

**Assessing the “Caring” Behaviors of Skilled Maternity  
Care Providers During Labor and Delivery:  
Experience from Kenya and Bangladesh**

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## **Summary**

In high-maternal mortality settings, where increasing use of skilled childbirth care can potentially have the greatest impact, perceptions of the quality of modern maternity care among women, families and communities can limit use of such care. The behaviors and attitudes of maternity care providers may be as important a factor in how facility-based care is perceived as the actual technical quality of care.

This paper discusses how findings from a review of the literature and experience on maternity care provider “caring behaviors” and client satisfaction with obstetric care guided the development of tools to assess the “caring” behaviors of facility-based, skilled maternity care providers during labor and delivery.

A set of Maternity Care Provider Caring Behavior (MCPCB) assessment tools was pre-tested in Kenya and Bangladesh with the assistance of maternal health program planners, educators of maternity care providers, hospital supervisors, and obstetric practitioners. Their input and results from the assessment pre-tests helped to refine and improve the draft tools, and to adapt the generic models to develop locally-appropriate tools and approaches to improve the “caring” behaviors of maternity care providers.

This paper describes the tool adaptation process and pretest results. It suggests a model to test the effectiveness of the toolkit as part of a comprehensive set of behavior change interventions to improve skilled provider caring behaviors. Using the assessment activities as an initial step, maternity care providers, communities and health systems planners can collaboratively develop behavior-based strategies to address an important potential barrier to the global goal of skilled childbirth attendance for all women.

## **Background**

### **The Need for Behavior Change among Skilled Maternity Care Providers**

For the past several years, the Safe Motherhood Initiative has focused increasingly on improving access to and utilization of skilled childbirth attendance and facility-based maternity care (9,29,40,41). Increasing the proportion of women in developing nations who deliver with skilled attendance is being advocated as the single most crucial intervention to reduce maternal mortality (41). An infusion of new funding has allowed expansion and rapid scale-up of maternal survival programs, with the primary objective of strengthening capacity to provide quality, skilled maternity care (33,66,70).

Client satisfaction with care is an important element of quality care, often determining patient's willingness to comply with treatment recommendations, thus influencing effectiveness of care (84). Many studies indicate that problems related to maternal provider behaviors and attitudes are a major barrier to utilization of skilled childbirth care. The satisfaction of households, families and communities – essential “partners” in any efforts to reduce maternal deaths - with skilled childbirth care has also been investigated (3,4,8,14,16,19,22,24,42,46,47,48,49,50,57,83,91). There is growing evidence that client-perceived quality of maternal health services, particularly provider attitudes and behaviors, has a greater influence on use of skilled maternity care than more widely recognized factors such as access or cost (6,7,28).

Women's perceptions of caring behaviors during childbirth have been studied in both developed (34,69) and developing countries (1,6,7,84,87). In Bangladesh, negative client perceptions about the quality of maternity care, including discourteous or inattentive staff behavior, are widely considered to explain the underutilization of skilled childbirth care, especially in rural areas (87, 107). Also in Bangladesh, due to community perceptions of the “dismal quality of health services” most women hesitate to seek delivery care in a hospital unless it is an emergency (1). There is increasing documentation of neglect, verbal abuse, and intentional humiliation of women during childbirth in many countries, affecting access, compliance, quality and effectiveness of maternity care (28). Skilled childbirth care providers in some settings may be “more concerned with maintaining hierarchy of status than in transformation of individual patients from sickness to health” (61).

### **Rationale for the MCPBA Tool: Is Skills Training Enough?**

Almost all of the programs that focus on interventions to strengthen the supply side of maternal care systems include improvements in the lifesaving skills of maternal care providers (92,116), and indicators have been developed to measure the effect of skills training on provider performance (73,79,81). Most training has been focused, necessarily, on improving the essential clinical elements of quality routine maternity care, and the lifesaving skills required to treat obstetric and newborn emergencies. This includes monitoring progress of normal labor and delivery; manual removal of retained placenta, prevention and management of hemorrhage and sepsis, vacuum extraction, dilatation and curettage, resuscitation; and advanced procedures such as c- section and repair of ruptured uterus (116).

In some settings, despite such skills training, problems persist in sustaining improved clinical practice among maternity care providers (38,56,76). This documented gap in

establishing and maintaining new behaviors among maternal care providers despite skills training has been called “skills deficit vs. performance deficit” (39). There has been a growing recognition of new training needs for skilled childbirth care providers, and debate about where skills training ought to lie within the continuum of quality maternity care for all women (88).

An emerging theory suggests that “interpersonal competence” and “intercultural competence” for skilled providers (34) may be as important as technical competence, at least from the perspective of patient satisfaction with maternity care (100,106); and that “core competencies” for skilled providers must go beyond skills training alone. Many maternal survival programs already recognize the essential role of provider behaviors in quality of, and satisfaction with, skilled childbirth care. Most clinical skills training manuals and programs do include basic principles and guidelines for providing emotional and informational support to women and their families during normal pregnancy and birth, and also during complications and emergencies. “Core competencies” for skilled care providers have been expanded to include courteous, respectful, individualized care during birth, and awareness of and respect for cultural differences (2, 9,20,25, 26, 31,64,67, 70,116) However, as with provider skills, there have also been problems maintaining improved provider behaviors and attitudes.

Changing provider behaviors within the hierarchical system and organizational (medical) culture within which inpatient maternity care takes place presents a special challenge (56,61). As one researcher stated, compared to interpersonal counseling and communication (IPCC) skills in outpatient clinic settings, “the inpatient (maternity) facility as locus of behavior change communication is less well articulated (61).” Yet improving the quality – both the technical skills and “caring” behaviors - of inpatient maternity care becomes increasingly important as the global guidelines for the Safe Motherhood Initiative focus more on promotion of facility-based childbirth for all women.

Few tools exist that specifically define ideal skilled care provider “caring” behaviors during labor and delivery *in a format that allows the actual measurement of provider behaviors*. The Maternity Care Provider Caring Behavior Assessment tool was developed to fill this gap, and provide a foundation for provider behavior change interventions.

