Improving Early Postpartum Care in Mandiana, Guinea: Negotiating with Families, Communities and Maternal Care Providers

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MAP OF GUINEA

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APPENDICES

Acronyms

AED	Academy for Educational Development
AID	Agency for International Development
ANC	Antenatal Care
BCI	Behavior Change Interventions
BEOC	Basic Emergency Obstetric Care
CEOC	Comprehensive Essential Obstetric Care
CHI	Community Health Initiative
EFFI	Elderly Female Family Influential
EmOC	Emergency Obstetric Care
EPP	Early Postpartum
EPPC	Early Postpartum Care
EPPV	Early Postpartum Visit/Visitor
FGD	Focus Group Discussion
GDHS	Guinea Demographic and Health Survey
GMOH	Guinean Ministry of Health
HBLSS	Home-based Life Saving Skills
IDI	In-depth Interview
IEC	Information Education Communication
KPC	Knowledge, Practices and Coverage
LSS	Life Saving Skills
MCH	Maternal and Child Health
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
PIH	Pregnancy Induced Hypertension
SC/US	Save the Children Federation USA
TBA	Traditional Birth Attendant
TTBA	Trained Traditional Birth Attendant
USAID	United States Agency for International Development
VHC	Village Health Committee
WRA	Women of Reproductive Age
WHO	World Health Organization

Respondent Category Abbreviations

AS-K	Skilled providers (Koundian)
AS-M	Skilled providers (Mandiana)
AV-K	Traditional birth attendants (Koundian)
AV-M	Traditional birth attendants (Mandiana)
CVS-K	Village health committee (Koundian)
CVS-M	Village health committee (Mandiana)
FAC-K	Women with complications (Koundian)
FAC-M	Women with complications (Mandiana)
FEMA-K	Elder women influentials (Koundian)
FEMA-M	Elder women influentials (Mandiana)
FSC-K	Women without complications (Koundian)
FSC-M	Women without complications (Mandiana)
HOM-K	Husbands/male partners (Koundian)
HOM-M	Husbands/male partners (Mandiana)

EXECUTIVE SUMMARY

The early postpartum period is critical to both maternal and newborn survival. More than sixty percent of all maternal deaths occur in the early postpartum period. The first week of life is a particularly vulnerable period for newborns as well, when fifty to seventy percent of fatal and life-threatening illnesses occur. Program emphasis should therefore be placed on providing routine skilled care for new mothers and newborns that focuses on early detection of complications and prompt referral, in addition to the conventional "fortieth day" postpartum visit. It is a particular challenge to develop early postpartum care programs that can deliver this lifesaving care in resource-poor rural areas where the majority of births occur at home in the absence of a skilled attendant.

The Africa Bureau of USAID provided funding for the CHANGE Project to develop and test a model to strengthen the capacity of women and communities to participate in the development of interventions to improve maternal and newborn survival in rural Africa. Save the Children (SC/US) partnered with CHANGE from May 2001 to March 2002, to test such a model as part of their Community Health Initiative (CHI) in Guinea.

The qualitative research had two main objectives: to identify factors that contribute to patterns of early postpartum care seeking behavior among recently delivered women; and to test the concept and acceptability of introducing early postpartum home visitors (EPPVs). The research incorporates the new global emphasis on early postpartum care as part of maternal survival programs and explores the potential role of elder female family influentials in increasing the use of early postpartum care. Several innovative approaches were employed, including "concept testing," consultative research and community negotiation. Respondents were selected from two sites in the Mandiana Province in Upper Guinea, Mandiana District and Koundian District. A total of eighty-three respondents were interviewed.

The research results provide insight into the factors underlying careseeking decisionmaking during the early postpartum period in rural Guinea. Overwhelmingly, all categories of respondents expressed a desire for more information, and a willingness to try the new approach suggested to increase use of early postpartum care.

Acceptance of an early postpartum visitor entering the household to visit all new mothers and newborns was high among all categories of respondents. Almost all respondents stated that they would accept a postpartum visit from a qualified person at any time after delivery, whether or not there was a complication. Trained traditional birth attendants (TBAs) were the preferred EPP visitor for routine early postpartum care and early detection of complications, but all categories of respondents expressed a strong preference for skilled providers in the presence of early postpartum complications.

"Conditions of acceptability" for EPP visitors were clearly expressed by each category of respondent. Women and their families would willingly accept an EPP visitor into their home during the first week after birth if they were well trained to conduct such a visit and were chosen and supported by the community to do so. The link worker should also be "kind, patient, welcoming, friendly, available and a good communicator."

Save the Children staff and the CHANGE research consultant who conducted the research held participatory discussions with community members, Village Health Committee (VHC) members, skilled providers and the local health administration to present and discuss the research findings

and negotiate an acceptable intervention design. Participants expressed thoughtful and feasible suggestions for the design of an early postpartum care intervention that could improve early postpartum care (EPPC) coverage even within the constraints that exist in their communities for both clients and providers.

The qualitative research and post-research meeting provide an example of negotiating behavior change with communities to improve early postpartum care. In Mandiana, respondents expressed a high degree of willingness to change current behaviors and to consider alternative early postpartum care options. The presence of a high level of amenability to change toward a given practice - in this case early postpartum care - increases the likelihood of rapid, measurable behavior change. Testing new concepts and behaviors before designing and implementing programs can improve the likelihood of adoption of recommended behaviors and reduce costly mistakes.

Several factors must be considered when interpreting the results from this study. One factor is the small size of the sample. The other is the influence that the presence of a major NGO like Save the Children has had in the area, where there have been five years of successful program interventions to strengthen maternal care provision, including TBA training. Undoubtedly, the presence of a cadre of trained TBAs, who already provide childbirth care and counseling in the study communities, influenced the preferred source of routine EPPC or EPP visitor. Also, village health committees have imposed substantial monetary fines in some of the villages, intended as a means of encouraging use of trained TBAs and health facilities for all births.

The combination of these factors may make it difficult to generalize and develop broad program recommendations based on the results of this particular study - to suggest for example that TBAs might be the preferred early postpartum visitor in other communities where these factors **do not** apply. However, it may be reasonable to expect that in many communities that do share similar characteristics - remote, rural areas of Africa where NGO maternal and child health programs are active – results might be similar. It is therefore important to test this generic research model again in other dissimilar settings and compare the results.

Finally, this research was designed to focus specifically on community acceptability of early postpartum care options. It is not a comprehensive exploration of the many other important behaviors often included in qualitative research on the early postpartum period. The research focused on maternal care and did not specifically investigate use of newborn care. It could be useful to expand this generic qualitative research plan and instruments to include newborns, and to integrate research questions related to other aspects of maternal and newborn care practices during the early postpartum period.

I. INTRODUCTION

Providing Care When Women and Newborns Need it Most: A Focus on Early Postpartum Care

Since 1987, safe motherhood interventions have been an integral part of worldwide national programs to improve the health and survival of mothers and newborns. Over the years, the nature and content of safe motherhood programs have changed to reflect new evidence and lessons learned from field experience. The global safe motherhood community now agrees that to reduce maternal and newborn deaths, attention must be given not only to **what** health care is required, but also to **when** that care must be available. Most prominent among the evidence-based recommendations for shift in program emphasis are "refocused" antenatal care, skilled attendance for all women during pregnancy and birth, discontinuation of TBA training and recognition of the critical importance of skilled care during the immediate and early postpartum period.

A comprehensive meta-analysis of nine published studies on postpartum maternal deaths (Bangladesh, China, Egypt, India, Malawi and USA) demonstrated that in both developing countries and the US, more than 60% of all maternal deaths occurred in the early postpartum period (12). A recent qualitative study in Kenya also documented that many life-threatening complications continue to occur in the days and weeks after birth, even among women who delivered at facilities. The "three delays" in receipt of timely, appropriate maternal care were commonly experienced by new mothers and their families throughout the early postpartum period as well (14).

Up to 45% of **all** maternal deaths occur within one day of delivery, 65% within the first week and 80% within the first two weeks after birth (12). Thus, during the first 24 hours postpartum and the first week after birth, women are at highest risk for maternal death. The risk remains significant in the second week postpartum as well.

Hemorrhage, pregnancy-induced hypertension (PIH) and sepsis are the most common causes of early postpartum maternal death. As much as 30% of all PIH occurs in the first days postpartum (28). The period of greatest risk for hemorrhage and PIH is during the first day and drops off steeply after that. Particular vigilance is needed during the first four to six hours, when postpartum hemorrhage is most likely to occur. Most deaths from sepsis occur during the second week after delivery.

The early postpartum period is critical to newborn survival as well. Neonatal mortality now accounts for approximately two thirds of the eight million annual deaths worldwide in children under one year of age. Ninety-eight percent of all newborn deaths occur in developing countries, mainly Africa and Asia. The first week of life is a particularly vulnerable period, when 50-70% of fatal and life-threatening newborn illnesses occur (28). Most of these newborn deaths are due to sepsis, asphyxia and problems associated with low birth weight.

Focusing on this time period and these causes could therefore maximize use of scarce safe motherhood program resources (12). Skilled delivery attendance and adherence to a new schedule of postpartum care by a skilled provider could markedly reduce both maternal and newborn deaths in this critical time period. Although there is compelling evidence that most maternal deaths occur during or very soon after birth, reprioritization of program resources has

not occurred and women are “still not getting the right care when they need it” (1). Early detection remains “curiously neglected” in many national programs (12).

Despite the fact that this information has been widely available since 1996, shifts in emphasis in safe motherhood program interventions to reflect this evidence have not kept pace with the expanding evidence base. Antenatal care, despite lack of evidence-based effectiveness (3) is still the most widely provided and most utilized element of maternal care in most developing countries. There has been much recent emphasis on skilled attendance among global safe motherhood program planners, but in many instances the focus remains on care during labor and delivery and does not extend to include the critical early postpartum period. Even many birth preparedness interventions stop at birth and do not include advance planning for an early postpartum visit for all new mothers.

In many settings, postpartum care coverage data refer only to the standard six-week postpartum visit. Currently, coverage for postpartum care, even the conventional 40-day postpartum visit, is substantially lower in most countries than for care during any other phase of pregnancy and birth. But **early** postpartum care, during the first two weeks after birth, is almost non-existent in the developing world (1). Care during the immediate postpartum period, the first 24 hours after delivery, needs to be re-conceptualized as a critical part of maternity care.

The World Health Organization (WHO) recommends up to four contacts with new mothers during the early postpartum period. These visits should occur at one, three, seven and fourteen days postpartum. It is only **after** this critical early postpartum period that what is commonly understood as routine postpartum care - counseling on breastfeeding, infant feeding and immunization, maternal nutrition and family planning- should take place (1). It is therefore key that increased programmatic emphasis be placed on assuring that new mothers and their newborns receive routine, skilled care that focuses on early detection of complications and prompt referral in addition to the conventional six week (or “fortieth day”) postpartum visit.

