

**Technical Report # 47**  
**Follow-up of Providers Trained in**  
**the Use of Family Health Services**  
**Protocols in the Departments of**  
**Borgou/Alibori, Atlantic/Littoral, and**  
**Mono/Couffo in Benin**

**November 2003**

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**On behalf of the Ministry of Health**

**PRIME II**  
**Benin**



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# *Acronyms*

ALK	Acceptable Knowledge Level
AVS	Village Health Agent
BMOH	Benin Ministry of Health
CCS/CSA	Community Health Complex/District Health Center
COGEC	Community Management Committee
CPNFT	Coordination of National Tutor Training Program
CSCU/CSC	Urban Division Health Center/Community Health Center
CSSP/CSC	Sub-Prefecture Health Center/Community Health Center
DDSP	Department Public Health Office
DRH	Human Resources Office
DSF	Family Health Directorate
EEZ	Zone Coaching Team
EIE	Interdepartmental Coaching Team
FH	Family Health
FP	Family Planning
IDE	State Nurse
IS	Health Nurse
MC	Chief Doctor
MCZ	Health Zone Coordinating Doctor
MVA	Manual Vacuum Aspiration
PNFT	National Tutor Training Program
PROSAF	Family Health Integrated Promotion Program
PSI	Population Services International
QA	Quality Assurance
SFE	Registered Midwife
SMI	Mother and Child Health
STI/AIDS	Sexually Transmitted Infections/Acquired Immunodeficiency Syndrome
USAID	US Agency for International Development
ZH	Zone Hospital



# *Executive Summary*

Upon request and with funding by USAID, PRIME II/IntraHealth International has been providing support to the Benin Ministry of Health (BMOH) since 1996 in designing and implementing Family Health (FH) Service Guides. In order to ensure efficient application of service protocols by the providers, the BMOH decided to first test these in a few health zones in the departments of Borgou/Alibori (North), Atlantic/Littoral and Mono/Couffo (South).

Testing was done utilizing a strategy that involves three training approaches (classic, tutoring and self training).

A follow-up of the agents trained in the use of FH Service Protocols was done in April 2002, after the testing phase, to assess their relevance and the efficiency of the dissemination approach used.

Follow-up results indicate that globally, the protocols are rather easy to use. They are easily applicable, accessible and available. The approach used to disseminate them was deemed adequate and efficient by most of the actors at the various levels. It should be noted that a certain number of factors had a positive influence on implementing protocols dissemination, including:

- Active involvement of BMOH (DSF (Family Health Directors), DRH/CPNFT (Human Resources Office/Coordination of National Tutor Training Program));
- Support from departmental FH services (mobilizing the tutors);
- Proximity coaching;
- Strict follow-up of the coaching team;
- Collaboration between partners;
- Grassroots planning;
- Sensitizing of COGECs (Community Management Committee).

However, certain aspects of the protocol documents still need improving in form and substance. Moreover, steps must be taken to address the following constraints in protocols implementation:

- Lack of or insufficient small materials. For instance, the providers noted lack of bleach, eosin for umbilical cord dressing, uneasy access to umbilical stethoscopes or lack of uterine examination gloves.
- Inadequate work frame in some health facilities. For instance, one provider noted:

*“The women can no longer make confidences. They are received for consultation almost in the same place as those waiting for their turn.”*

- Reluctance of some specialists to change, due to lacking information. Thus, some gynecologists and pediatricians oppose to implementing the protocols because they still have confidence in what they are doing.

- Conflicts of competence. For instance, some providers refuse to follow the process to implement the protocols simply because they were not trained like their colleagues. They systematically refuse innovations.
- Competence gaps for some providers. The providers show considerable lacunae in infection prevention, whereas this skill is a cross-running competence, and applies to several protocols. The same can be said about IV procedure.

As regards to post-training changes with providers and services, the follow-up results were globally encouraging and advocate for scaling this dissemination approach to other departments. In fact, one of the follow-up objectives was to assess post-training changes for knowledge and competence among providers and tutors/trainers. Results indicate clear improving of knowledge levels in relation to protocol contents and strengthening of skills in protocol use, particularly in the southern departments. Follow-up also showed changes/innovations in services as result of implementing FH Service Protocols, including the average number of days of SMI (Mother and Child Health) service offer, infection prevention and use of maternity cards for pregnancy follow-up.

The following recommendations were made to improve the protocol documents and dissemination approach:

#### **To the BMOH**

- Disseminate the follow-up results among all actors in order for them to take the necessary steps to correct the insufficiencies noted;
- Review protocol documents so as to improve form and substance. Specifically:
  - Review the summary to match the pages with the table of contents;
  - Utilize dull paper to print protocols, thus making reading under artificial light easier;
  - Utilize binding that will make it possible to use protocols simultaneously at several posts. For instance, have protocols in sheets or detachable booklets;
  - Utilize coil binding for plastic covers of different colors;
  - Look into the possibility to:
    - Bind by component and utilize colors;
    - Present certain parts of protocols in poster or memento format.
  - Include the comments made by tutors and providers on substance (see body of report).
- Utilize the approaches tested in the southern departments for better dissemination and application of the protocols by operational staffs;
- Utilize the experience of the national trainers/tutors group that participated in the process through survey departments;
- Set up a mechanism/system to motivate agents and boost experience;

- Provide health facilities with small materials/equipments to support the experience.