### **Measuring Maternity Care Provider “Caring” Behaviors**

In 2001, CHANGE convened a small team composed of a behavioral scientist, an international midwifery trainer and a maternal health behavior change person to review a number of recently developed maternal care provider skills training manuals and documentation of training programs, to define areas of consensus, and identify gaps (21,23,53,58,82,85,94,95,97,107,109,111,112). We interviewed (electronically) more than twenty-five experienced lifesaving and midwifery skills trainers, to elicit their opinions and experience on how to identify and promote “caring” behaviors as part of skills training for maternal care providers (93). In addition, the team compiled and reviewed published literature on “caring” behaviors during labor and delivery. The following section summarizes this information, which provided the foundation for the development of the Maternity Care Provider “Caring” Behaviors Assessment (MCPBA) tool.

Much remains to be done to develop and refine assessment tools to measure user satisfaction and provider satisfaction with quality of obstetric care (90). However, there is a substantial body of published literature that attempts to measure the contribution of caring behaviors to perceived quality of health care, in both Western and non-Western cultures. Some of the literature focuses specifically on provider caring behaviors during labor and birth (18).

The “complex and nebulous nature of caring as a concept and the contextual elements that influence its perceived meaning” in different cultures has made it challenging for researchers to standardize the definition of caring. (71,72). Therefore, some researchers have begun to develop a philosophical foundation for future study of “the science of caring” (53), and to clarify the meaning of caring (71,72). Defining the dimensions of caring behaviors can provide a framework for maternal care providers to understand caring situations, increase their awareness of potential nurse and patient “caring moments” (118), and alert them to “missed caring opportunities”.

A review of the literature identifies several different instruments and models that have been proposed for the study of provider caring behaviors in a healthcare setting to study “caring behaviors” (59,118). Several different models, including a variety of specific elements of caring, have been proposed to help provide an underlying structure to the study of caring behaviors. A “Caring Dimensions Inventory” (CDI) with 25 categories of caring has been developed (59). A “Caring Behaviors Inventory” (CBI) includes categories of respectful deference to others, assurance of human presence, positive connectedness, professional knowledge and skill, and attentiveness to the experience of others (118).

One model identifies three distinct components of provider caring behaviors – verbal, non-verbal and technical competence - all three of which must occur for caring to take place. Types of caring behaviors have been divided into expressive and instrumental. *Expressive* caring behaviors establish relationships of caring, trust, faith, hope, sensitivity, touch, empathy and warmth. Support, surveillance and comfort are broad concepts associated with expressive caring behaviors. *Instrumental* caring behaviors include physical, action-oriented helping behaviors (procedures) and cognitive-oriented helping behaviors (teaching). Ten “carative factors” have also been defined (53).

### **Provider vs. Client Perceptions of Caring Behaviors**

In the developed world, there is broad agreement that quality maternity care should be woman-centered and family centered, taking into account women’s and family’s views and their rights to choice, control and continuity of care. The client perspective on provider caring behaviors, specifically during childbirth, has been much more thoroughly explored. Less emphasis has been placed on the views of maternal care providers, perhaps because it is assumed that there is a universal provider point of view on the importance of caring as well as curing.

A few studies of provider perspective on caring behaviors, their actual “caring” practices, and the effect of client-provider relationships on use and satisfaction with care have been undertaken (5,12,13,27,36,52,56,89). A study in four African countries elicited provider opinions on provider/client relations, and the interpersonal dimensions of care (80). One study developed ratings for nurse-as-person as well as nurse-as-clinical care provider, based on nine “caring nurse /qualified nurse” categories (30). Use of a

“Holistic Caring Inventory” (HCI) demonstrated that health care professionals tend to view competent nursing care as quality care, while patients consider caring and interpersonal interactions, as well as curative skills, when defining quality care (115).

Using an instrument called CARE-Q, providers and patients were found to differ in their perception of how frequently providers performed caring behaviors (110). Staff often rated the frequency of their performance of caring behaviors higher than patients did. The frequency of performance of caring behaviors in this study did not match well with either the provider or the client rating of the importance of the various caring behaviors. Interestingly, in the Kenya pretest of our MCPBA tool, discussed below, the frequency of performance of caring behaviors also did not correlate well with the importance assigned to the behaviors by providers themselves (10).

One study divided caring behaviors from the patient perspective into four processes: “translating” the medical experience into lay terms; “getting to know you”; establishing trust; and “going the extra mile” (34). Patient satisfaction increased when providers informed, explained and instructed patients. Confidence and trust were enhanced when nurses “took charge” and “appeared to enjoy their work”. “Going the extra mile” meant providing care beyond the basic care that was expected. Using a CARE-Q instrument, “listens to the patient” was the most important caring behavior, to both patients and providers alike. “Makes me feel as if someone is there when I need them” and “knows what they are doing” were important measures of provider caring behaviors to patients.

Interestingly, in this Western research setting, patients valued **perceived** professional competence (looks like they know how to change the I.V., etc) more than caring, while nurses valued caring more. Conversely, in a developing country setting, families and patients who had experienced obstetric emergencies were satisfied with levels of technical facility-based care and waiting times that would be unacceptable in a Western setting, as long as either the mother or newborn survived (77). Problems with attitudinal factors of providers, such as insults and disrespect to patients, were a much stronger disincentive to care use in this setting than actual quality of medical treatment received.

### **Patient Satisfaction and Use of Skilled Childbirth Care**

Patient satisfaction with care is increasingly seen as an essential element of quality care. Satisfaction with care often determines patients’ willingness to utilize skilled care, and to comply with treatment and referral recommendations, thus influencing the ultimate effectiveness of such care (84).

There is growing evidence that perceived quality of health services and satisfaction with care may have a greater influence on childbirth care-seeking behaviors than do access and cost (7). In Bangladesh, negative perceptions about the quality of services, including “inattentive, discourteous staff behavior, lack of cooperation and lack of privacy” are widely considered to explain the underutilization of rural public health facilities (87). Due to the “community-perceived dismal quality of health services”, most women in rural Bangladesh hesitate to seek delivery care in hospital unless there is an obstetric emergency” (1).