The real challenge is to develop such intrapartum and postpartum care programs able to deliver this lifesaving early postpartum care, even in resource-poor rural areas where the majority of births continue to occur at home in the absence of a skilled attendant (1). It has been recommended that the resources and training necessary to manage the most common maternal and newborn early postpartum problems should be made available to the lowest level of health care that the national health system permits (12).

In general, community-based strategies that utilize and enhance the skills of traditional community health workers and caregivers to recognize danger signs in the mother and newborn during the early postpartum period and make a timely, appropriate response may produce the greatest immediate gains in improving neonatal outcome (5).

Making interventions with demonstrated efficacy operational in a culturally acceptable, cost effective and sustainable manner may prove to be the biggest challenge of all. Community based studies are needed to define and test the impact of implementing packages of essential newborn care practices within the context of local resources and customs (5).

Although it has been said that there have been few successful examples to date (1), some progress has been made toward these goals. Several countries have redesigned their safe motherhood programs to reflect the new priority of early postpartum care, or are testing pilot interventions (20). During the past several years, increased emphasis has been placed on

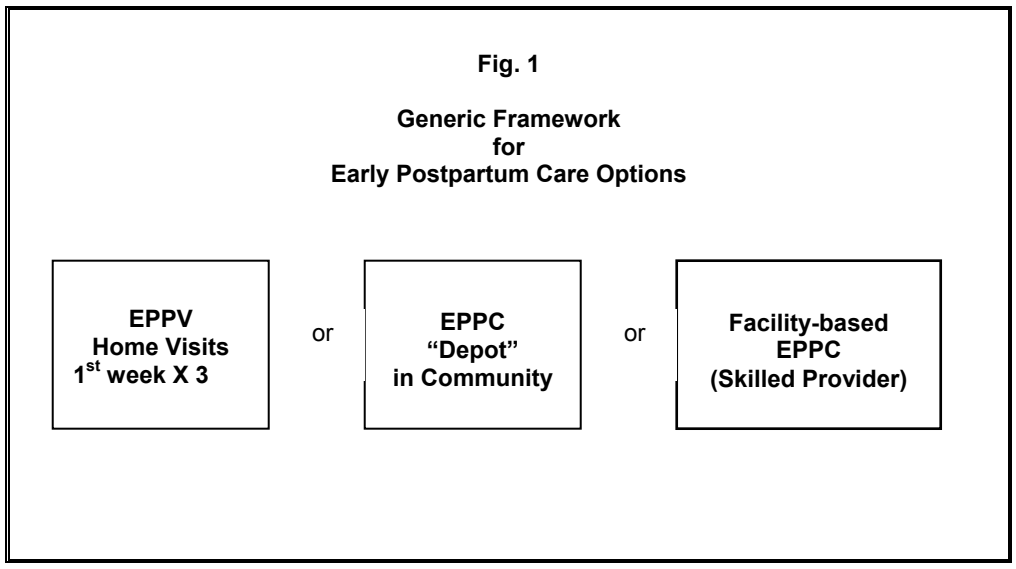
developing setting-appropriate interventions to reduce maternal and neonatal deaths, both in hospital settings (8, 9, 10) and in the community (2, 22).

The pilot programs include: extended skilled care for women who deliver in facilities for at least 24 hrs, 48 hours for complicated facility deliveries; heightened household vigilance throughout the first twenty four hours after birth for women who give birth at home; a home visit on the second or third day postpartum to question the mother and family about blood flow and fever and a third visit 7-10 days after delivery to ask about pain, erythema, the nature and quantity of lochia and a perineal examination to check healing (12).

Interventions must also be in place to educate communities about the causes of maternal and newborn deaths, the specific symptoms and timing of occurrence for each common postpartum complication and the shared responsibility of families and communities in preventing postpartum maternal deaths (12).

The Early Postpartum Visitor (EPPV) Concept

Figure 1 depicts the range of early postpartum care options that women, families and communities that may be suggested when negotiating culturally acceptable early postpartum care (EPPC) alternatives.



Fortieth-day postpartum care is almost always facility-based, and so it is possible to strengthen the capacity of skilled providers at facilities to expand the range and timing of maternal and newborn services to provide several points of contact during the first two weeks after birth. Common barriers to this model of EPP care include: lack of skilled providers trained in management of early postpartum emergencies; unwillingness or cultural constraints to new mothers leaving home for varying periods after birth; lack of awareness of the need for care during the early postpartum period, particularly if there is no clear evidence of complications and the conventional access barriers of cost, distance and transport.

The second option is to create or strengthen a cadre of informed, community early postpartum visitors (EPPVs) who can make several visits into the home of new mothers in the two weeks after birth to check for danger signs in both mother and newborn. Common barriers to this

model might include: unwillingness or cultural restrictions on contact with or entry into the home of new mothers; lack of awareness of the need for early postpartum check for mother and newborn and lack of models for interventions to “train up” a cadre of informed, community EPPVs.

The third option, an “EPPC depot” in the community, could be an option if concept testing in households demonstrated resistances to an external visitor entering the home. In those cases, a community-based alternative might provide a more culturally acceptable and still accessible source of EPP care, along with interventions for household-level training to improve early recognition of postpartum danger signs. The “linkworker” at the EPPC depot could evaluate, refer and accompany the woman or newborn to skilled care.

This summary report describes the results of qualitative research collaboratively developed and implemented by the CHANGE Project and Save the Children US to inform the design of a community-negotiated intervention incorporating early postpartum visitors to increase the use of early postpartum care.

II. Background

A. Background of the CHANGE Project's Maternal Health Component

The CHANGE Project (AED/The Manoff Group) was designed to identify, develop and apply innovative behavior change tools and approaches to improve behaviors relevant to maternal health, child health and nutrition. CHANGE has received major support from USAID's Global Bureau (SO2 team) to develop tools and approaches to specifically address priority behavioral issues in maternal mortality reduction and to work with partners to plan, implement and evaluate these tools and approaches. CHANGE collaborates with field partners and programs where improved maternal health services are in place, or being strengthened, as part of the globally endorsed "systems approach" to reducing maternal and newborn deaths.

A generic set of model tools is being developed and tested with partners in several country settings. The set of tools, "A Minimum Package of Behavior Change Interventions for Maternal Survival," focuses on changing behaviors at individual, household, community and institutional levels. The major behavioral objectives are: to increase birth preparedness; to increase the use of a skilled attendant during pregnancy, birth and early postpartum; to increase the timely use of skilled care for obstetric and newborn complications and emergencies and to improve the provision of quality maternal and newborn care by skilled maternal care providers.

The CHANGE Project is developing a comprehensive package of behavior change interventions to improve maternal survival. The framework for behavior change interventions to improve maternal survival has three main components, which focus at the individual/household level, the community level and the care provider/facility level. The approach suggested for each level is based on a comprehensive review of behavior change field experience and research during the first decade of the Safe Motherhood Initiative and takes into consideration the new global recommendations for maternal survival program priorities based on this evidence and experience.

The generic qualitative research tools developed by CHANGE as part of the Minimum Package help to identify the country-specific, local dimensions of decision-making related to maternal health care seeking and other contextual factors that can help increase demand for services and design services that meet the stated preferences of women and communities. The field-tested generic tools and the lessons learned through field testing will provide a model for adaptation and implementation by other countries that want to include research-based behavioral interventions as part of comprehensive maternal survival programs.

In addition, the CHANGE Project received funding from the Africa Bureau, specifically to develop and test a model to strengthen the capacity of women to participate in the development and implementation of interventions to improve maternal and newborn survival in rural areas of Africa. Save the Children (SC/US) agreed to partner with CHANGE to explore the possibility of testing such a model as part of their project.

B. CHANGE Partnership with Save the Children

Save the Children's Community Health Initiative Project

Since 1997, Save the Children (SC/US) has been working with the Guinea Ministry of Health (GMOH) and local partners to improve maternal and child survival in 73 communities in Mandiana District. A primary objective of the Community Health Initiative (CHI) Project has been to strengthen community and household capacity to prevent maternal deaths by improving access to and use of skilled birth attendance and emergency obstetric care (EmOC) (23).

The project's strategy to improve maternal survival includes: 1) improving health provider competency in managing obstetric emergencies through life saving skills LSS training; 2) strengthening community-based delivery care by training of traditional birth attendants (TBAs) in LSS; 3) strengthening community capacity to manage obstetric emergency fund and transport schemes by establishing and training village health committees and 4) improving household and community knowledge of and care-seeking for obstetric emergencies.

From May 2001 to March 2002, CHANGE collaborated with Save the Children to assist in the assessment of the maternal survival behavior change component of their Community Health Initiative (CHI) in Guinea. Funded by USAID, SC/US began project activities in 1997 with the GMOH to reduce maternal and child deaths in Mandiana Province, a remote, rural and medically under-served area in Upper Guinea. One of the primary objectives of the SC/US/GMOH program in Mandiana is to increase use of skilled attendance by all pregnant women. A second objective is to improve household knowledge of danger signs and access to emergency obstetric care.

SC/US staff expressed an interest in increasing the proportion of women receiving early postpartum care during an initial field visit by a CHANGE consultant in July 2001. The qualitative research was conducted in Mandiana and Koundian districts from January to February 2002.

Applying a Behavior Change Intervention (BCI) Approach to Increasing Use of Early Postpartum Care

A behavior change approach is a process for planning and implementing a comprehensive, strategic set of interventions and activities that aims to change behaviors at many levels to achieve a health objective. A behavior change approach identifies priority behaviors for change, uses qualitative research among critical target audiences to define major factors influencing these behaviors and recommends a research-based set of behavior change interventions. A broad range of interventions might be required to change behaviors directly as well as to create a supportive community and policy environment for change. This usually requires expanding the range of "behavior change" activities beyond conventional communication, to link and coordinate communication activities with training, health systems support, product and service improvements and policy changes that may not usually be recognized as essential components of a behavior change strategy.

A comprehensive approach to behavior change to improve maternal and newborn survival recognizes that behavior change does not result from increasing knowledge alone. Many contextual factors, including the behaviors of a wide family and community network, influence individual behavior change. Creating an "enabling environment" – addressing barriers, resistances and motivators - is essential. The strategic selection and implementation of an

appropriate set of behavior change interventions can help to directly improve maternal care-seeking practices and help to create a supportive, "enabling" environment at household, community, health facility and policy levels, within which behavior changes to promote maternal survival can best occur.