### **To Department Head Offices/Health Zones**

- Include protocol implementation follow-up in DDSF (Department Public Health Office) and Zones action plans;
- Conduct advocacy among the development partners to obtain technical, material and financial support to the process;
- Sensitize managers in centers on the need to obtain relevant materials and equipment for optimal protocol implementation including IV catheters, protection materials for infection prevention, drugs;
- Staffs in health centers should urge COGECs to set up a small health insurance system for reference.

### **To DSF and Department Head Offices**

- Improve communication systems between centers for references;
- Considering the population's reluctance towards evacuations due to non use of occytocics, allow midwives to utilize occytocics in some of the centers;
- Train all midwives in Manual Vacuum Aspiration (MVA);
- Train AVS (Village Health Agents) in partograph tracing;
- Give orientation to doctors, zone coordinators and DDSF on protocols and dissemination approaches;
- Include protocols implementation follow-up in zones' action plan;
- Conduct practical training for the three tutors;
- Disseminate follow-up results among all actors in order for them to take the necessary steps to correct insufficiencies noted (follow-up, clarification of tutors' roles/tasks, ...)





# *Introduction*

Upon request and with funding by USAID, PRIME II/IntraHealth International has been providing support to Benin's Ministry of Health (BMOH) since 1996 in designing and implementing FH service guides. Using lessons learned from the Reproductive Health (RH) Training Needs Assessment done in 1996 with the assistance of PRIME, the BMOH prepared and disseminated the document on "FH Service Policy, Norms and Standards." Between May 1999 and February 2001, PRIME provided technical support to develop "FH Service Protocols" which was validated by the BMOH in August 2001.

In order to ensure efficient application of protocols by the service providers, BMOH decided to have them tested in some health zones in the country, including Sinende-Bembéréké in the Borgou department; Banokoara and Malanville-Karimama in the Alibori department; Allada, Toffo and Zé in the Atlantic department; Cotonou in the Littoral department; Lokossa and Athiémé in the Mono department; and Aplahoué, Djakotomey and Dogbo in the Couffo department. The protocols were tested using a strategy that involved three training approaches (classic, tutoring, and self-learning). In the Borgou/Alibori departments where tests had been conducted between March 2001 and April 2002, PROSAF (Family Health Integrated Promotion Program) provided remarkable financial and logistic support and collaborated with PRIME on the technical issues. In the Mono/Couffo department and the Atlantic/Littoral department, tests were accomplished between February and July 2002 with financial and technical assistance from PRIME.

Following the testing phases, a follow-up of the trained agents was performed in April 2002 in the Borgou/Alibori departments, and in July 2002 for the departments of Atlantic/Littoral and Mono/Couffo. This follow-up report documents the results and lessons learned from FH Service Protocols field-tests.

## **Follow-up goal and objectives**

The goal was to evaluate the adequacy of FH Service Protocols and the efficiency of the approach used in disseminating them.

The specific follow-up objectives were to:

1. Assess availability, accessibility, applicability and ease of use of FH protocols;
2. Assess Post-training changes in knowledge and skills among health service providers and tutors/trainers;
3. Determine whether action plans had resulted in changes/innovations in services, following the application of FH Service Protocols;
4. Assess adequacy and efficiency of approaches utilized to disseminate FH Service Protocols;

Make recommendations about eventual revisions of protocols and strengthening/improving the dissemination approach.



# *Methodology*

## **Study design**

This is a formative survey that aims at evaluating the dissemination process and the use of FH Service Protocols. The results will enable the BMOH to make amendments to the protocols document and to the dissemination process.

Globally, the evaluation concerned service providers in CCS/CSA (Community Health Complex/District Health Center), Sub-Prefecture Health Center/Urban Division Health Center/Community Health Center) CSSP/CSCU/CSC maternity hospitals and/or dispensaries, hospitals as well as tutors trained in utilizing FH Service Protocols. Furthermore, in Health Zones where the providers were trained, the coordinating doctors were also concerned by the survey.

## **Instruments**

In total, eleven tools including questionnaires, observation tables and tally sheets were designed to assess protocol use and applicability, work conditions, self-learning, tutoring and agents' characteristics. The number of questionnaires depended on whether tutors or providers were involved. One evaluation questionnaire for protocol dissemination approach was given to the health zone coordinating doctors. These data collection instruments can be distributed in four groups:

### ***Interview guides***

- One instrument to collect information on protocol use and check document availability and structure along with contents applicability.
- One instrument to identify dysfunctions in the application of FH Service Protocols and assess protocols requiring posters and separate printouts.
- Two instruments to evaluate the dissemination approach of FH Service Protocols for providers on the one hand and providers/tutors on the other. These are used to record visits made by tutors, collect information on feedback concerning tutors support, usefulness of tutoring, availability and usefulness of the self-learning guides.
- One instrument to evaluate the dissemination approach of FH Service Protocols for tutors. This instrument is used to assess work volume, tutors' knowledge of tasks, feedback obtained during tutoring, acceptance and usefulness of the tutoring approach.
- One evaluation instrument for the dissemination approach of FH Service Protocols among the health zone coordinating doctors and training doctors; it is used to document the appreciation by coordinating and training doctors of changes that can be attributed to tutoring.