Several studies have been conducted to measure patient satisfaction with care and provider caring behaviors during childbirth. In Bangladesh, an instrument called SERVQUAL, measured dimensions of care that were important to inpatients in a

maternity facility (6). One study of women's perceptions of caring behaviors during childbirth identified the behaviors perceived as most caring (69). Women who had normal births perceived behaviors in the "human needs subscale," one of the behavioral categories utilized in the study, as most caring. Women identified "help me with my care until I am able to do it for myself", "give my treatments and medications on time", and "check my condition closely" as important measures of provider caring behaviors.

To bridge the increasingly well-documented gap between institutional (provider) and patient perceptions of quality of care, programs should stress the importance of providers learning to value the types of behaviors and interactions that *patients* consider quality of care, and systematically incorporate these interactions in performance and measures of quality care (115). Several methodologies to elicit provider and client perceptions of maternity care, and to address discrepancies have been developed and implemented in Bolivia (17), Peru (45) and other rural maternal care settings (62,102).

### **The Culture Gap: Toward a Transcultural Perspective of Quality Maternity Care**

Experience in Guatemala, Bolivia and Indonesia during the first decade of the Safe Motherhood initiative showed the importance of identifying and removing the barriers to obstetric care use that derived from a clash of cultural perspectives among clients and facility-based maternal care providers (73). A process was developed to document the cultural factors, for both "medical culture" and traditional folk culture, and to then "negotiate" a mutually acceptable compromise (17,54,55). Addressing these avoidable cultural and structural medical barriers from within the medical system increased patient satisfaction and use of inpatient obstetric services (54).

Since then, the dimensions of the cultural gap in childbirth care have been more extensively examined. Caring has been shown to be a universal value, but caring behaviors, provider's ways of expressing caring in a clinical setting, differ considerably (53). In a study of caring provider behaviors in eleven countries, caring was identified as the theoretical foundation of quality care, one of the core values agreed upon by hospital-based respondents worldwide (11). Caring behaviors across cultures were quantified using a measure of caring attributes called CAPSTI (caring attributes, professional, self and technological influences). The CAPSTI study showed that nurses caring behaviors and perceptions of caring shared much in common, while still retaining individual cultural features related to caring and its practice. It is critical to identify patients' and providers' perceptions of caring behaviors, and to respect, preserve and nurture this culturally-specific uniqueness of caring behaviors (11).

Intercultural differences in caring beliefs, values and practices are identifiable in practices observed among maternal care providers (60). A study of caring behaviors in 30 cultures showed that professional caring behaviors vary considerably among care providers of different cultural backgrounds (60). Nurses from different cultures tended to know and emphasize different care constructs for caring behaviors such as support, comfort and touch. In the cultures studied, caring behaviors were mainly provided by female caregivers, both professional and non-professional. Male "curegivers" were primarily physicians.

The thirty country study demonstrated a growing cultural gap, as modern medical technologies and practices gradually reach farther into areas where folk practice has long been a reliable, accessible, preferred source of maternal care. In many instances,



providers did not know or care about traditional perceptions of obstetric illness, or the folk remedies used to treat them. This lack of provider interest in or understanding of traditional causality theories of obstetric complications, and the resultant decrease in use of skilled obstetric care, has recently been documented in Western Kenya, related to an obstetric problem known as “rairu” among the Luo people (77). Some patients perceive the incongruities between folk values and professional childbirth care as intractable and do not even consider the possibility of systems changes to reconcile cultural differences. Many women, although they recognize the safety and other advantages of facility-based delivery with a skilled attendant, still chose home birth with a traditional attendant because they value the caring, supportive behavior available in that environment.

The greater the differences between folk care values and professional care values, the greater the signs of cultural conflict and stresses between professional caregivers and lay providers. Folk providers include not only traditional birth attendants (TBAs), but also the myriad of other types of traditional and “fringe” practitioners now known to be involved in providing childbirth related care to women in traditional cultures around the world, such as shamans in rural Nepal (68), tamorgias in Egypt (75) and prayer groups in Kenya (77).

### **Community Caring: Expanding the Concept of Caring from Individuals to Communities**

To meet the challenge of designing a health care system that is more responsive to the needs of the communities they serve, skilled maternal care providers must establish dynamic relationships with community members (86,95,101). This includes exploring the meaning of caring and quality maternity care from the community perspective. Several major themes for caring for the community have been put forward as guidelines to help facility-based care providers accomplish this (23). These include:

- reciprocal relationships (between providers and clients) and teams working together are central to building healthy communities;
- education with a focus on prevention is a key to health enhancement; and
- understanding community needs is the primary catalyst for health reform and health system change.

Tools and approaches to define “community-defined quality” (CDQ) of maternity care have been developed and tested in several countries (63). In Peru, and Guatemala community health development approaches have been successful in promoting true involvement of women and communities in the design and content of the maternal healthcare they receive (45,102).

### **Developing the Maternity Care Provider “Caring” Behavior Assessment Tool**

Almost all of the skilled provider training programs now being implemented recognize the role of “caring” behaviors, in addition to provision of good quality clinical maternity care. Yet there did not seem to be a tool that could objectively assess the actual behaviors of individual midwives and other skilled providers during labor and delivery in a facility setting. The Maternity Care Provider “Caring” Behaviors (MCPCB) Assessment Tool was developed to address the gaps in perceived problems with provider behaviors, which contribute to lack of use of skilled childbirth attendance.

The maternal provider “caring” behavior assessment tools are a set of tools to provide an observational assessment of maternity care providers “caring behaviors” during labor and delivery. The purpose of the tools is to assess, address, and improve maternal care provider behaviors during labor and delivery, a documented barrier to increased utilization of skilled childbirth attendance and facility-based childbirth.

There are several assessment tools in the complete set – caring provider-client, caring provider-provider (caring obstetric team) and caring provider-community. This paper describes only the first tool that assesses maternity care provider-client behaviors, the MCPBA tool.

As an initial step, a complete set of 97 behaviors and sub-behaviors for “caring” provider behaviors during labor and delivery was developed, and divided into seven categories. The behaviors were selected based on 1) ranking as important “caring” behaviors by clients and providers in the literature review; and 2) ability to observe and measure the behavior in a labor and delivery room setting; and whenever possible 3) evidence linking the behavior with improved birth outcome (32,74,98) for example, helping the patient to empty her bladder regularly.