The initial step in applying a behavior change approach is to conceptualize health objectives in behavioral terms and develop a set of behavior change objectives for each health outcome. The contributing behaviors and underlying factors at many levels that influence healthy outcomes - individual, family, community, health system and policymakers - should then be assessed and addressed for each category of behavior and for each health objective.

One of the fundamental principles of the behavior change approach is promoting behavior change in the context of social change. Community engagement, ownership and empowerment are recognized as key to sustained behavior change. At the community level, a behavior change approach focuses on activities that create and sustain an enabling environment for behavior change and social change, building partnerships with communities and developing interventions considering the community's own assessment of their needs and priorities. Community-centered behavior change interventions promote the empowerment of community partners and encourage collaborative design and implementation of local programs. A community-oriented behavior change approach recognizes people and communities as agents for their own change, placing information within the community for dialogue, debate and collective action and using community-available resources to overcome barriers when feasible. An assets-based approach helps communities identify, strengthen and utilize resources and knowledge that exist within the community itself to support behavior change and improve health outcomes.

CHANGE Approach

There are several concepts/elements involved in the CHANGE behavior change approach to improve maternal survival that are key to the success of the approach. Among them are the central concept of behavior-based programming, a standardized format for strategic application of research results to behavior change strategy development, "concept testing," social network analysis and "negotiating" behavior change.

Behavior-Based Programming

The concept of behavior-based programming is central to CHANGE's "Minimum Package of Behavior Change Interventions to Improve Maternal Survival" (**Appendix I**). This concept places behavior change at the center of the program design process. As described above, developing a behavioral framework based on a program's desired health outcomes is the initial step, beginning with clear delineation of the "ideal" behaviors that would be required of all potential influentials, at all relevant levels of intervention, to achieve the improved outcome. A set of research objectives per category of respondent, based on these ideal behaviors, guides the systematic design of a qualitative research plan and instruments that contain all the elements, not only to document current behaviors in relation to the "ideals;" but also to explore how current behaviors can be redirected, repatterned or repositioned toward the ideal.

Appendix II contains a sample instrument from CHANGE's generic qualitative research tools to explore factors influencing use of early postpartum care. The tools, a set of behavior-based instruments, were designed to document actual behaviors, barriers, motivators, amenability to change, conditions of acceptability and "user characteristics." Each of these elements is

essential to the design of a comprehensive set of research-based behavior change interventions.

The design of these instruments incorporates the information needs suggested by recent global emphasis on universal use of skilled care at birth; the need to reposition TBAs as “links” to skilled care for all women, instead of their current role as care providers; the critical, lifesaving importance of use of skilled care during the early postpartum period and the need to enable skilled maternal care providers to actively participate in provision of higher quality, more “caring” maternity services for women.

BCI Strategy Formulation Grid

CHANGE uses a standardized format for systematic application of research results to behavior change strategy development that has been successfully applied in a wide range of health programs over the past decade. One of the most persistent gaps in the design of the behavior change component of programs is that often, even when results from qualitative research that was well-conceived, well-implemented and well-analyzed are available, the results are not systematically carried forward into the strategic design of comprehensive behavior change interventions. The BCI strategy formulation grid suggested for use with the generic qualitative research instruments to explore factors influencing use of early postpartum care helps to address this gap by providing a simple framework for incorporating research results into BCI strategy design (**Appendix III**).

Consultative Research: Concept Testing and Negotiated Behavior Change

To date, consultative research is most widely known through its application to child nutrition, but is appropriate to promoting early postpartum care as well. Consultative research maximally involves communities and households not only as respondents in the qualitative research, but also in the design, testing and modification of new behaviors to increase acceptability and adoption. For example, in this research all categories of respondents are specifically asked for their opinion on the “new” concept of repositioning TBAs as “links to skilled care,” instead of actual care providers. Testing this concept on the ground with the people who must actually agree to try it is critical to assure the potential acceptability in the field of the global consensus on promoting skilled care for all women.

Negotiating behavior change – talking with women, families and communities to develop realistic, feasible behaviors that come as close to the “ideal” behaviors as local conditions permit and to determine the specific “conditions of acceptability”- before behaviors, strategies, and interventions have been decided on can increase the likelihood of sustained behavior change.

Localization of Behavior Change Interventions

There is a growing recognition that generic messages promoting broad behaviors, use of skilled attendance at birth for example, need to be “localized” to have contextual meaning in order to be effective. Too often, “messages” are developed centrally, in countries, regions or even at global level, and may not retain the intended meaning once they reach families and communities who live their lives locally, often within well-defined cultural boundaries. Defining local cultural context and linguistic subtleties can make a generic message locally meaningful and actionable.

An important initial part of the qualitative research process is developing a **lexicon of maternal health terms** relevant to childbirth and early postpartum. The purpose of this lexicon is more than simple translation of predominantly Western-oriented medical terms and concepts into the local language. A well-researched lexicon also captures the colloquialisms or local "slang" terms. As many traditional cultures have a strong, vital oral tradition, there are also often proverbs, idioms and rhymes that are used to indirectly express concepts that are culturally sensitive.

Documenting the precise words, phrases and concepts that communities themselves use allows them to be skillfully woven into behavior change materials and messages to increase local comprehension. This localization process has been called the "house-to home" metaphor by UNAIDS. The lexicon of terms developed to guide the research in Mandiana is included as **Appendix IV**.

C. Country Background

Skilled Maternity Care in Guinea

Increasing the use of skilled maternity care is a major priority of the Guinean Ministry of Health as part of its effort to reduce maternal mortality. The goal of the Guinea Safe Motherhood Program (GSMP) is to reduce the maternal mortality ratio (MMR) by half from the current national level of 528 per 100,000 live births by the year 2010 (7). The GSMP also aims to increase skilled childbirth attendance from 35% to 80% and to increase receipt of postpartum care from 17% to 50% (18). The GSMP outlines a set of key activities to increase access to and use of skilled maternity care and to improve the capacity of the health system to manage and refer obstetric complications.

Coverage and Regional Disparities

There are wide regional disparities in the use of skilled care during pregnancy and birth in Guinea. Between 1996-1999, thirty-six percent (36%) of all births nationwide were assisted by a skilled attendant, either a doctor or nurse/midwife (7). In urban areas, births were more than three times as likely to be attended by a skilled provider than in rural areas (64 % and 18%, respectively). In both urban and rural areas, nurse/midwives provided most skilled delivery care.

Traditional Birth Attendants (TBAs) attended slightly more than one third of all births nationwide. Use of TBAs was more than three times as high in Upper Guinea and Forest Guinea (29%), as in the other regions (10%). More than 40% of all births were attended by a relative or were unattended, meaning that no one at all was with many Guinean women giving birth. Unattended births were most common in Central Guinea (75%) and least common in Conakry (9%). Table 1 presents more details of service coverage by region.

Table 1. Assistance during delivery by place of residence and region, GDHS, 1996-1999

Guinea 1996-99	Assistance during delivery (% of births)				
Place of residence	Doctor	Trained nurse/midwife	Traditional birth attendant	Relative or other	No one
Urban	13	64	9	11	3
Rural	4	18	24	44	9
Region					
Lower Guinea	5	27	9	47	12
Central Guinea	3	16	4	61	14
Upper Guinea	5	15	29	43	8
Forest Guinea	3	36	44	16	1
Conakry	21	67	4	6	2
Total	6	30	21	36	7

A disturbing discrepancy in urban-rural maternity care use is found among adolescents. In rural areas, women under 20 years of age are the least likely of all age groups of rural women to use skilled delivery care (only 22%). In urban areas, skilled attendance by a doctor or nurse/midwife was highest among young women than women of all other age groups (77%) (7). The pattern among adolescents in rural areas is of concern because obstetric risk is higher among young primiparas.

Antenatal care (ANC) use is high throughout Guinea. Three-quarters of all women (73%) made at least one ANC visit during pregnancy and 48% of women made four or more visits (7). There were considerable differences between regions in the type of ANC provider. For example, doctors provided 33% of all ANC in Conkary and only 12% in Forest Guinea.

The contraceptive prevalence rate in Guinea is only 5%. Only 10% of women have ever attended any type of school, including Islamic schools where teaching is primarily Koran-based (7).

Ninety percent of urban women, and 50% of rural women, live within five kilometers of a health facility providing delivery care. However, because many health facilities cannot currently provide even basic care for obstetric emergencies, to reach appropriate emergency obstetric care it is often necessary to bypass health centers and go directly to a hospital. For 46% of rural women this requires an hour or more of travel by vehicle, if a vehicle is available (7).

Nation-wide efforts are underway as part of the GSMP to upgrade the health system capacity to provide skilled care for all women, and emergency obstetric care (EmOC). These include Ministry of Health (MOH) activities to upgrade district hospitals and to establish a functioning referral systems between district hospitals and other levels of maternity care. Other donors have also been working with the MOH to strengthen training of maternal health providers, transport and logistics, management information systems and communication activities. In addition, several projects, including CHI, are training TBAs in a modified life-saving skills program. Despite its commitment to increasing professional childbirth attendance for all women in Guinea, training TBAs is regarded by the MOH as an interim measure to extend the reach of skilled birth attendance, particularly in rural areas where many health facilities remain understaffed (26).

Skilled Maternity Care in Upper Guinea

Maternal health indicators in Upper Guinea indicate lower use of maternal health services than the national average. As Table 2 shows, there is a wide gap when compared to urban centers such as Conkary. In Upper Guinea, skilled birth attendance is one fourth that of Conkary. Fertility is much higher among women in Upper Guinea, who have an average of three more children than women in Conkary.

Table 2: Comparison of Selected Maternal Health Indicators: National, Upper Guinea and Conkary. Guinea Demographic and Health Survey, 1996-1999.

Indicators	National	Upper Guinea	Conkary
Total fertility rate	5.5	6.9	4
Current use of modern contraceptive method	5%	--	--
Antenatal care (1+ visit)	73%	--	--
Tetanus toxoid (2+ doses)	61%	45%	85%
Delivery by skilled attendant (doctor or nurse/midwife)	36%	21%	88%

The Setting: Mandiana Province

Mandiana Province lies in the region of Upper Guinea, a savannah zone in the northeast corner of the country, bordering Mali and the Ivory Coast. The Province has a population of 195,000, with an estimated 39,000 women of reproductive age (23). The area is sparsely populated, with only nine inhabitants per square kilometer, less than half the average national population density. Most inhabitants are Malinke with small populations of other ethnic groups. The dominant religion is Islam. The local economy is based on agriculture, traditional mining of gold and small-scale commerce. Each year from July to September, the region experiences a period of low availability of food due to depletion of last year's harvest (23).