### ***Knowledge and competence test***

- One instrument including 19 knowledge questions grouped under three headings (Sexually Transmitted Infections/Acquired Immunodeficiency Syndrome

(STI/AIDS), Safer Motherhood and Child health) and four case studies to measure abandonment of hazardous practices was distributed to providers, providers/tutors and tutors. This instrument also contained one section on characteristics of the agents interviewed.

- One instrument evaluating agents' skills in utilizing Family Health Service Protocols to make decisions. This instrument allows observing providers and tutors' behavior in two case study situations (pregnancy related high blood pressure and newborn pathologic icterus).

#### ***Observation table***

- One instrument to document the work conditions (infrastructure and equipment, materials and drugs).

#### ***Review card***

- One review card for the self-learning guide to appreciate the answers to self-evaluation questions, documentation of cases received by agents during FH consultations, resolution of case studies, various protocols read and constraints in applying protocols as well as a summary of the constraints met in self-learning.
- One review card for action plans to measure the extent of achievement of the actions identified by providers upon completion of classic training.

Tools were pre-tested:

- At Parakou CSDU and Madina CCS (Parakou urban district) where two agents are presently posted. They had been trained while on post at the Malanville/Karimama Health Zone;
- At Tchatchou CCS and at the hospital of Saint Martin de Papané where the health agents are posted who had received orientation on protocols.

Pre-testing enabled follow-up of the tools to be finalized.

### **Survey targets**

Considering their limited number, no sampling of trained providers was done. Evaluation therefore concerned all the providers and tutors involved in the dissemination process, trainers and coordinating doctors.

Table 1 below gives a summary of the agents involved in the dissemination process by department as well as agents concerned by the survey.

**Table 1: Survey achievements by department**

Health Zone	Tutors		Providers		Coordinators/ Trainers	
	Planned	Seen	Planned	Seen	Planned	Seen
Atlantic	4	3	6	6	5	3
Littoral (Cotonou)	5	5	12	12	7	5
Mono-Couffo	5	5	5	5	8	7
Borgou/Alibori	13	12	39	27	4	4
Total	27	25	62	50	24	19

**Table 2: Summary per department of agents not reached by the survey**

	Providers	Tutors	Coordinators/ Trainers	Total
Atlantic/Littoral	0	1	2	2
Mono/Couffo	0	0	3	3
Borgou/Alibori	12	1	0	13
Total	12	2	5	19
Observations	3 absent 5 on leave 3 on assignment 1 ill	1 on assignment 1 ill	(on travel or absent)	

Tables 1 and 2 show that the survey reached the majority of the actors involved in testing. The cases not reached were due to professional and health reasons.

## Data collection

### ◆ *Collecting and processing team*

A follow-up team composed of eight members for the survey in Borgou/Alibori departments, and supplemented to 11 in total for the other departments (generalists, public health doctors, obstetricians/gynecologists, pediatricians, state midwives and one statistician) was set-up for tools' elaboration, data collection, processing and interpreting. A common understanding of the information to be collected and collection method was achieved through participation of the follow-up team members in elaborating and pre-testing the tools.

### ◆ *Fieldwork*

Data collection was carried out from 14-30 April 2002, for Borgou/Alibori, and from 15-27 July for Atlantic/Littoral and Mono/Couffo. Teams were constituted and active simultaneously in the same zone, visiting each health zone one after the other. This enabled the two teams to meet every evening and assess the day's achievements while reviewing the next day's planning. In each zone, surveyors evaluated on average one trained agent per day, due to the number of instruments that had to be administered to each target. Those concerned were given prior notice through a message indicating schedules and times at which the teams would make their visit.

Upon arriving at the survey zones, data collecting agents first met with the coordinating doctor or his replacement before any contact with providers and tutors. At the end of the first day, surveyors devoted one work session to harmonizing tools completion and solving some difficulties, including instruments used to evaluate use of FH Service Protocols, in order to make decisions.

In addition to the data collected during the follow-up, further data was collected between 22-30 October 2002 by the tutors in their own centers, and also among the service providers whom they monitored. Combined with coaching reports prepared by the tutors, this has enabled identification of specific dysfunctions in the application of FH Service Protocols and to assess protocols that needed posters and separate printouts.

◆ ***Ethical issues***

All the persons interviewed were given the choice to express their consent or not, before the questionnaires were administered. Moreover, information was collected anonymously and confidentially.

### **Data entry and analysis**

One data entry person, two coding/encryption agents and one programming analyst composed the data processing team. The data cards were first classified and counted by instrument type then corrected (inadequate individual identifications, redundant information, etc.) Tools with close-ended questions were then run through encryption as well as those with open questions after being coded by tool type.