Though comprehensive, the full set of behaviors was too lengthy to include in a rapid assessment tool. Therefore, a modified list of key behaviors was selected from the complete set of behaviors. Two versions of a draft “generic” provider behavior assessment tool were developed, a comprehensive one, and a condensed version that selected a few representative behaviors for each of the major categories.

The seven original categories of provider ‘caring’ behaviors are:

1. Attend to Human Needs
2. Be Accessible to Patient
3. Attend to Emotional Needs
4. Respect Human Dignity /Rights
5. Inform/Explain/Instruct
6. Involve Family
7. Incorporate Cultural Context

An eighth category, “Minimize Negative Behaviors” was added after the two pretests were conducted.

There are four parts to the complete set of provider-client maternal provider caring behavior assessment tools: 1) the maternity care provider “caring” behavior **observational assessment** tool (described above); 2) the maternity care provider “caring” behavior **self-assessment** tool; 3) the **provider focus group discussion** (FGD) guide; and 4) the **patient exit interview guide**. A user’s guide and several aids for tallying data have also been designed and pre- tested.

These maternal provider “caring” behavior assessment tools collect data to help assess provider behaviors in several ways.

- 1) The maternal provider “caring” behavior assessment tool collects three types of information: background information and clinical data on a patient in the process of labor/delivery, basic information on the clinical setting on the labor and delivery unit

(type of staff present, patient-to-provider ratio, number of students present). These factors can influence the ability of providers to provide care to patients.

- 2) The maternal provider “caring” behavior self-assessment tool contains the full list of ninety-seven provider “caring” behaviors. In the self-assessment, individual midwives and other maternal care providers rate themselves on their own performance in caring behaviors and provider/client interaction. This self-assessment information is then compared to the external observer’s assessment of that same provider’s performance.
- 3) The maternal provider focus group discussion (FGD) guide takes place after the external provider behavior assessment and the self-assessment have been completed. The maternal providers who participated sit together to discuss the assessment activities as a group. A brief description of the results can be given, and FGD participants have the opportunity to comment on aspects of provider behaviors that cannot be observed through use of the assessment tool. For example, providers can discuss which behaviors are most important, which are easiest to perform, which behavior gaps would be easiest for them to improve, and what resources they would need to motivate them to improve behaviors.
- 4) The patient exit interview guide provides information gathered from patients and their families as they leave the labor and delivery unit. Their perspective can be compared with the actual observations made using the assessment tool to see the extent to which patient perceptions of care and actual observed care correlate.

The information gathered from use of the provider-client behavior assessment tools can be used for several purposes. It can help to determine the amount and quality of caring behaviors that are part of current maternal provider’s practice during labor and delivery. It can also elicit provider perceptions of the content and quality of their caring behaviors, and interaction with patients and families during labor and delivery. It can provide insights into barriers to improved provider behaviors, as well as potential motivating factors, and resources needed to promote provider (and client) behavior change. It can also document the point of view of the client as she is leaving the labor and delivery unit. Program planners and maternal care providers can use the combination of information from different sources to develop an evidence-based, participatory plan to improve the behaviors of maternity care providers during labor and delivery.

The tools can be used at national level, district hospital level, and/or health center level.

- National program planners can use the tools to design strategies and interventions on a larger scale to improve the behaviors of maternal care providers during labor and delivery.
- Pre-service midwifery educators/tutors can use the tools to serve as practical behavioral guidelines to strengthen the pre-service behavioral training of midwives and other maternal health care providers.
- In-service training coordinators can use the tools in a similar way as a part of ongoing in-service educational activities.
- Supervisors of labor and delivery units can use the tools to help assess the content and quality of their staff’s behaviors on the job.

- It can also be used as a supervisory tool, providing an objective basis to demonstrate improvements in client/provider interaction and maternity care provider behaviors.

The combined results of these initial assessment tools provide the basis for design of a set of locally appropriate provider behavior change interventions that are a follow-up to the assessment activities.

### **Pre-testing the draft MCPCB assessment tools in Kenya and Bangladesh**

A generic set of “caring” behavioral guidelines can only recommend broad categories of behaviors and suggest individual behaviors that represent the types of behaviors that could be included in each category, based on existing models. Specific behavioral categories and actual behaviors that are appropriate and acceptable in the sociocultural context of each country must be negotiated locally. The key elements of the adaptation and pretest process implemented in Kenya and Bangladesh were:

1. Key informants adapt the generic tool for their facility/country settings.
2. Key informants suggest ways to use the tool in future activities to improve providers’ caring behaviors
3. Select facilities appropriate for testing the tool.
4. External (consultant plus local counterpart) assessment/observations of provider-patient interactions in Labor/Delivery Unit
5. Provider self-assessments, focus group discussions, and patient exit interviews.

### **Adapt the Generic Tool**

In early 2002, working with midwives, physicians and other maternal health and survival program planners and policy makers in Kenya and Bangladesh, CHANGE adapted the “generic” behaviors and assessment tools to reflect local maternal care settings and program needs in the two country settings. A set of locally-appropriate maternity care provider “caring” behavior assessment tools was designed and pre-tested in each country. These draft provider behavior assessment tools are now ready to be tested on a larger scale. The process by which they were developed can serve as a model for other countries to follow to develop their own maternal provider “caring” behavior assessment tools.

**Table 1. Comparison of Pretest Sites Maternal Health and Safe Motherhood Indicators**

INDICATOR	KENYA	BANGLADESH
<b>FERTILITY</b>		
Contraceptive prevalence-modern method (%)	32	42
Total Fertility Rate	4.7	3.2
<b>SERVICE UTILIZATION</b>		
Deliveries in health facilities (%)	40	8
Deliveries by skilled health personnel (%)	44	12
ANC at least one visit (%)	92	37
Tetanus toxoid coverage, 2+ doses (%)	51	64
<b>MORTALITY</b>		
Maternal Mortality Ratio	590	440 -

Sources: KDHS, 2000; BDHS, 2001; Mitra et al 1997; UNICEF 1999; World Health Organization 1999.

### Select Facilities to Test the Tool

Key informants and CHANGE partners in each country identified facilities that were representative of typical maternity care settings. The sites selected were convenient and purposive, with high volume of births being an important criterion.