The population is composed of patrilineal, extended kinship units in which polygynous unions are common. Women have key roles as caretakers of children and managers of food resources within the family. While there are co-wives, mothers-in-law and other elder female relatives in many of the large Malinke households, the birth mother is responsible for daily care and feeding of her own young children (23).

Culture

In Upper Guinea, women's perspective on childbearing and pregnancy vary according to different stages of the life course (known as kare in Mandinka). Kare begins with deng muso (child), progresses through sunkuru ni, sunkuru, salibani, koro muso and finally to muso ba koro (the highest stage of eldest women who are "closest to the ancestors"). Different types of reproductive talk and behavior are "condoned" according to stages in kare and there are traditionally rules governing talk among women in different stages of kare. These rules have eroded over time with more exposure to modern ideas and practices regarding childbearing and

childrearing (11). However, it is still important to be aware of sociocultural beliefs that may compete with modern maternal health information and advice.

Maternal Care Health Infrastructure in Mandiana

The region is served by one district hospital, 11 health centers and 15 health posts. Many of the health centers are not fully staffed and some positions are staffed by persons without the full qualifications (23). Villages are located up to 45 kilometers from the nearest health facility, requiring travel on unpaved roads and across rivers in some cases. Some villages are completely isolated during the rainy season. Lack of transport is a major barrier to accessing skilled care. Bush taxis run infrequently on the main road and many women arrive at the district hospital by motorcycle, often owned by health center staff (17).

To date, more than 44 maternal and child health (MCH) nurses from the hospital and other local health facilities have been trained in a three-week course using a modified home-based lifesaving skills (HBLSS) training curriculum. In addition, one TBA in each of the 73 communities received an additional one-week intensive course in HBLSS. Trained TBAs account for about 40% of the total number of active TBAs in the Mandiana area. MOH policy encourages trained TBAs to conduct deliveries in the health centers, rather than at home. In Mandiana town,TBAs currently assist their clients during hospital births as well (26).

Seventy-three village health committees (VHCs) have been established to monitor births, maternal and child deaths and to promote use of maternal and child health services in the community. Each VHC has five members selected by the community, three of who are women and one who is the “chief TBA” of the community. A total of 550 VHC members received training on the importance of maternal care, birth preparedness and recognition of obstetric danger signs. VHCs also established and maintain community banks (caisses), revolving funds to pay for costs of obstetric emergencies in each of the 73 villages.

An unusual feature of the SC/US project is the monetary fines that some VHCs have imposed on households that do not use a trained TBA as their birth attendant. The fine is intended to enourage people to use skilled attendants or trained TBAs. According to SC/US, almost half of the 73 VHCs regularly enforce the fine, 4,000 – 5,000 CFA (approximately US$2.50). Most of the revenue generated goes to the local administration and a small portion goes to the trained TBAs.

There are other efforts underway in the region to improve access to and use of essential obstetric care among women in Mandiana. For example, the Guinea National Safe Motherhood Program (GNSMP) plans to begin upgrading the EmOC capabilities of Mandiana District Hospital in late 2000. This includes a new surgery for the maternity ward, a blood bank and training of hospital and health center staff. Radio communications will be upgraded to link the hospital with health centers, safe motherhood communication activities have been conducted, and more than 4,000 women of reproductive age (WRA) in the target area have been contacted (27).

A CHANGE consultant who visited the study area in July 2001 concluded that data on use of facility-based postpartum care in Mandiana are inconclusive, and that little is known about the content of the postpartum visits that do take place. CHI project objectives state that trained TBAs will visit pregnant women during the first week after delivery to check on bleeding and uterine involution, to administer vitamin A (if not done at birth) and to give advice on

breastfeeding and immunization of the newborn. MOH health agents currently supervise the trained TBAs, but their supervision checklist does not include postpartum care (17).

Women in Mandiana receive little or no early postpartum care, according to the global definition of three skilled postpartum visits during the first week after birth, either days 1-3-7 or 2-4-6 postpartum, depending on national protocol. The SC/US project promotes a first postpartum visit to a health facility as soon as possible after the seventh day postpartum, because cultural taboos do not permit women to leave the house before this time. Thus, some women may receive postpartum care from a skilled provider at a health facility if they bring their infants in for their first immunization. For most women however, this visit is for newborn care and represents *contact* rather than *care* for the woman herself.

D. Research Background

Adapting the Generic CHANGE Qualitative Research Plan and Instruments to Meet Specific Partner Program Needs

Although some elements of the EPP research plan and process could likely be used in all research settings, the generic CHANGE qualitative research tools are usually adapted to accommodate specific program objectives and local setting-specific considerations.

The Save the Children (SC/US) Community Health Initiative in Guinea had as one of its main maternal health objectives increasing rates of skilled attendance by 100% in the project implementation area (from 36% baseline in 1997 to 70%). "Skilled attendance" in this setting includes the TBAs trained by the project. Among its other objectives are increasing household knowledge of danger signs and establishing community funds for obstetric emergencies. There were no specific early postpartum care objectives stated.

Based on the findings of the CHANGE consultant in June 2001, CHANGE proposed a research activity to develop an intervention to increase early postpartum care use in Mandiana. The research had two main objectives: to identify factors that contribute to patterns of early postpartum care seeking behavior among recently delivered women and to test the concept and acceptability of introducing early postpartum home visitors. The EPPC activity incorporates the new global emphasis on early postpartum care as part of maternal survival programs and explores the potential role of elder female family influentials (EFFIs) in increasing utilization of EPPC. The use of several innovative approaches was proposed - community negotiation, consultative research, "concept testing" and social network analysis.

Behavior-Based Research Objectives/Planning the Research

The set of generic instruments –IDIs and FGDs—were reviewed in detail with SC/US staff. CHANGE assisted in the development of behavior-based set of research instruments, beginning with a clear statement of ideal behaviors for each category of respondent thought to be involved in decision making about use or provision of early postpartum care. **Appendix V** contains a list of EPP behaviors related to acceptance of the EPPV concept. A qualitative research plan and a set of qualitative research objectives and instruments were drafted, specifically focused on early postpartum care**.** The draft plan and instruments were reviewed and approved by SC/USF field staff in Mandiana, and later finalized in the field by a CHANGE consultant. **Appendix VI** lists the study activities and time schedule followed.

The Qualitative Research

Perhaps the most widely used qualitative method is focus group discussions (FGDs). However, qualitative research results based on FGDs only, particularly when exploring childbirth-related issues, often do not provide the depth of information required to develop high quality behavior change interventions. For this reason, the research plan relies heavily on in-depth interviews (IDIs) with most categories of respondents.

Qualitative Research Plan

The respondents were selected from two sites in Mandiana Province, Mandiana District and Koundian District. The sites were designed to represent a location near to the District Referral Hospital and far from the hospital, which is the only facility in the region with the capacity to provide comprehensive essential obstetric care (CEOC). Koundian is about 75 kilometers, or roughly one hour, away from the hospital.

The qualitative research instruments included:

In-depth interview (IDI) guides for**:**

- Women who had experienced a normal delivery within the past six months,
- Women who had experienced obstetric complications during the past six months and their families,
- Elderly Female Family Influentials (EFFIs) of women who experienced a normal delivery during the last six months,
- Skilled birth attendants, including nurse-midwives and physicians and
- Traditional birth attendants.

Focus Group Discussion (FGD) guides for:

- Husbands/male partners of women who had delivered during the past six months and
- Village health committee (VHC) member.

The VHCs facilitated identification of respondents in Mandiana and Koundian. As all births are reported to VHCs, locating appropriate respondents was relatively easy. Once the respondents were identified by the VHCs and agreed to participate in the study, VHC members introduced the interviewers to the respondents. Care was taken to explain the objectives of the study to each respondent. If respondents were not comfortable (this occurred only once), the VHC assisted the research team to find another respondent.

Four FGDs and 47 IDIs were conducted in the two study areas, according to the original research plan. A total of 83 respondents were interviewed. For each category of respondent equal numbers were chosen from Mandiana and Koundian, except for the category of skilled providers. Five skilled providers were interviewed in Mandiana, and two skilled providers were interviewed in Koundian. All interviews were conducted in Malinke, except those with skilled providers that were conducted in French. The interviews were recorded on micro-cassette and later transcribed into French by the interviewers who collected the data. Table 3 shows the breakdown of interviews by type and category of respondent.

Table 3. Number and type of interview conducted

	In-depth Interviews			Focus Group Discussions		
Target Population	**Mandiana**	**Koundian**	**Total**	**Mandiana**	**Koundian**	**Total**
Women who had normal birth in last six months	5	5	10			
Women who had obstetric complications in past six months	5	5	10			
Elder female family influentials	5	5	10			
Traditional birth attendants	3	3	6			
Skilled Providers	5	2	7			
Husbands/male partners of women who had birth in past six months				1	1	2
Village health committee members				1	1	2
Total	**23**	**20**	**43**	**2**	**2**	**4**

Community Interviewers/Interviewer Training

Five interviewers were recruited from Mandiana to conduct the interviews. The interviewers all had previous work experience as SC/US community health "animators." In selecting interviewers with this background, the team recognized that some respondents might know their interviewers and that this might influence responses. It was agreed, however, that the benefits of using these former employees - familiarity with the area, confidence of the community leaders in their ability and their existing maternal health knowledge - outweighed the barriers.

SC/US/Guinea staff and a CHANGE consultant conducted the four-day interviewer training. The training reviewed the research objectives, discussed basic concepts of early postpartum care and reviewed the lexicon of terms containing local maternal health terms and definitions and basic techniques in conducting in-depth interviews and focus group discussions. Each research instrument was reviewed and translated from French into Malinke. One day was spent pre-testing each instrument and making the necessary adjustments.

III. RESEARCH RESULTS

The research results provide insight into the factors underlying careseeking decisionmaking during the early postpartum period in Mandiana District. Overwhelmingly, all categories of respondents expressed a desire for more information and a willingness to try the new EPPV approach suggested to increase use of early postpartum care.

A. Early Postpartum Care

Traditional Behaviors Related to the Early Postpartum Period

In Mandiana, behaviors during the first week postpartum are guided by cultural traditions that clearly recognize special maternal needs during the early postpartum period. Particularly during the first week after delivery, special customs are observed. The name given for this period is "Dyubabatoya wait" which means "time of the new mother." Special expenditures are made to provide for the new mother and newborn and clothes are purchased for the new baby. Assuring the availability of nutritious food for new mothers is widely recognized as important. The mother eats honey, kanin, chicken, beef stomach, fish and fonio.

During the two weeks after birth, new mothers are expected to rest at home. Men help lighten their burden of work, and especially during the first week after birth, other members of the family or a co-wife do housework such as cooking. Trained TBAs, mother-in-laws, and other older women in the family also look after the new baby.