Data was entered using Access 2000. After systematic entry control, the requests were converted into Excel 2000 for processing. This consisted in intersecting on the one hand each variable and indicator by health zone/department and by targeted personnel category (tutor/provider, provider, trainer), and computing frequencies for variables relating to open questions on the other, with due care about the denominators utilized. Tabulating was done using Excel 2000 as expected in the analysis plan. Finally signification tests ( $X^2$ ) were conducted to assess the existence of any significant differences in knowledge and competence scores among the groups, between post/pre-test and follow-up. Data interpreting was carried out by the data collecting team during two workshops, the first one for the data collected in Borgou/Alibori and the second for the results obtained in all the departments.

### **Constraints and limits**

◆ ***Administrative constraints***

In Borgou/Alibori departments, the coordinators and tutors were invited by DDSP to a training seminar on quality assurance (QA) held in Parakou during the data collection period. These targets were therefore away from their posts, which disturbed the pre-established survey schedule and forced the surveyors to make a second unplanned visit. In Littoral, work organization hindered the availability of the targets and consequently the surveyors the surveyors had to visit the same facility several times.

- ◆ **Technical constraints**

For the collection of statistical data, some items of the work conditions assessment tool were not adequately filled out due to inadequate filing of data back-ups in the sites visited (CSSP/CSC Sinendé, CCS/CSA Sèkèrè and CSSP/CSC Abomey Calavi).

## **Description of dissemination strategy**

### **Rationale for strategy**

Benin has developed some experience in the application of innovative approaches to in-service training with self-learning combined to classic training with PSI (Population Services International), PRIME and BMOH (1998) on the one hand and, tutoring through the National Tutor Training Program (PNFT) (1999) on the other.

Past dissemination experiences were inadequate and therefore BMOH decided to use other approaches in order to increase behavior change among the providers towards continuous use of the FH Service Protocols. A combination of the three approaches – classic, self-learning and tutoring -- was experimented in the departments of Borgou/Alibori, Atlantic/Littoral and Mono/Couffo.

This was intended to facilitate improved understanding of protocols contents, increased and more efficient application of FH Service Protocols by user staffs at the operational levels of the health pyramid.

### **Definition of approaches**

- ◆ **Classic approach**

This classroom training approach in the presence of one trainer uses interactive methods that enable active participation of all learners.

- ◆ **Tutoring training**

Training is done at work site by one provider of the same level who integrates the health team and gives support to each health team member in his daily tasks that are related to the protocols. This is peer training.

- ◆ **Self-learning**

In this situation, the learner is responsible of the training process. He assesses his own knowledge level at the beginning, carries out by himself as many learning tasks as possible, using a package of materials logically arranged by objectives, and he also determines the effect of learning on improving his own knowledge or skills.

## **Concept frame**

### **The actors**

- ◆ **"Master trainers"**

These are multidisciplinary resource persons with training experience who are coached by PRIME and PROSAF technical staff. Their role is to identify training needs in protocol use, define training strategies, prepare training materials, and train trainers and tutors at the decentralized levels (department, health zone).

◆ **"Trainers"**

They are trained at the decentralized levels by master trainers. These are doctors, or midwives for the most of them, providing FH services and working with service providers whom they directly supervise. Their main task is to conduct and evaluate classic training sessions for the service providers using appropriate materials. They explain to service providers the linkages between classic training and the other approaches (tutoring, self-learning).

◆ **"Tutors"**

These are peer educators/trainers. They carry onto the worksites the training that started in the classrooms. They work with the health teams to identify organization and service quality related matters and prepare corrective action plans. They coach the providers, giving them feedback on protocol use, check for self-learning guide use and help finding solutions to difficult cases. They also have discussions with the supervisors (chief doctors, zone coordinating doctors) and COGEC members with a view to contributing in solving eventual problems in the health center. Tutors are agents of change.

◆ **"Interdepartmental Coaching Teams (EIE)"**

These teams are composed of members selected from the core of master trainers/tutors of BMOH (DSF, DDSF). They are in charge of introducing tutoring in the health zones, introduce the tutors to the health teams, organize tutors' meetings to share lessons learned during tutoring, give technical support to the tutors so as to enable them to carry out tutoring functions. The teams make several visits to the worksites.

## **The process**

During *classic training*, the service providers acquire expertise with FH Service Protocols. They have discussions on actual problems arising in work places in relation with FH, using FH Service Protocols. In addition, they identify practices that need innovation in protocol application, upon returning in their respective health centers. Classic training spans over six days.

During *tutoring*, health teams and trained health agents work with the tutor in the course of several visits, until the performance by the health team is acceptable. The tutors agree with health staffs on the date or period of visits. By and large it is expected that the work of tutors be integrated within the global supervision of health zone activities.

## **Implementation of strategy**

The dissemination strategy was first implemented in Borgou/Alibori (2001) and a few months later in the Atlantic/Littoral and Mono/Couffo (2002). The interim period enabled those who initiated the intervention to draw out the lessons learned in Borgou/Alibori and adjust the strategy to situations found in the other departments, particularly concerning resources availability and efficient application of the



dissemination approach. The main changes brought in the southern departments as compared to the northern ones include:

- Decreased tutor/provider ratio so as to decrease the number of visits to be made by each tutor and strengthen proximity coaching;
- Effective involvement of MCZs (Health Zone Coordinating Doctor) and MCs (Chief Doctor) in provider follow-up through orientation on FH Service Protocols approach and use;
- Establishing two-men tutor teams composed by midwives only;
- Assigning more responsibility to coaching teams throughout the process particularly concerning the systematic follow-up of tutors.