In Kenya, two public facilities were selected as pretest sites, one urban and one rural. The urban site is a large maternity hospital in Nairobi (and one of the busiest in Africa). It is a teaching center and manages some 22,000 births a year. The rural district hospital also has a high volume of maternity patients, but compared to the urban site, equipment and supplies are limited and the infrastructure is in need of repair. Both facilities treat complicated obstetric cases, including surgical cases.

In Bangladesh, four facilities were selected to represent urban, rural, private and public maternity care environments. The public urban hospital, the largest pretest site, serves as a training institute and manages 6,500 deliveries annually. The private urban facility and the two rural facilities had a smaller number of obstetric patients, which is typical in a country such as Bangladesh, where utilization of facility-based obstetric care is low. All of the four pretest facilities manage other types of obstetric cases in addition to routine delivery, including surgical cases. Equipment appeared adequate and basic supplies for deliveries are purchased from outside sources by the patient.

Table 2 presents the characteristics of selected facilities, including average number of deliveries, the type and numbers of providers present during the observation period, and the number of patients observed in each facility.

**Table 2. Characteristics of Facility Selected for Pretest of Tool**

	KENYA		BANGLADESH			
Type of facility	Urban public hospital	Rural public hospital	Urban public hospital	Urban private hospital	Rural public hospital	Rural private hospital
Ave. no. of recorded deliveries per day	60	25	14	5	3	4
Type of providers on staff	Midwives Students* Physicians	Midwives Students Physicians	Nurse-MWs** Community MW FWVs*** Physicians Students Ayas (cleaners)	Nurse-MWs FWVs Physicians Ayas	Nurse-MW Students Physicians Ayas	Nurse-MW Jr. midwife TBA
No. of Staff in unit During observations ****	11	20+	7	5	2	3
Ave. no. of Patients in unit during observations	20	10	3	1	2	2
Staff:patient ratio	2	2+	2.3	5	1	1.3
No. of Patients observed In pretest	5	7	9	1	1	1

\* Student nurse-midwives \*\* Nurse-midwives \*\*\*Family Welfare Visitors \*\*\*\*Excludes physicians, who usually visited the unit but did not remain.

### **Assessment /Observations of Provider-Patient Interactions in Labor/Delivery Unit**

Permission was obtained for the CHANGE consultant and a local midwife counterpart to conduct observations over a period of several days in the labor and delivery unit in each facility from hospital directors of the facilities selected. The observers were seated in a place that allowed them to observe the patients and their interactions with providers, but did not interfere with the flow of patient care. In facilities with few patients, all the patients in the labor/delivery unit were observed. In the busier facilities, patients in active labor were selected through chart reviews and discussions with staff. For logistical reasons, observations took place only during the day. It would be extremely useful to conduct the assessment during the evening and night shifts as well.

Using the tool itself to record assessment results, the observers placed a mark (check or tick) next to each behavior any time it was performed by **any** health provider for the patient being observed. One assessment form was completed for each individual patient, but the behaviors of any maternity providers who gave care to the woman were all recorded on the one card.

A total of 24 labor and delivery patients were observed, over a total of 90 hours. Self-assessments were completed by 22 staff midwives, most of whom had participated in the observational assessment. Thirteen patient exit interviews were conducted, and a

total of 17 staff midwives and midwife tutors participated in focus group discussions. Caution should be used in interpreting results obtained from the small number of patients and maternity care providers observed. It is important to remember that this initial activity was simply to pre-test the utility of the assessment tool, not to make any large-scale generalizations or conclusions about provider behaviors.

## **Observations of Provider Caring Behaviors during Labor and Delivery**

### **Results from Kenya**

Twelve patients were observed, five in the urban facility and seven in the rural facility. Roughly 40 hours of observation took place over six days, (five to seven hours a day for three consecutive days in each facility). During the observation period, the minimum staff/patient ratio was approximately two to one in both the urban and rural facility.

In both the rural and urban Kenyan facilities, a minimal amount of provider-patient interactions were observed, whether “caring” behaviors or providing actual clinical care. A total of 52 caring behaviors were observed and recorded among the 12 patients during the observation period. On average, each patient received only four caring behaviors (out of a total possible 27 “caring” behaviors and six basic elements of routine clinical monitoring/care) The caring behaviors performed for a given patient ranged from zero to 12. Six of the 12 patients observed received less than the average number (four) of caring behaviors. Provider caring behaviors were somewhat more frequently performed in the urban facility (total of 36 behaviors among five patients) than in the rural facility (26 behaviors among seven patients).

There was a similarity in the frequency and type of caring behaviors performed by Kenyan providers in both the urban and rural facilities (Figure 1). No behaviors from the categories ‘Involve Family’ or ‘Incorporate Culture’ were observed in either the rural or urban setting. Negative behaviors were observed toward only one patient (not shown in the figure). Because family members, who could potentially have provided some of the “caring” care and attended to their patient’s basic human needs, are not allowed on the wards, social support to laboring women was minimal. Interestingly, in both settings, an extremely minimal amount of touching the patient occurs during labor and delivery. It was not possible to determine if fear of the possibility of HIV/AIDS transmission during birth contributed to this “no-touch” policy, or if other cultural factors were involved.

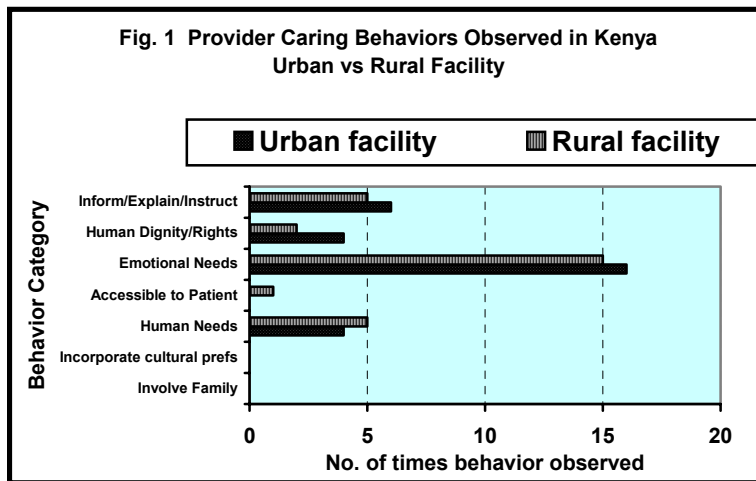


Fig. 1 presents the most commonly observed provider caring behaviors. In both Kenyan facilities, 'observing and talking' to patients was the most common caring behavior observed, followed by advising the patient about their breathing and/or position for comfort. The least common provider behaviors (each observed only on one occasion) were related to being

accessible to the patient - "comes quickly when called" and "responds to questions completely and politely."