> *"The new mother can wash her clothes and take care of herself. Other members of the family can help her wash clothes and heat water for her during the first week. If there are other co-wives they can prepare the meals up to 40 days after the birth because the new mother should do nothing" (FSC-M4)*

> *"The new mother shouldn't do anything herself, other people should prepare meals for her, heat water for her so she can bath for the whole week after birth." (FSC-K5)*

Use of traditional herbal remedies during the early postpartum period is common. Elder female family influentials (EFFIs) use traditional herbal medicines for certain illnesses, however they also believe that new mothers and newborns should use modern treatments. Use of herbs is more common in remote rural locations than in urban areas. In Koundian, women reported they occasionally use traditional medicine because it is less expensive than modern medicine and that certain illnesses are better treated traditionally. In Mandiana, women did not mention traditional medicine frequently, except to state that they rarely used it, especially for problems with pregnancy or delivery. Most skilled providers recognize that women use some traditional medicines, but did not know which herbs are used for which problems.

Restrictions: "Dyubabto tana"

Some superstitions influence the movement of new mothers and newborns. New mothers typically stay at home during the first week after delivery so as not to risk seeing people of a lower class or a certain caste, which would mean bad luck or even death for the mother and her new baby. This is called "Dyubabto tana." A banana leaf branch is placed by the door of a household to indicate the presence of a new mother and newborn.

"There are men who should not see the new mother after birth. "Dyubabto tana," it is not food for these men to see you, in any case that is what is said here in our culture, but as for me, I don't know why that is so." (FSC-M3)

Other reasons were given for why women stay in the house during the first days after birth, for example, because the "wind" is not good for her health. Most women reported that new mothers could not leave the house until after the baptism of the baby, which occurs on the 7th day after birth.

"The new mother should not go out during the first week after birth because there are people in town that should not see the new mother. After the first week the new mother can go out, after the umbilical cord has healed." (FSC-M4)

Even within the context of traditions limiting movement of new mothers, there are culturally appropriate mechanisms to overcome this constraint. After the seventh day, maternal seclusion is less strictly observed. Most "exceptions" during the early postpartum period involve complications with the baby, not the mother herself. Most women and men reported that new mothers could leave the house during the early postpartum period to seek care if their baby were ill or if there was a problem with the mother. If a mother cannot leave the house, the baby can be given to the trained TBA or a member of the family who can bring the baby to a health facility for care. Most EFFIs stated that whenever an early postpartum problem arises, the best option is to bring the mother to a health facility. There is also a strong existing practice of either the mother or the family taking a healthy newborn to a health facility for vaccination after the seventh day postpartum.

"Yes, she can go out, especially if the baby is ill, she can go out." (FSC-M3)

"She can't do anything for herself and for her baby unless someone helps her. It is her family that must bring the baby to the health facility for her. If the new mother is sick and the baby is fine the family can take care of the baby until the mother is feeling better." (FSC-M3)

"If there is a problem and she can't leave the house it is necessary to find transportation to bring her to the hospital. The women must inform the trained TBA and the TBA informs the family who then finds some transportation." (HOM-M2)

"If the baby has a problem and the mother can't leave the house, the trained TBA can take the baby and bring it to the hospital or if her co-wife is there, or sister-in-law or her husband." (HOM-M2)

VHC members agreed that if there is a problem with the new baby during the first week after delivery, the mother will not take the baby to the health facility because of "Dyubabto tana," but will ask a trained TBA or other family member to take the baby to the health facility for treatment. A few respondents felt that the traditions guiding the early postpartum period were inviolable.

"Even if the baby has a problem before the seventh day the mother can't go out for risk of meeting someone who is taboo for the new mothers." (FSC-K3)

Some skilled providers stated that it was not good for the mother's health to leave the house unless there was a health emergency. A few skilled providers, however, reported that the new mother could leave the house to bring the baby to the health center. In Koundian, skilled providers stated that when a woman has a birth complication in the early postpartum period and

she can't leave the house, a skilled provider is summoned to the home by a TBA to check on the mother and new baby.

Knowledge about Early Postpartum Care

Many women were aware that routine and emergency postpartum care is available. Few women, however, reported that they had been informed of the importance of a health consultation during the early postpartum period for them and their baby. Men also reported that only a few new mothers knew of the importance of postpartum consultations and get check-ups after birth.

> *"It depends on whether they know the importance. Those who do, get a check-up. On the other hand, those who don't know the importance of a postpartum exam, don't get a check-up." (HOM-K2)*

> *"There are women who go with their babies, and others who don't go because there are always women who are difficult, who can spend all their time when they are pregnant without going to the health center." (FEMA-M5)*

> *"We think it is necessary that the baby and mother be consulted immediately after giving birth and again during the first week after birth." (HOM-M2)*

> *"I have heard of a skilled provider in our community that can take care of me and my baby but they are far away. Sometimes they come to vaccinate the children and they counsel us not to give birth at home but to go to the hospital." (FSC-M5)*

There was widespread stated awareness of the need for EPP care among TBAs. The TBAs interviewed stated that all new mothers should get a check-up after birth, particularly if there was a problem.

> *"We do it (check-up for women other than those they assisted). Because I was given the women in our sector to look after. Even if a woman gave birth without my knowledge I go to see the new mother and take care of her and the new baby." (AV-K1)*

> *"When a woman has problems after childbirth she must go to the hospital and tell the skilled provider what she is suffering from and she will be examined and given a prescription of the necessary medicines." (AV-M3)*

> "*We counsel and treat the new mothers after a week because if she remains without treatment, she can fall ill and that would cause problems." (AV-M2)*

Skilled providers and VHC members were especially aware of the need for EPP care. All the skilled providers stated that the baby should get a check-up right after birth even if they are in good health, and that women, with or without obstetric complications, must receive care immediately at least two or three times after delivery. VHC members also stated that women should receive care beginning immediately after delivery, one week after and at the end of the 40 days. Yet both groups stated that women do not routinely seek EPP care.

> *"Effectively, a women with obstetrical problems must be treated immediately, I think that it should continue and women after childbirth should stay at the hospital. Some women don't get the postpartum care they need because as soon as they feel even a little bit better they keep themselves from us or leave the health facility." (AS-M5)*

"We examine the mother to be sure that she is in good health. We examine to know whether there is a problem and if so we treat it." (AS-M2)

"… I could assist a birth and then someone else comes to consult the woman. The visits happen often at the maternity or where the woman gave birth, often on the seventh day. We oblige the women to come, I keep their health cards until they come back otherwise we don't see them again. When they come back we counsel them to go to the health center for the vaccination and for the new mother to get examined." (AS-M4)

"It is very necessary to see the baby and new mother to see that the mother hasn't developed a infection postpartum and to see if she is breastfeeding correctly." (M2)

"Before many cases were missed but now that there is a health center it is rare. Many women lost their lives during childbirth, now they understand (the importance of skilled care)." (CVS-K1)

Many women do receive an EPP home visit, usually by a trained TBA. These visits are part of the SC/US project activities. Men and VHC members agreed that new mothers and babies, even if they are in good health, often receive a visit from trained TBAs who give advice on exclusive breastfeeding and a nutritional diet for the mother. Some TBAs reported that they visit the new mothers more than once during the first week postpartum and a few said they do not visit the mother until after the first week.

"When a woman gives birth we look after her for a week because she could give birth without any problems but could have a problem postpartum. It is necessary for the trained TBA to be present to give important recommendations concerning her health. We return often to see if the new mother is hurting, because sometimes women hide when they are hurt. As soon as we discover such a case we accompany her to the health facility." (AV-K2)

"Women talk to trained TBAs if there are problems because it's the TBAs that they know. They are the best people to help because they are trained. They provide care such as cleaning the baby, counsel women not to give water to the new baby, visit the new mother for three days, bring the baby to be vaccinated." (AV-M1)

"If you assist a woman during delivery, you know if the woman is healthy or not, when she should return home, you tell her to come back to the health facility after a week to be examined" (AV-M3)

Skilled providers said that EPP care is rarely sought by women unless they have a problem. In general, women do not go out to a health facility for a routine postpartum consultation in the days and weeks following birth because they think that if there is not a problem, it does not make sense to go. In the urban areas, home visits are not made by skilled providers unless it is an extreme emergency.

"Sometimes women miss getting postpartum care by negligence on the part of the skilled providers." (AS-M4)

Home visits by skilled providers for **routine** early postpartum care are virtually unheard of. None of the women or men reported receiving a visit from a skilled provider at their home. The women said they did not know anyone else in their village who had received a visit from a health agent or skilled provider. The only care providers who make routine home visits are trained TBAs and members of the VHC.

"Once the wives leave the health facility after the delivery, the skilled providers are finished with them." (HOM)

"Never, you have to go to the health center. We can't say why the skilled providers don't come to us, certainly it's because we don't have much money." (HOM-K2)

Some women appear to "fall through the cracks" of the project's home visiting system and receive no EPPC, not even from a TBA. TBAs agreed that not all new mothers receive check-ups, and some skilled providers also stated that some women are being missed during the early postpartum period.

B. Care Seeking in Early Postpartum Emergencies

Recognition of EPP Complications

Some of each category of respondent could name a few maternal early postpartum danger signs. "Dizziness" was most commonly named. Fever, bleeding and pain were the next most frequently mentioned. Most women mentioned problems that they thought were related to birth and early postpartum including bleeding, fever, dizziness, malaria, kidney pains and anemia. Men had heard of bleeding, dizziness, fever, headaches and stomachaches. Skilled providers believe that families recognize early postpartum complications primarily according to certain symptoms such as pain, bleeding and fever. Many women stated that problems during birth and the early postpartum period were often first recognized by the women themselves and sometimes by family members or trained TBAs.

Although most respondents made no advance preparation for the potential occurrence of EPP complications, some respondents mentioned the need to put money aside in case something happens so they can pay for medical services.

Careseeking decisionmaking

As part of the research plan, ten women and families of women who had experienced complications during birth or the early postpartum period during the last six months were interviewed. These "complication narratives" provided information about actual detection of obstetric complications and household actions taken.

According to women who participated in the complication narratives, most began labor at home with a family member such as mother-in-law or a trained TBA in attendance. Most respondents stated that husbands or EFFIs are the first to be informed when EPP complications occur. In Mandiana, most of the women said that they tell their husbands first because husbands take charge of the family especially in times of crises. In Koundian, women reported that they told other women in the homestead or their TBA, because they are the ones who spend the most time with the new mothers.

TBAs and VHC members interviewed said that trained TBAs are usually called first to check on women when complications occur because in most cases it is the TBA who has been following the woman since the beginning of her pregnancy. Skilled providers also reported that TBAs are sometimes contacted first by women experiencing problems because TBAs are the intermediary between the family and the health facility.