These differences are summarized in the following table.

**Table 3: Characteristics of dissemination strategy implementation, by department**

<b>Factors</b>	<b>Borgou/Alibori</b>	<b>Atlantic/Littoral, Mono/Couffo</b>
Tutor profile	SFE, IDE, IS	SFE
Provider profile	SFE, IDE, IS	SFE
Tutor/Provider ration	1/4	1/2
Proximity coaching	Low	Strengthened
Involvement of MCZs and MCs	1 trained out of 3	All trained according to origin of agents through action plans
EIE role	Active at start of tutoring	Continuously active (regular meetings with tutors)

## Preparation

Three activities were conducted during this phase, namely:

- Needs assessment
- Preparation of training materials
- Tutors selection

### ➤ **Training needs assessment**

In April 2001, PROSAF and DDSP in Borgou/Alibori, in collaboration with Prime II assessed training needs during a workshop attended by the providers and targeted zones coordinators. The needs were validated and harmonized during a dissemination session with the participation of representatives from the central level and all the concerned departments.

### ➤ **Materials preparation**

In May 2001, PROSAF and DDSP in Borgou/Alibori organized in collaboration with Prime II and under DSF supervision a workshop to prepare the providers' training curriculums in FH Service Protocols use. The materials prepared were related to the

needs identified and to the training approaches selected. They were finalized in June 2001. These various sessions resulted in designing the following materials:

- One training module (classic) in FH emphasizing activities related to the health of the mother and child;
- One tutors' manual
- One self-learning guide

➤ **Selection of tutors and trainers**

◆ ***In Borgou/Alibori departments***

In June 2001, a team formed by one expert in charge of training at PROSAF, the midwife responsible of SMI/MUT Division at Borgou/Alibori DDSP and the coordinator of the PNFT, visited the health zones of Banikoara, Bembèrèkè/Sinendé and Malanville/Karimama.

For this selection, the team visited the facilities of the candidates recommended by zone coordinators to inspect centers and have individual interviews with each candidate. The following selection criteria were used:

- Be a qualified health agent (State midwives and state nurses);
- Have at least eight years experience;
- Be available for site tours;
- Work in a dispensary, peripheral maternity hospital or zone hospital (ZH);
- Be able to adapt to new situations;
- Be motivated to get technical expertise;
- Have a capacity for communication;
- Be able to train and coach;
- Be committed to work as a tutor;
- Membership in the health zone training team would be desirable.

The selection team ended up identifying nine tutors including one state nurse, three health nurses, and five state midwives. It should be noted that the above criteria could not be met due to insufficient qualified personnel. Three additional agents (maternity hospital or dispensary health nurse) were later selected in the Malanville/Karimama health zone by the coordinator to complete the tutors' group.

◆ ***In the Atlantic/Littoral and Mono/Couffo departments***

Here, the department tutors selected and trained through the National Tutoring Training Program were targeted for training in FH Service Protocols use. It may be possible that disparity in the skills among the tutors of the North and those of the South could have affected providers' use of the protocols although this was not proven by the follow-up.

## Trainers and tutors training

### ◆ *In Borgou/Alibori departments*

Tutors' training was done in July 2001. Ten health agents including six state midwives, one state nurse and three health nurses participated in this training which was attended also by one State Nurse from the Atlantic department. Training was done in three phases: "classic – tutoring – self-learning."

Three doctors and two state midwives trained as trainers by PROSAF joined the tutors' group to attend training on protocols contents. These trainers, supplemented with the head of SMI/MUT division, constitute the departmental tutors and providers' follow-up team.

### ◆ *In the Atlantic/Littoral and Mono/Couffo departments*

Trainers' training was done by "accompaniment". In fact, the resource persons (one doctor and two midwives) who were also "supervisors" reinforced their training skills working with the trainers who had conducted the training of service providers in protocols use in Borgou/Alibori departments.

Tutors' training was done using the following phases.

#### ➤ *Classic phase*

This involved two stages:

- Training in coaching techniques and tutoring;
- Training in contents of FH Service Protocols;

#### ☞ **Training in coaching techniques and tutoring**

The identification of participants' expectations at the onset of training enabled to establish that most of the participants expected to acquire perfect expertise in the tutoring training approach. It should be noted that the preliminary questionnaire had revealed gaps in the areas of communication skills and training techniques. The following topics were covered by the training sessions:

- Classic training approach "Learning for expertise"
- "Tutoring" training approach
- Tutors' activities and tools
- Orientation in services integration
- Planning of corrective actions
- Training techniques

#### ☞ **Training in contents of FH Service Protocols**

Identifying participants' expectations at the onset of training enabled to establish that most of the participants expected to acquire perfect expertise in FH Service Protocols. The following topics were covered by the training sessions:

- Background and history of FH Service Protocols;

- Contents of FH Service Protocols presented in the providers' classic training curriculum (see Annexe 1).
- Quality assurance
- Data use
- Behavior change strategy
- Micro-teaching
- Preparation of action plans
- Orientation in self-learning

At the end of each teaching activity, the participants recorded the new practices related to the protocols that they were to adopt in their health centers. These practices, with improvements or innovations, were summarized in individual or collective action plans to be used for the follow-up of activities. At the end of training, the tutors were given four types of documents:

- FH Service Protocols;
- Tutors guide;
- Self-learning guide;
- Follow-up schedule.