### General Observations in Kenyan Pretest Sites

Despite the primary objective of assessing provider caring behaviors during labor and delivery, it is often difficult to ignore aspects of routine clinical care that are taking place simultaneously in and around the labor unit. In Kenya for example, observers were impressed by the comprehensive nature of infection control procedures on the ward.

Some problems were noted with incomplete data entered in the delivery record books in both the urban and rural facilities, perhaps due in part to the high volume of deliveries. One notable concern is the lack of use of the partograph, a charting tool that should routinely be used to help monitor progress of labor. Providers at either the urban or rural sites did not routinely use the partograph contained in each individual patient chart. Providers at the urban site said they were too busy to fill in the graph.

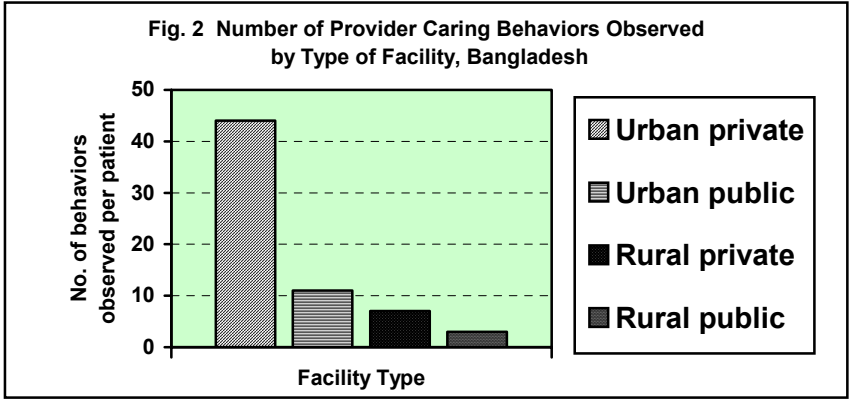
Two observations at the rural site, the need to house antenatal patients and delivery patients in the same room and serious equipment shortages, may have a negative impact on quality of care.

### Results from Bangladesh

A total of 12 patients were observed, nine patients in the public urban facility, and one patient each in the three other facilities. Approximately 50 hours of observation took place over seven days. The staff/patient ratio varied by facility, ranging from one to one, to one to five.

Although the number of patients observed was the same, the quantity of caring providers behaviors observed in the Bangladesh settings was three times higher than observed in Kenya. A total of 152 caring behaviors were observed over the six days of observations. On average, providers performed 13 caring behaviors per patient during the observation period. This average, however, masks considerable disparities among facilities.

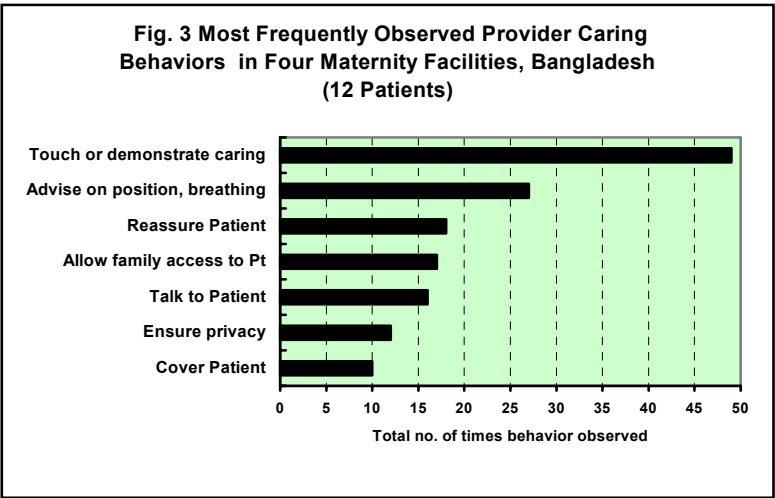




A wide variation in the number of caring behaviors was observed by type of facility (Figure 2). The one patient observed in the private rural facility received the most caring behaviors during labor and delivery (44). This represents a repeat

of some caring behaviors multiple times. An average of 11 caring behaviors per patient was observed among providers in the public urban site. Seven caring behaviors were provided per patient at the private urban facility, and three caring behaviors per patient at the public rural facility.

Figure 3 presents the most commonly observed provider caring behaviors for the four facilities combined. Touching and other culturally appropriate ways of demonstrating caring to patients was the most common caring behavior observed. Advising the patient about their breathing and/or position for comfort, and making statements to reassure the patient were the next most commonly observed caring behaviors.



Caring behaviors regarding family involvement were regularly provided to the one patient observed in the urban private facility. In the urban public facility, family involvement occurred only when family members were able to make their way onto the ward without being discovered. Two patients were allowed to perform a religious/cultural (Hindu) behavior, massaging the laboring woman's abdomen with oil.

In all but the private urban facility, the least common caring behaviors provided to patients were related to provider accessibility. Although ensuring privacy, which includes avoiding unnecessary bodily exposure of the patient, ranks low on the list of observed behaviors, it should be noted that on occasion patients themselves did not try hard to keep themselves covered. Negative behaviors were observed three times, twice toward the same patient, in the rural public facility.

Compared to patients in the public facilities in Kenya, patients in public facilities in Bangladesh received twice as many caring behaviors (Table 4). Staff/patient ratios were similar in both places, roughly two providers per patient. The number of student providers in Kenya was higher than in Bangladesh. Providers in both places performed similar types of caring behaviors (Table 5). Compared to Kenya, in Bangladesh family members were allowed slightly more family involvement, albeit not deliberately.