"It was one of the older women in the family that said I should go to the health center because the birth had become difficult. By that time I was tired but I also asked to go the health center." (FAC-K1)

"Everyone agreed that I needed assistance. At the health center, they helped me to have the strength to give birth." (FAC-K1)

According to respondents in Mandiana, it took from six to twelve hours from the time a complication was recognized until household-level action was taken to get skilled care at a health facility. In Koundian, women reported that it took from ten hours up to three days to reach skilled care. Some women did not remember how long it took to decide what to do.

Women reported that it is the responsibility of family members and trained TBAs to find transport to take them to a health facility where they could receive skilled care. Some women in Koundian reported that they continued the birth at home even after problems occurred, with the assistance of a skilled provider when available.

"The trained TBA told me to go to the health center and I told her that I couldn't go, it was too late and at that moment she went to look for a skilled provider to come to my home to help me." (FAC-K5)

Satisfaction with Care

For the most part, women in both Koundian and Mandiana were satisfied with care they received for obstetric complications. Many stated that health facility staff attended to them immediately and that they received care that they thought was appropriate. Men in both places also found health facility staff to be well prepared for emergencies, and stated that the staff do the best that they can to help their patients. Most women reported that if someone in their family or someone they knew had a similar problem, they would tell them to seek care at a health facility as soon as possible "so that they wouldn't suffer the way they had suffered themselves."

Barriers to Receiving Care

According to some men and women interviewed, ability to pay the fees associated with facility-based care strongly influences the timing and quality of care received. Financial concerns were repeatedly mentioned as a problem by husbands, who bear the costs of treatment of obstetric emergencies. Male respondents stated that it is the responsibility of men to do everything possible to get the money necessary to pay for services needed. In Mandiana, men stated that lack of funds often delays receipt of skilled care at the hospital, even in emergencies. Some women reported that they were not taken care of until the husband or other family members could find money to pay in advance for the services. Some women said they stayed at home and endured the pain rather than seek skilled care when they knew they could not afford to pay for it.

"When I arrived at the health facility, the skilled provider wouldn't help me, he abandoned me in the waiting room until my husband brought me the money to pay for services, otherwise I wouldn't get treated." (FAC-M1)

The typical cost of facility-based skilled care in Mandiana was reported to be between 13,000 and 200,000 GF, and in Koundian from 9,000 to 50,000 GF (US$1 = 2,000 GF).

Cost was also mentioned by men in Mandiana in reference to reasons for preference of TBAs. Men thought that women prefer trained TBAs to skilled providers because they are less expensive. According to many men, since women who go to facilities to deliver are frequently charged so much, they are afraid to go back to the hospital if problems occur, to avoid being charged high fees again. Men also reported that some women do not seek skilled attendance at birth because they are embarrassed to go to the health facilities and therefore give birth at home. Men in both places stated that the lack of information on the importance of skilled care during and after delivery keeps women from seeking care.

In Koundian, stated barriers to receiving care were more related to the limited obstetric care available at the health center and transportation problems, including cost and availability of vehicles getting to the referral hospital in Mandiana.

C. Acceptability of Proposed EPP Visitor/Link Care Provider

Acceptance of an EPP visitor (EPPV) coming into the household to visit all new mothers and newborns was high among all categories of respondents. All women stated that they would accept a postpartum visit from a qualified person at any time after delivery, regardless of whether there was a problem or not, to see that the mother and baby were in good health.

> *"A visit from a health worker at home would give me pleasure. This visit would permit new mothers to know their health status and that of her baby. I would accept a visit if there were problems or even if I wasn't sick." (FSC-K5)*
>
> *"If we could, I would like that, truly we would like that because it's from such a visit that we would know if we are in good health or not." (FSC-M2)*
>
> *"Yes, we would permit a health worker to visit us whether or not there were health problems for the baby, just to know the health status of the baby." (FSC-M4)*
>
> *"New mothers will not have any difficulty with visiting from a link worker because the person was chosen by the community with confidence." (FEMA-M4)*
>
> *"We would permit a visit from someone trained even if the mother and baby didn't have a problem. If there were a problem they could take them directly to the health center to get treated." (FEMA-K3)*

Routine EPP visits taking place outside of the home, at an "EPPC depot" in the community was also an acceptable concept among all categories of respondents, even for a mother and newborn with no problems. Most women felt that they could go out of the home during the early postpartum period to visit a trained health care provider, whether there was a problem or not. They also thought that their family and friends would accept the concept of women going out of the home to seek EPP care. EFFIs and men agreed that they would encourage new mothers to go to health facilities, even if the distance were considerable, as long as it would help the women to regain their health.

> *"I would go visit a health provider in the days following delivery, even if there wasn't a problem to have a routine consultation at a health facility." (FSC-M4)*
>
> *"We would like her (new mother) to go out and visit (someone trained), it is possible that an illness could be detected by a skilled provider, you could be informed in time to take precautions at the hospital." (FEMA-M2)*

"The skilled provider can make a home visit if they live next door, otherwise after birth it's the new mother who has to go out to see the midwife." (CVS-M1)

Preferences for Type of EPP Visitor

A range of opinions were expressed regarding the preferred person to perform an EPP visit to the mother and baby. All respondents agreed that the EPP visitor should be "trained." Both TBAs trained by the project and professionally-trained skilled providers are considered trained by community respondents.

*"We would permit a visit from someone **trained** even if the mother and baby didn't have a problem. If there were a problem they could take them directly to the health center to get treated." (FEMA-K3)*

There is a noticeable gap between what many respondents said they believed about the paramount importance of professional, facility-based, skilled attendance during the early postpartum period, and whom they selected as their preferred EPPV (usually trained TBAs). Most women clearly stated that skilled providers in a health facility were the best source of EPP check-up for both mother and baby. All EFFIs stated that a trained provider should check women after birth. Yet as stated earlier, provision of routine postpartum checkups by skilled providers during the first week after birth is rare. In Mandiana, where skilled providers are more available because district hospital is located there, it is possible, but not common, for women to receive skilled EPP care.

"A skilled provider is the best person to help women who have just given birth because they know the illnesses better than those of us who are not educated." (FEMA-K2)

"Skilled providers can examine the mother and baby, usually that happens here in Mandiana. Those that are informed go to the hospital right after delivery, others refuse to go." (FSC-M3)

"Given the problems associated with pregnancy and childbirth, we prefer the type of care given by the skilled providers to facilitate birth. We like that better than traditional treatments." (FAC-M5)

For most women, trained TBAs were the most widely preferred EPPV. Some women specifically reported that they would prefer the trained TBAs who are members of the village health committee to make these visits, because they are the ones who help them during their pregnancies. Trained TBAs were also the most acceptable EPPV to their families and others in the community.

"We would accept a trained TBA because they are available and take good care of us." (FSC-K2)

"The person could be a man or woman, but the best person to do this is a trained TBA who is member of the VHC because they take care of women from the time she is pregnant until birth, and the VHC will go back and make sure the baby is vaccinated, and there is even someone from the VHC who looks after the nutrition of the children." (HOM-K2)

Although most respondents would accept trained TBAs as the EPP visitor for **routine** early postpartum care and early detection of complications, all categories of respondents expressed a preference for skilled providers if there was a **complication** in the early postpartum period. Skilled providers were adamant that a skilled provider must be consulted once a complication is

identified, stating that they should manage problems themselves, as they are better trained and have the necessary equipment, supplies and medications. TBAs also agreed that skilled providers are the best people to help a new mother with complications.

> "*Mid-wife, trained TBA, doctor or skilled provider. If there isn't a problem then a trained TBA. If there is a problem, then a skilled provider is the best person to examine and treat the problem." (AS-K2)*

> *"If the skilled providers have a good understanding with the trained TBAs then they will accept them. The trained TBAs must always pay a visit to the skilled providers to keep them informed." (AV-K2)*

VHC members also had clear preferences for the type of EPP visitor. In both Koundian and Mandiana, most VHC members said that trained TBAs are the best person to check on the health of the new mother and baby during the first week postprtum, and that TTBAs are best placed to be linkworkers. However, many VHC members also thought it was important for skilled providers to check on the new mother and newborn at a health facility **after** the first week postpartum, and that for those women who delivered at health centers, the health agent who assisted the birth should be the one to make the EPP visit, to make sure they are in good health.

> *"A trained TBA is the best person to examine the new mother and baby because the women are looked after by the trained TBAs from the time they are pregnant until they give birth. There's no specific time to check up on them, it should be done at all times." (CVS-K1)*

> *"The skilled providers would accept the trained TBAs as a link care provider because they are trained and if there is a complication they accompany the new mother to the health center. If the trained TBAs aren't accepted, no one else in the community would be accepted except the skilled providers themselves." (AV-K2)*

> *"We think that women would go to the hospital and get care, but ultimately it's a question of financial means, poverty keeps many women from going unless there is a complication. It is necessary to train the TBA, even if they don't have all the drugs, give them some so they can help some women. The TBAs are closer to us than the hospital. We can get the help of TBAs much faster than the skilled providers." (CVS-M1)*

TBAs were enthusiastic about being EPP visitors. They thought that they and other TBAs that they know could best help women and newborns get basic care soon after birth, as well as refer women to health facilities for skilled care if needed.

> *"That would make us very happy." (AV)*

Most skilled providers were enthusiastic about and supportive of the concept of early postpartum visitors, as community "linkworkers." Most of them agreed that trained TBAs could best play this role. Skilled providers thought that midwives and trained TBAs would the most appropriate EPPVs because of their closeness to women throughout pregnancy and birth.

> *"Women talk to trained TBAs if there are problems because it's the TBAs that they know. They are the best person to help because they are trained. They provide such care as cleaning the baby, counsel women not to give water to the new baby, visit the new mother for three days, bring the new baby to be vaccinated." (AV-M1)*

Conditions of Acceptability for EPP Visitors

"Conditions of acceptability" for EPP visitors were clearly expressed by each category of respondent. Women and their families would willingly accept an EPP visitor into their home during the first week after birth as long as they were well trained to conduct such a visit and were chosen and supported by the community to do so. The link worker should also "be kind, patient, welcoming, friendly, available and a good communicator."

Skilled providers said that the linkworkers should be chosen by the community, that the criteria for choosing a link worker should be defined and respected and that meetings should be organized to present the link worker to the whole community to explain their role and activities. Skilled providers stated that trained TBAs would be acceptable to them as a home visitor/link worker because the TBAs are trained by the Ministry of Health and SC/US and already work closely with the skilled providers. VHC members said that to be accepted in the community, EPP linkworkers should be well trained and have the materials necessary to carry out their work properly. Skilled providers and VHC members made it very clear that the EPPVs must be supervised, and agreed to take responsibility to provide this supervision.