#### ☞ **Orientation of MCZs and MCs**

In order to involve MCZs and MCs in the protocols implementation process, a three days orientation was organized by the departmental trainers with the assistance of the master trainers. This orientation dealt essentially with protocols contents and was carried out only in the Mono/Couffo and Atlantic/Littoral departments.

#### ➤ ***Tutoring and self-learning phase***

After classic training, the tutors returned to their respective worksites to carry out tutoring in their health centers, and also perform self-learning tasks using the guide that was given at the end of training. This period spanned over one month, and then the trained tutors received the visit of the national tutors in charge of training them in tutoring.

One preparation meeting regrouping zone coordinators or their representatives, the head of FH service, support doctors, COCEC or COGES presidents, trained tutors and trainers, and national tutors preceded this visit. At this meeting, the role of national tutors was clarified, specifically involving the following tasks of assistance to the trained tutors:

- Introduce tutoring in the health zones,
- Assess the situation of health centers including planning of corrective actions,
- Coach the trained tutors on these various tasks.

The national tutors who had not attended training in protocols had to limit themselves to the above tasks and were not to be involved with self-learning tasks or protocols use. The departmental follow-up team addressed these aspects.

➤ ***Mechanism of tutors follow-up during tutoring and self-learning***

The departmental follow-up team carried out follow-up of tutoring and self-learning activities. (See EIE role above).

## **Providers training**

➤ **Classic phase**

◆ ***In Borgou/Alibori***

As described above, six agents<sup>1</sup> (three doctors and three midwives) of whom five had been trained by PROSAF in training methodology, attended training in FH Service Protocols use. The purpose of this training was to provide Borgou/Alibori departments training in the use of FH Service Protocols, using the curriculum designed to this end as well as FH Service Protocols. The data collected through documents analysis indicate that all trained trainers had performed the post-training tasks defined above. Thus, five of the six trainers have:

- Prepared one providers' training program in FH Service Protocols use, including the goal, objectives, session plans and schedule, in compliance with the training curriculum and FH Service Protocols;
- Trained 41 FH service providers during two sessions organized from 10-22 September 2002. The providers trained originated from the health zones of Banikoara (ten including two SFE (Registered Midwife) and eight IS (Health Nurse)), Sinende Bembèrèkè (20 including four SFE, four IDE (State Nurse) and 12 IS) and Malanville-Karimama (nine including one SFE, two IDE and six IS). The origin of the trained providers encompassed all care levels in a health zone including ZHs, CSSP/CSCUs and CCS. The trainers utilized interactive training techniques (case studies, role play, demonstration) to enable the learners to easily acquire expertise in the skills. The topics selected in the curriculum were dealt with in relation to protocols contents (see Annexe 1). During training, the providers identified practices that needed improving or innovating and included them in the action plans. Upon completion of training, the participants were given the three protocols modules and one self-learning guide;
- Assessed participant's knowledge and skills through adequate tools (questionnaires, tests, etc.) and prepared a report on training sessions conducted. These assessments show the training sessions had achieved good results.

During the first providers training session, the trainers benefited from coaching by "master trainers" from the national and departmental levels who gave them feedback on training process and contents, thus allowing improvement in their performance at

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1 It should be noted that two of the six trainers gave technical support to the trainers in Atlantic and Nono with the preparation, conduct, evaluation and reports of training sessions involving 19 providers and 19 tutors in February 2002.

the second session. However, master trainers did not utilize any observation tools to systematically assess trainers' classroom skills.

◆ ***In the Atlantic/Littoral and Mono/Couffo departments***

One doctor (from the Atlantic) and two midwives (from the Littoral) accompanied two trainers from Borgou to assist them with providers and tutors' training in the use of FH Service Protocols. In trainers' groups, they prepared, conducted and evaluated the training of 23 providers from 04 - 09 February 2002 at the Maternité Lagune. The providers trained originate from the Littoral/Atlantic (18 SFE) and Mono Couffo (5 including 4 SFE and 1 IS).

➤ ***Tutoring and self-learning phase***

In this phase, the providers were to:

- Apply lessons learned from training by using FH Service Protocols systematically in their daily practice;
- Implement the action plans for practices that needed improving and innovating;
- Do their own self-learning.

The tutors were deployed in the trained providers' health centers by teams of two members, (one midwife and one nurse in the Borgou), or one member (in the Atlantic/Littoral and Mono/Couffo) who worked according to the established schedule. The program consisted in making at least two visits of two to five days in each health center, with a week of self-learning in between. During their stay in the health centers, the tutors assessed the training facilities' needs and, with the health team, developed action plans of which they conducted the implementation. They also coached the providers, with the midwife assuming the coaching responsibility for the application of FH Service Protocols, while the nurse attended to other priorities such as hygiene, cleaning and organizational aspects.