### General Observations at Pretest sites in Bangladesh

As in Kenya, partographs were little used as part of routine recordkeeping during labor. The presence of family for support during labor was infrequent. The lithotomy position is almost exclusively used for delivery, and c-section rates are unusually high. Ayas play a critical role in direct patient care, “caring,” and infection prevention during facility-based labor and delivery.

### Focus Group Discussions (FGDs) Among Maternity Care Providers

In both countries where the assessment tools were pre-tested, focus group discussions were conducted among nurse-midwives working in the labor and delivery units where observations were conducted. One FGD was conducted in the rural Kenyan facility. Two FGDs were conducted in Bangladesh, one each in the urban public and rural private facilities. Each FGD had five to six participants.

Participants were asked to review the generic list of caring behaviors and to discuss which caring behaviors they thought were more important and why. They were also asked which of the caring behaviors were the easiest for them to perform.

Table 3 shows that in Kenya there was a correlation between behaviors that midwives thought were important, and behaviors they thought were easiest to perform. There was, however, little correlation between behaviors perceived “more important” and “easy to perform” behaviors and the behaviors actually observed during the assessments in the facility (right hand column).

**Table 3. Comparison of Kenya FGD Results and Observations**

“Most Important” Caring Behaviors	“Easiest to Perform” Caring Behaviors	Actual Caring Behaviors Observed
Welcoming the patient	Welcoming the patient	0
Ensuring privacy	Ensuring privacy	0
Observe and talk to the patient	Observe and talk to the patient	19
Explain what you are doing and why	Explaining	0
Listen to what the patient tells you	Orienting the patient	
Use respectful and polite language		
Respond when patient calls		0
Be accessible to the patient		1

Table 4 presents the same information for Bangladesh. There is much greater correlation between what the FGD participants said is important and easy to do, and what they actually were observed doing that there was in the Kenyan provider FGDs.

**Table 4. Comparison of Bangladesh FGD Results and Observations**

<b>“Most Important “Caring Behaviors</b>	<b>“Easiest to Perform” Caring Behaviors</b>	<b>Actual Caring Behaviors Observed</b>
Encourage patient, provide reassurance	Reassure patient	18
Be close to patient	Be accessible	16
Assist to change position	Advise on breathing and position	27
Assist gently	Touching and eye contact	49 (demonstrate caring)
Allow patient to have visitors	--	17
Observe and talk to patient	--	16
Maintain privacy	---	22
Respond to questions	---	7
Welcome patient and family	---	0
Come quickly when called	---	9

### **Facilitating the Process of Adaptation and Pretest of the Assessment Tools**

A users guide has been drafted and pre-tested in Bangladesh, for use with the MCPCB tools. This user’s guide describes the steps in the process of locally adapting, pre-testing and applying the maternity care provider “caring” behavior assessment tools. It also describes the process that can be used to plan behavior change interventions based on the assessment results, to help improve maternal provider “caring” behaviors during labor and delivery.

## Next Steps

The initial responses of key maternal health professionals and program planners who participated in the design and pre-testing of the tools in Kenya and Bangladesh, both to the introduction of the MCPCB assessment tools and to the behavioral concepts underlying the tools, was extremely encouraging. They made many recommendations for improvement in the design, content and use of the draft tools that have enhanced both the format and content of the revised versions. They also suggested additional activities that can be conducted after the initial provider behavior assessments have been completed, to improve caring behaviors by maternal providers during labor and delivery.

Based on these recommendations, and incorporating input from other sources, next steps may include:

- incorporating the core “caring” behaviors into a set of standards and guidelines to be used as part of pre-service training for midwives and other cadres of skilled childbirth attendants;
- closely linking the standards for caring behaviors contained in the assessment tools with the basic standards of quality care for routine childbirth and obstetric complications; conducting the caring behavior assessments on a larger scale, implementing workshops for providers to analyze the assessment results and developing participatory action plans to improve caring behaviors; and
- utilizing an operations research methodology to determine if the assessment and follow-on activities were effective to improve provider behaviors.

Table 4 summarizes key informant suggestions for ways that the tool could be used to improve provider caring behaviors in pre-service and in-service settings.

**Table 4. Key Informant suggestions for use of the Maternal Provider Caring Behaviors Assessment Tool**

Kenya	Bangladesh
<ul style="list-style-type: none"> <li>◆ Pre-service assessment tool</li> <li>◆ Pre-service guidelines for quality care</li> <li>◆ Self-assessments for practicing midwives</li> <li>◆ Job aid in labor and delivery unit</li> <li>◆ Supportive supervision tool</li> <li>◆ Component of maternal health clinical and LSS training</li> </ul>	<ul style="list-style-type: none"> <li>◆ Guidelines for quality care (provider behavior)</li> <li>◆ Provider assessment tool (checklist)</li> <li>◆ Pre-service tools/instructional material</li> <li>◆ In-service training programs</li> </ul>

## Conclusions

In both the African and Asian settings, pretests showed that after local adaptation, the draft MCPCBA tool was a simple, user-friendly way to document maternity care provider “caring” behaviors through use of observational methodology. Almost universally, the obstetric care providers and planners recognized the behaviors as an essential, if frequently overlooked, aspect of quality maternal care during labor and delivery. Most reviewers welcomed both the comprehensive and condensed lists of caring behaviors as aids to assist in integrating the “caring” behavioral aspects of obstetric care into provider training programs.

Very few changes were made in the field to modify the seven overarching behavioral categories. Based on literature documenting mistreatment of women during facility-based childbirth, “Minimizing negative behaviors,” originally conceived as an add-on at the end of the other categories, was incorporated as the eighth behavioral category.

The majority of adaptations and modifications were to reflect country-specific manifestations of caring behaviors, and local sociocultural and religious practices related to birth. This was, in fact, one of the major motivations behind the development of the assessment tool - to create a tool to help providers recognize and respect the cultural differences inherent between traditional and modern obstetric practice as encountered during facility-based childbirth.

During the pretests, it became clear that the observational methodology also allows an opportunity to assess routine clinical care during labor and delivery. Many of the obstetric care providers involved in developing and refining the local versions of the assessment tools felt strongly that it was necessary to add a section on the assessment tool to record the frequency of performance of several aspects of routine monitoring of delivery care. The final versions provide space to record timing and frequency of monitoring of blood pressure, fetal heart, cervical dilation, status of membranes, and fluid and urine output.