Respondents Suggestions about How to Increase Awareness, Use and Quality of Early Postpartum Care

All categories of respondents contributed ideas about how to increase the use of early postpartum care. Most of the women, EFFIs and TBAs agreed that community associations and groups, as well as activities organized by the VHC, would be effective for sharing information on skilled attendance and EPPC. TBAs said they could organize and conduct discussion groups to help motivate women to use EPPC. VHC members suggested that other community events such as baptisms, marriages, etc. could also be a focus for activities to disseminate information about EPPC and link care providers. Skilled providers and VHC members said education, counseling and promotion of postpartum services should take place at health facilities and through other sources such as community associations, trained TBAs and the media. The use of theater groups was also mentioned as another possible way to spread information in the community.

> *"We can motivate women through discussion groups so they will go to the health center." (AV-K1)*
>
> *"It is difficult, be we have informed mothers to use the health facilities to reduce the number of health problems for her and her baby. Since the VHC started to educate women in the neighborhoods and districts they have begun to understand the necessity of using services at health facilities before and after childbirth." (CVS-M1)*

Skilled providers also said that women would be motivated to seek care if that care included a friendly reception, routine care and support. One skilled provider keeps women's health cards so that the woman must return for a consultation after birth in order to retrieve her card. They suggested that trained TBAs could also be used more effectively at the peripheral health posts and health centers.

D. Social Support/Social Networks/Communication Channels

All categories of respondents expressed that they would like to have more information about pregnancy and birth, even skilled providers. Men, most of whom find out about women's health

issues such as pregnancy and childbirth from trained TBAs and from their wives, also wanted to know more, and learn about it from additional sources.

Most women stated that they usually prefer to talk with other women about problems during pregnancy, birth and postpartum. Most women are also comfortable talking with health care workers, trained TBAs, their mothers and friends about pregnancy and birth-related topics. Almost all of the women responded that they did not have enough information about pregnancy and childbirth, and that often those that they talked to were not able to answer their questions or give them necessary information. Many women said that during their pregnancy they were told by friends or trained TBAs to have their baby at a health facility, because they would have fewer problems. Women said they currently traveled anywhere from one to seven kilometers to get advice from the TBAs.

Only a few women interviewed were comfortable routinely discussing birth-related topics with their husbands. In Koundian, women rarely talked to anyone about these topics. When they did, it was another woman or a TBA. Many women there first talked to someone only after they realized that they were having a problem.

> *"Since I live next to a trained TBA and she knows about women's problems, I talked to her about my difficulties." (FSC-M1)*

> *"I didn't discuss anything with my husband concerning the birth and I am far away from my mother. I also didn't discuss it with my mother-in-law nor with health professionals or friends." (FSC-K2)*

Although some women and other respondents seem to be aware of current sources of birth-related information - health centers and the village health committees - many women did not actually seek information from these sources.

VHCs currently play an important role in providing information to groups and organizations about how to link women and their families with skilled attendance at childbirth and early postpartum care, and most respondents think this role could be strengthened.

> *"Whether you talk of good things or bad things you can share ideas, discussion groups can be supported by women who can get out in the community, and spread advice to women who are pregnant." (FSC-K1)*

> *"There are ways, each time we get together we can talk of these aspects (about birth). If we are serious we can improve the situation." (FSC-M2)*

Social Networks

Several activities and common gathering places were clearly identified for each category of respondent.

Younger women talk and socialize mainly with friends their own age, and elder women talk and socialize among themselves. All women leave the house almost every day to go to the market and to visit family, friends and neighbors. They also may be part of a group that is involved in gardening, embroidery, sewing and income-generating activities. Women said their participation in these groups decreased when they were pregnant, especially those activities, like the gardening groups, that required physical labor.

One common group that connects women in Mandiana District is known as a "tontine," a social structure that is common among women throughout Africa and in many other parts of the world. A tontine is a group of women who have joined together, and contribute money on a regular basis into a common "fund." Each woman who contributes has a regular opportunity to take home the entire sum of money, often a substantial amount. This allows them to make big purchases or expenditures without saving the money on an individual basis, which can be difficult in traditional communities due to male control and/or communal sharing of household funds. The women who belong to the tontines often socialize together and help one another with their gardens or household chores, especially if a member is sick.

> *"Usually, women our age talk about resolving small problems that happen in our community, we also belong to women's groups for example that everyone contributes money to help solve problems of women in our community, whether you are an elder woman or not. The activity that we do together is gardening." (FEMA-M5)*

TBAs spend time with other TBAs in community activities, and frequently help each other during births. TBAs reported that there is a "chief TBA" in most villages, who is selected based on her experience and motivation. This TBA is respected, and her opinions are considered important by other TBAs. The chief TBA is often responsible for education of the younger, less experienced TBAs.

> *"We go out with other TBAs, we have reunions, training sessions, seminars, we meet each other in the neighborhoods to counsel women, we go out together and we return together." (AV-M1)*

Men typically meet and socialize with other men in cafes, at the mosque, and in other public places, and while working in the fields and plantations. The Imam at the mosque and village elders were identified as importance sources of information for men.

> *"The men talk amongst themselves. They have groups, they cultivate rice and cotton." (AV-K1)*

> *"It is necessary to bring men together often, we have meeting places where we can talk about postpartum care and everyone will be informed." (HOM-K2)*

Skilled providers reported that they meet each other and share information at daily meetings at the hospital and at monthly meetings at the health centers. They also have two professional meetings each year at the provincial and national level. VHC members meet four times a week to discuss activities and share information.

Communication Channels

Radio listening is very common among all categories of respondents. Women stated that they often listen to the radio, especially the rural radio station, about health and education. However, few of the younger women discuss these programs with other people.

> *"I listen to the radio, the station in Kankan. We like the programs about pregnancy and vaccination for children. I don't talk with others about what I hear on the radio." (FSC-M5)*

Most EFFIs listen often to the radio, preferring programs about gardening, maternal and child health and the education of young girls. Unlike younger women, they often discuss programs that they heard on the radio.

"I listen regularly to the radio at least four times a day. The radio talks often about problems with children and I talk a lot with my friends (about what I hear on the radio)." (FSC-K2)

"I listen to the radio often. Since I don't spend the day in town, I listen at night. The programs I like are those that encourage women to form groups and work, women gain much from working in groups. We talk often about what we hear on the radio." (FEMA-M2)

Men stated that they listen to the radio every day. Men often talk about the programs they hear on the radio with others with VHC members.

E. Differences between Mandiana (Urban) and Koundian (Rural) Communities

Although many of the research findings were similar in both study locations, some clear differences were found between respondents in the rural area and those in the urban area. Table 4 lists some of these differences. These geographically different responses should be considered when developing both the EPPV the intervention and BCI strategy.

Table 4. Differences between Urban and Rural Communities

Mandiana (Urban)	Koundian (Rural)
Pregnant women talk to their friends and to trained TBAs about pregnancy and birth.	Pregnant women rarely talked to anyone about their pregnancy and birth.
Women tell their husbands first when they have a problem because it is the husbands who take charge of the family, especially in times of crises.	Women tell their mother-in-law or their friends if they have problem because they are the ones who spend the most time with the new mothers.
TBAs aren't allowed to administer care to women.	TBAs administer care.
The best person to do EPP check is a trained TBA.	Skilled provider is best to do EPP check at a facility when women come to vaccinate the baby.
Skilled providers rarely make home visits; it is up to the mother to go to the facility for a consultation.	When a woman delivers at the health center, the health agent who assisted the birth makes a home visit.
Women interviewed rarely used traditional medicine, especially for problems of pregnancy or delivery.	Women occasionally use traditional medicine because it is less expensive and more effective for certain illnesses.
Difficult for new mothers to make postpartum care visits to facilities in the first and second weeks after birth.	Postpartum visits difficult because women not aware of the importance of EPP consultations after birth.
When labor begins, they are taken to the hospital to give birth.	Some women taken to health center, others continue to deliver at home.
Time ranges from 6 to 12 hours from recognition of complication until taken to a health facility.	Time ranges from 10 hours to 3 days from recognition of complication until taken to a health facility.
Cost for care at health facility between 13,000 and 200,000 GF.	Cost for care at health facility between 9,000 to 50,000 GF.
Barriers are that women prefer the trained TBAs to skilled providers because they do their jobs well and it is less expensive.	Barriers to seeking skilled attendance at birth for complications is that women are embarrassed to go to the health facilities and lack of information on the importance of skilled care during and after delivery.

When a women has a complication “she is operated on” (cesarean).	When a woman goes to the health center with a complication she is either treated there or referred to the hospital in Mandiana.
Lack of money often delays skilled care at the hospital even if it is an emergency.	Delays in treatment related to limited obstetric care available at the health center and transportation cost and availability of vehicles to reach referral hospital in Mandiana.
TBA and family members must find a way to help transport the new mother and baby to the hospital when there are problems.	Skilled provider is summoned to the home by a TBA to check on the mother and new baby when there are problems.

IV. Community recommendations

The CHANGE consultant and Save the Children staff who participated in the research held participatory discussions with community members, VHC members, skilled providers and the health administration to present and discuss the findings. The following are the recommendations that resulted from those discussions.

Overall recommendation

- Develop an early postpartum care program that includes the suggestions for criteria, roles and activities of EPPVs outlined in this study; particularly the use of trained TBAs as link workers who would work in close association with the VHC and skilled providers.

Communication/Community Awareness/Mobilization

- Develop activities to increase knowledge of danger signs related to pregnancy and childbearing in the community (with focus on early postpartum danger signs).

- Develop activities to increase communication between husbands and their wives during pregnancy, particularly in preparing for childbirth.

- Increase awareness of the community obstetric emergency referral system, particularly the importance of families contributing to the community bank.

- Explore the possibility of expanding the current use of the community bank to include normal delivery instead of use exclusively for deliveries with complications.

Training

- Reinforce the training of both skilled providers and trained TBAs in terms of early postpartum care.

- Train more TBAs so that all communities have a least one trained TBA to help women prepare for birth, assist birth and provide postpartum care.

Social Networks/Communication Channels

- Implicate the opinion leader of the community (Imam, mayor and district president) in the early postpartum care awareness campaigns and sessions.

- Use rural radio as a source of disseminating early postpartum care information.

Systems Strengthening

- Ensure that all parties involved respect official tariffs for services and drugs at the health facilities.

- Finalize the contract between the CVS/community bank and the referral center (hospital).