For the self-learning component, tutors' tasks were to assist providers plan learning activities, encourage them in accomplishing these activities and ensure that providers complete all activities contained in the learning guide.

➤ ***Follow-up mechanism***

The departmental follow-up team made coaching visits in the facilities under tutoring and, on these occasions supervised self-learning done by the providers, helped tutors accomplish their tasks as defined in the tutors' manual. The team also held process review meetings with the tutors.

# Results

## Characteristics of agents interviewed

Considering that the dissemination of FH Service Protocols had targeted RH providers at all levels in the health pyramid, the survey concerned 46 facilities among whom slightly more than half (54%) are CCS.

**Table 4: Distribution of providers, by facility and department**

Facilities	Total number	Departments			
		Atlantic	Littoral	Mono/Couffo	Borgou/Alibori
HZ	13	1	3	-	9
CSCU	2	-	1	1	
CSSP	7	2	-	2	3
CCS	22	3	2	2	15
Maternité Lagune	3	-	3	-	-
CUGO	3	-	3	-	-
Total	50	6	12	5	27

As Tables 5 and 6 indicate, out of 75 agents interviewed in total, 50 (66%) are service providers, and 25 are providers/tutors representing 33% of the total number. The providers and tutors are distributed among the various facility types in similar proportions with the larger number in CCSs. Globally, the tutor/provider ratio is one to two with the exception of Mono/Couffo where the ratio is one to one, and Borgou where it is one to five. This difference in ratios reflects the project initiators' decision to limit the number of providers per tutor in the Atlantic/Littoral and Mono/Couffo departments in order to decrease the total number of visits to be made by each tutor. This decision was made on the one hand to solve the problem of limited resources in these departments compared to Borgou/Alibori that is benefiting from PROSAF support and on the other hand to strengthen the proximity coaching of providers.

**Table 5: Distribution of tutors, by facility and department**

Facilities	Number	Departments			
		Atlantic	Littoral	Mono/Couffo	Borgou/Alibori
HZ	11	-	2	3	6
CSCU	2	-	1	1	-
CSSP	1	-	-	-	1
CCS	10	3	1	1	5
Maternité Lagune	1	-	1	-	-
CUGO	-	-	-	-	-
Total	25	3	5	5	12

**Table 6: Average characteristics of providers, by department**

Department	Mean age	Tenure in qualification	Tenure in facility
Atlantic	45	19	3
Littoral	46	20	11
Mono/Couffo	43	16	4
Borgou/Alibori	37	15	4
Mean	<b>42.7</b>	<b>17.5</b>	<b>5.5</b>

As can be seen in the table above, the mean age of providers is 42.7 years. The Atlantic and Littoral departments have the highest mean providers' age and Borgou/Alibori the lowest. Providers on average have 17½ years tenure in their qualification. The more senior ones are found in the Littoral and Atlantic. Providers' tenure in the facilities is on average 5½ years with Littoral holding the lead (11 years).

**Table 7: Average characteristics of tutors, by department**

Department	Mean age	Tenure in qualification	Tenure in facility
Atlantic	44	19	5
Littoral	44	19	9
Mono/Couffo	43	19	5
Borgou/Alibori	42	18	6
Mean	<b>43.25</b>	<b>18.75</b>	<b>6.25</b>

Tutors' mean age is 43.25 years. The oldest are to be found in the Atlantic and Littoral (44 years) and the youngest in Borgou/Alibori. Tenure in qualification is about the same in all the departments ( $\approx$  19 years) whereas tenure in the facilities is higher in Littoral (9 years) compared to the other departments ( $\approx$  6 years).

### Other training experiences

After training in the use of FH Service Protocols, 22% of the providers in Borgou/Alibori report having received further training. Among these, 50% had training in addressing newborn infection. The training seminars were generally organized by UNFPA, PROSAF and BMOH. Thirty-nine percent of the providers in the southern departments report having received further training of which 44% was organized by BMOH. Most of the topics dealt with in this training are related to the contents of FH Service Protocols.

Eighty-three percent of the tutors in Borgou/Alibori departments report further training in other topics, including QA (50%), tutors' training (30%), family planning (FP) and STI/AIDS prevention. PROSAF, BMOH, DDSP were among the organizers of this training. However, only 38% of the tutors in the southern department declare having benefited from other training sessions (FP, STI/AIDS prevention, logistics, supervision and others) that were organized by BMOH/DDSP (60%).