Pre-testing the tool in different country settings and different types of facilities revealed wide variations in the amount and types of caring behaviors provided to patients. Caring behaviors categorized as attending to women’s emotional needs were the most frequently observed in both countries. Observing and talking to patients was the most common caring behavior performed by providers in Kenya. Touching and demonstrating caring were more common in Bangladesh. Advising patients on their breathing and positions of comfort, under the category of “inform, explain, instruct”, was the second most common behavior in both countries. These behaviors were also rated among the most important and easiest to perform by nurse-midwives in both countries.

Behaviors from the two categories ‘Incorporate cultural context’ and ‘Involve the family’ - both well documented in the literature as essential elements of patient-perceived quality of obstetric care - were infrequently observed in both country settings. Although the sample of providers observed was small, it is of concern that these two important aspects of provider behavior during labor and delivery are clearly not a routine part of everyday facility-based childbirth practice. Despite the growing recognition of unacceptable levels of both verbal and physical abuse of women during labor and delivery, very few ‘negative behaviors’ were observed during the assessments. Clearly, the presence of external observers may have been an inhibiting influence to negative behaviors. The absence of ‘negative behaviors’ does not guarantee a “caring” obstetric environment, however.

More work needs to be done to explore the reasons why caring behaviors are not more routinely practiced as part of facility-based care, even in settings where no obvious external barriers are evident to prevent these behaviors from taking place. Documenting medical, system and policy barriers that discourage providers from incorporating “caring” behaviors into their patient care, as well as investigating “internal barriers” from the provider perspective, are first steps toward eliminating these barriers and strengthening the “enabling environment” required for skilled maternity care providers to perform effectively (9). For example, almost all of the pretest sites had a “no visitor” policy in

place in the labor and delivery unit. Policies and protocols that negatively affect provider performance of caring behaviors can be changed if there is sufficient motivation to do so. In Zambia, a pilot program that changed family visitation policy to allow family members on labor and delivery wards was well received by both families and maternity care providers (65).

### **Assessment Issues to be Resolved**

There are still several areas that need to be addressed to improve the utility of the card and its effectiveness in assessing and recording provider caring behaviors. For example, observers can only record a caring behavior when it is performed by a provider. As currently designed, there is no way to record on the assessment form when a caring behavior *should have been performed but was not*. However, observers did note non-performance events in the margins of the card, such as when a patient cried out and was not attended to, or when a patient was shivering but was not covered.

It is important to note that some of the caring behaviors, as currently listed on the assessment form, are stated as **patient-initiated** behaviors, for example “respond to patient’s questions politely and timely.” If a patient does not initiate the behavior, the provider may not necessarily perform it, even if it is indicated and should be initiated by the provider as part of quality maternity care.

Inter-rater reliability, the correlation between findings of several observers assessing the same provider, may be improved if standardized criteria are developed to indicate a rating of “successful” performance of a caring behavior. A users guide has recently been developed and pre-tested in Bangladesh to allow more systematic adaptation and implementation of the assessment tools in different settings.

Cultural and family-inclusive behaviors may be more readily observed in areas of facilities other than the labor and delivery unit in settings where policies limit the presence of families in the actual labor and delivery areas. For example, waiting rooms and postnatal rooms where patients are transferred after delivery may be included as assessment sites.

The current form of the assessment tool may give observers only a partial picture of the quality of provider caring behaviors in a labor and delivery facility until all of the details surrounding its use are resolved through proposed operations research. Nevertheless, it has proved to be a good initial step to help trainers of maternity care providers in developing countries begin the discussion and focus on improving “caring behaviors,” a long-overlooked aspect of quality maternity care. The pretest findings in Bangladesh demonstrate what is possible for providers to accomplish in terms of exemplary provision of caring behaviors during labor and delivery, even within the constraints of a public facility.

## Discussion

### Improving the “Caring” Behaviors of Skilled Maternity Care Providers: Why Bother?

Increasing use of skilled childbirth care remains a global goal to improve maternal survival, and a key indicator in measuring the success of country programs. The importance of caring behaviors as part of patient-perceived quality of obstetric care is increasingly accepted. Pretest results for the maternity care provider “caring” behavior assessment tool demonstrate that there is still a long way to go to assure that the “caring” that all women expect and deserve as part of their childbirth experience is routinely available to them as a routine element of facility-based delivery care.

Motivating maternal care providers to care as well as cure, despite the difficult working conditions that are too often an undeniable part of their professional practice, remains a challenge. Minimizing negative provider behaviors during childbirth, including verbal and physical abuse, requires helping health personnel to explore the internal factors that may contribute to such behaviors, and to develop individual coping strategies. (108). “Staff burnout” has been documented in many high-stress clinical practice environments in both developed and developing countries (15).

In addition to addressing individual provider behaviors, changing social norms related to “caring” in obstetric care and toward violence against women in obstetric and other settings, is also essential. Placing “caring” obstetric practice high on the agenda at national policy level, and integrating sensitization about “caring” issues into all aspects of maternal care provider training is key. The training of maternity care providers must support a value system in medical education that supports the compassionate care of patients (99). Identifying and exploiting hierarchical medical networks to identify key influentials can speed the diffusion of ideas to change medical norms and culture (43, 113). In many countries, domestic violence and other forms of violence against women continue to be common throughout society (35,37,117). In these settings, it is difficult to isolate and address obstetric-related abuses by providers without challenging larger-scale social mores toward violence in the society as a whole.

Based on the results of the assessment tool pretests and subsequent full-scale use of the tools, individual facilities or national programs can begin to develop a systematic, multi-level set of behavior change interventions to increase provider caring behaviors during facility-based births. The assessment tools provide a foundation to develop behavior-based, research-based interventions to increase use of skilled obstetric care.

Programs can contribute to changing provider behaviors and increasing utilization of skilled childbirth care by all women by conducting a participatory analysis of assessment results (104,105) to help providers to:

- understand the internal barriers contributing to lack of caring;
- identify and address external system, medical and policy barriers that inhibit enabling obstetric practice environments; and
- change social norms regarding the medical importance of “caring” in a facility-birth environment, and toward violence against women overall.

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