V. DISCUSSION

The summary qualitative research results presented above provide an example of negotiating behavior change to improve early postpartum care. Past qualitative research has shown that families and communities are not always willing to accept new ideas and behaviors that would require them to alter firmly established childbirth traditions. Testing new concepts and behaviors before designing and implementing programs can improve the likelihood of adoption of recommended behaviors and reduce costly mistakes.

In Mandiana District, however, respondents expressed a high degree of willingness to change current behaviors, and to consider alternative early postpartum care options. The presence of a high level of amenability to change toward a given practice - in this case early postpartum care - increases the likelihood of rapid, measurable behavior change. Many of the respondents expressed thoughtful and feasible suggestions for how to design an early postpartum care intervention that could improve EPPC coverage even within the constraints that exist for both clients and providers.

The results from Mandiana provide an example of behavior-based research to support behavior-based programming and community negotiation. The research results can be directly applied to BCI strategy formulation. Community members began this process during the community meetings held in Mandiana during February. This section provides a few additional suggestions, based on a more detailed look at the results.

Unique Aspects of the Setting and the Potential Influence on Results

There are a few things that must be considered when interpreting the results from this study. One is the small size of the sample. The other is the influence that the presence of a major NGO like Save the Children has had in the area, where there have been five years of successful program interventions to develop functioning community health committees, community banks and transport schemes for obstetric emergencies and other efforts to strengthen maternal care provision, particularly TBA training. Undoubtedly, the presence of a trained cadre of TBAs who already provide childbirth care and counseling in most of the study communities influences the preferred source of routine EPPC or EPP visitor.

Particularly interesting is the system of substantial monetary fines that VHCs have imposed on women and families in some of the villages, intended as a means of encouraging use of trained TBAs and health facilities for all births. This fact was not well understood by CHANGE during the research design process, and therefore we did not factor this into the research design.

The combination of these factors may make it difficult to generalize to develop broader programmatic recommendations based on the results of this particular study - to suggest for example that other communities where these factors **do not** apply might also select TTBAs as their preferred early postpartum visitor. However, it may be reasonable to expect that for many communities that do share similar characteristics - remote rural areas of Africa where NGO maternal and child health programs are active – results might also be similar. And it highlights the need to test this generic model again in other settings, and compare the results.

Behavior Change Implications of Key Research Results

CHANGE uses a standardized format for the strategic application of qualitative research results to behavior change strategy development. The behavior change intervention strategy formulation grid suggested for use with the generic CHANGE qualitative research instruments used in this study is included as **Appendix VII**. It provides a simple framework for incorporating research results into BCI strategy design that can be used at community, district or national level.

Early Postpartum Care

1. There is a strong foundation of positive cultural tradition surrounding the postpartum period. It is important to build onto existing positive EPP behaviors and practices, integrating new or modified behaviors into a framework of known and accepted beliefs.

   Some examples include reinforcing the positive aspects of the special "dyubabatoya wait" period, such as: attention to maternal nutrition and special care and social support for mother; incorporating specific terms already used by the community to develop an expanded definition of the existing "protection" of the new mother and baby to include early postpartum health checks and assure that an appropriate person, who does not conflict with categories of people perceived as “dyubabto tana,” is proposed as the person to perform the routine early postpartum checking visit for all new mothers and newborns.

   Additional “signage” can be built onto the existing traditional “signage” of placing a banana leaf outside the home of a new mother to inform the community of the birth. For example, if a community depot option is selected as an EPPC option, that EPPC depot could display a sticker with a banana leaf insignia.

2. Program planners should recognize that potential conflict exists between culturally accepted isolation of the mother and newborn and need for vigilance to detect danger signs during the first week. The importance of the timing of EPP visits, during the first week when cultural “sanctions” are still in place, must be made clear to household members and the EPP visitor/link worker alike. In-home EPP visits can be promoted as harmonious with existing birth tradition. Stress the need for two visits before day seven.

   However, the seventh day is an important “transition” time, when some of the traditional constraints to maternal mobility can be negotiated. Planners can build on the existing practice of taking healthy newborns for vaccination on the eighth day postpartum to highlight the equal importance of checking mothers at that time too. Specific terms used by communities about the importance of leaving the home for newborn immunization can be integrated into the promotion of EPPC for the new mother.

3. There is not a “critical mass” of community awareness about the need for early postpartum care, especially for mothers, and therefore there is a need to develop a strategy to increase demand for EPPC. Beginning with birth preparedness plans that include the EPP period, the strategy should reinforce the dual purpose of EPPC - mother **and** newborn. The strategy should be promoted not only to women and TBAs, but to all categories of relatives, since so many births in Guinea are not even attended by a TBA. There is an existing belief that the husband/partner has a responsibility to provide for the

birth-related needs of women and newborns. This foundation of paternal responsibility can be used to reinforce that men have an important responsibility to assure receipt of EPPC in their household.

4. It is important to provide an EPP care option that incorporates the stated preference of almost all categories of respondent - that mothers should remain in the home during the first week after birth if possible. A routine EPP visitor can come into the home to check all mothers without violating that important belief. It is also important to reinforce the idea that EPP checks should be made if even there are no problems, as this was not well understood by most respondents. Mothers and newborns with danger signs can be brought to an EPPC post by an appropriate family member without violating customs regarding the movements of new mothers.

   Responding to the stated preference for TBAs to be EPPVs for routine care will require an expanded role for trained TBAs, to include routine care and danger signs checks for both mother and newborn during the EPP period in addition to the current preventive/promotive postpartum counseling that TBAs are now expected to perform. At the same time, it is necessary to expand the role and responsibilities of other recognized and accepted community health workers (VHC members, health agents, etc.) to include promotion of the need for monitoring danger signs in mothers and newborns during the EPP period. Many community respondents suggested such an expanded role for TTBAs, health agents, VHCs and neighborhood associations.

   To assure that the “supply side” can handle increased demand generated by EPP promotion to communities, the program should ensure that the health posts, health centers and hospital are prepared, and offer a “package” of EPP services for both mother and baby during the same visit.

5. It may be useful to validate and further document the findings from this research that suggested that there might be substantial “EPP care gaps.” It is important to identify and address the reasons why some women seem to “fall through the cracks” in the current community (VHC/TBA) system of monitoring births.

   The responses of women, families and TBAs clearly contradicted the strong stated beliefs of some VHC members and skilled providers that current care in the early postpartum period was adequate. At the post-research community meeting, it was in fact suggested that communities explore alternatives with VHC members, to document specific areas of greatest need and to meet these unmet needs.

Care Seeking in EPP Emergencies

6. Although many respondents knew several basic obstetric danger signs, awareness of the specific danger signs during the early postpartum could be strengthened, particularly the danger signs of most common causes of maternal death during the early postpartum period (hemorrhage, sepsis and PIH) and newborn deaths (asphyxia, sepsis and sequelae of low birth weight). Strategies to increase danger sign knowledge can build on existing awareness of dizziness, bleeding and fever.

   The non-specific term “dizziness” was a common danger sign listed by almost all categories of respondent. It is important to further explore this local term for "dizziness," to get the precise parameters, associated physical signs and symptoms, and to

determine the likely western medical equivalent for this community-defined obstetric danger sign.

7. The EPPC promotion strategy should emphasize the need to first seek skilled care for complications, whenever feasible, and reinforce the existing positive belief in the necessity of seeking skilled care for obstetric problems at any time, especially during the early postpartum period. It should promote the concept that TBAs (both trained and untrained) are a link to, but not a substitute for, skilled care.

8. A major barrier to use of EPPC seems to be related to common problems with overcharging for procedures at health facilities during childbirth. These claims of financial pressures and overcharging need to be explored and resolved.

   There is a strong existing family and community tradition of saving for childbirth in general, though not specifically for complications and emergencies, and not extending into the early postpartum period. The traditional women's savings groups, "tontines," can also be suggested as a means of saving for funds for EPP.

   Save the Children's community savings scheme (caisses) has been successful in many instances, but as currently conceived cannot be used for routine obstetric care, only for emergencies. Promoting continued contributions to and participation in the community revolving fund as part of safer birth is important and it may be useful to explore the option of using the revolving fund for costs of routine births, not just emergencies.

   The program may wish to investigate both the positive and negative effects of the fines VHCs now impose for not delivering at a facility with assistance from a skilled provider or trained TBA. These fines may inhibit careseeking.

   The program could explore instituting **non-punitive** strategies to motivate women and families to deliver with a skilled attendant. Reducing the current 4,000-5,000 CFA fine for families who do not deliver in facilities if they report the birth within the first 4-6 hours might be another option to ease financial burdens and also encourage "registration" and inclusion in EPPV schemes, even if a woman did not make it to a facility for the birth.

Acceptability of Proposed EPPV Concept

9. Respondents identified clear conditions of acceptability along with their overall acceptance of the EPPV concept. The stated conditions of acceptability of EPPVs should be incorporated into both the overall intervention design and the BCI strategy, especially the stated preferences of women and their families as to place and person to do the EPP visits. The strategy design should allow clear "options" for EPP home visits or EPP "care stations" in the community.

   It is important to reinforce the positive characteristics of skilled providers as perceived by women and their families. "Trained" was a very important qualifier used by almost all categories of respondent in association with their preferred EPPV.

   Skilled providers and VHC members also overwhelmingly endorsed the EPPV concept, but specified clear guidelines that they thought were important for the intervention to succeed. These suggestions should be specifically incorporated into the intervention and strategy design.

10. To create the “enabling environment” for EPP visits to occur, the program should acknowledge and address the barriers voiced by TBAs – the lack of basic equipment like flashlights and umbrellas for client visits on rainy nights, in addition to basic obstetric drugs, supplies and equipment.

Social Support/Social Networks/Communication Channels

11. All categories of respondents, including skilled attendants and VHC members, expressed a strong willingness to learn more about pregnancy, birth and postpartum, and supplied detailed information on when, where and with whom they commonly meet to discuss birth-related topics. The BCI strategy should systematically exploit the stated social networks of each specific category of respondent to most effectively disseminate EPP information. It should include education, counseling and promotion of EPP services at health facilities and at women’s groups where they do gardening, sewing and commerce.

    The results clearly indicate that the program should not rely on radio for disseminating information among younger women. However, for rural women the radio may be the only source of information/communication channel, since they do not talk to each other much about childbirth-related topics. Radio appears to be an appropriate media to spread EPP information among EFFIs and men, who do discuss things they hear on the radio. EPP radio spots and radio dramas could provide a solid focal point for discussion among these groups.

    Each category of respondent also offered very useful ideas on how to increase community awareness of the need for EPPV in their communities, and these should be incorporated into the dissemination strategy to the greatest extent possible.

12. Although many of the research findings were similar in both study locations, some clear differences were found between respondents in the rural area and those in the urban area. These geographically different responses should be considered when developing both the EPPV the intervention and BCI strategy.

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