobile phones to all Chief Medical Doctors in the different health districts with zero credit, so they can monitor the development of mothers and children who have stay for long without returning to the health facility.

Resources:

1. How to Use Mobile Technology to Provide Distance Learning in an Efficient Way Using Advanced Multimedia Tools in Developing Countries - Sagarmay Deb in *Multimedia, Computer Graphics and Broadcasting* (2012)
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5. Motlik, S. (2008). Mobile learning in developing nations. *International Review of Research in Open and Distance Learning*, 9(2). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/564/1071>
6. Orbicom (2007). *Emerging development opportunities: The making of information societies and ICT markets*. Ottawa: IDRC.

The author chose to focus on Cameroon as currently most developing-country interventions in information and education using mobile phones are being undertaken in Africa, exploiting the relative ubiquity of the technology in the region. This paper sought to explore the potential of mobile phones in contexts of poverty and relatively under-developed educational sectors, and, therefore, projects were limited to low and lower-middle income communities, following the World Bank classification (World Bank, n.d).