## Post-training changes in knowledge and skills

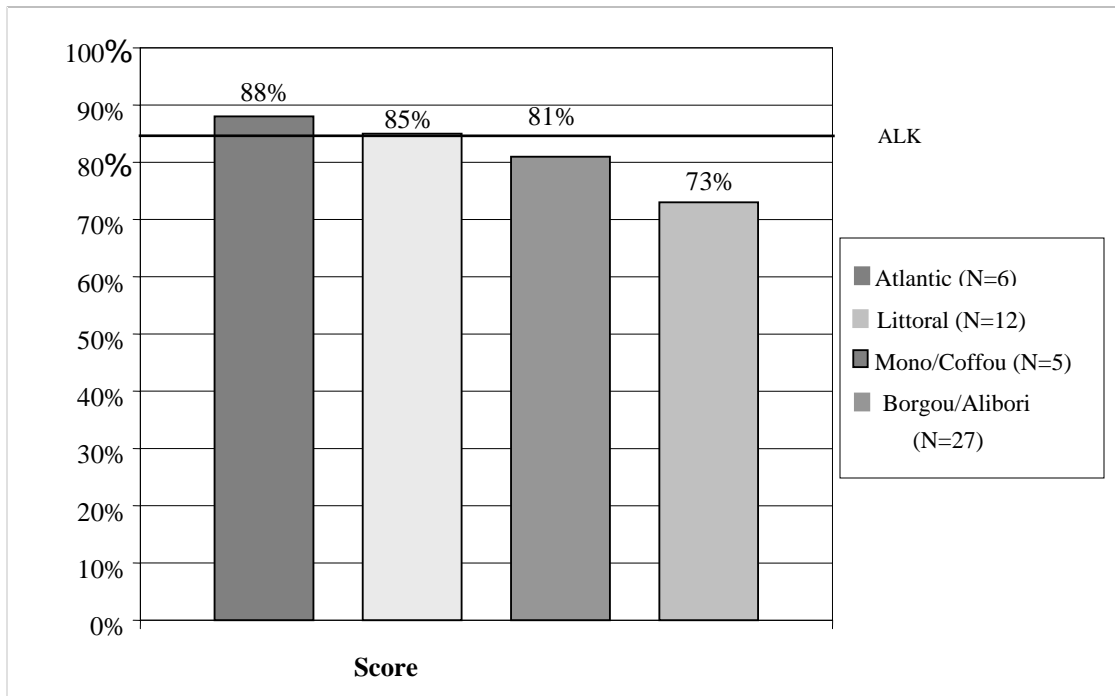
Post-training changes were assessed in terms of improved knowledge levels and capacity to utilize FH Service Protocols to make decisions.

### Changes in providers and tutors knowledge

The providers and tutors knowledge level was established during follow-up through a self-administered knowledge test. This test was structured in two parts: the first part was related to STI/HIV/AIDS (Q1 to Q5), Safer Motherhood (Q6 to Q14) and to Child Health (Q15 to Q19). The second part dealt with inappropriate practices in FH service that had to be abandoned.

#### *The Providers*

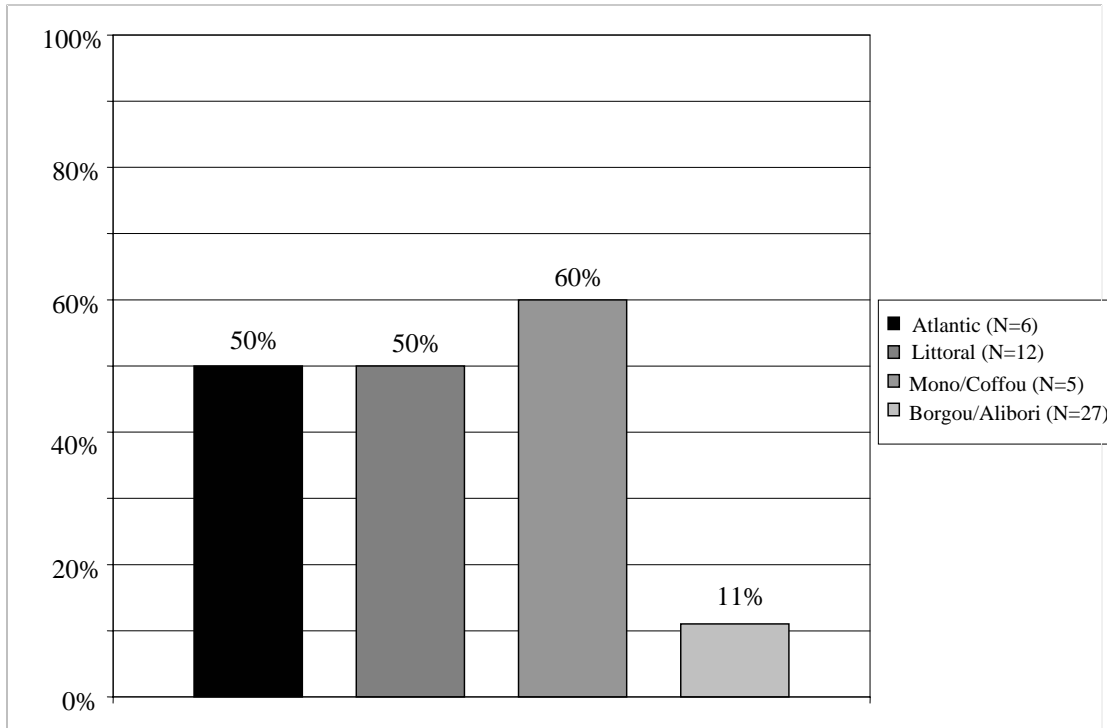
**Graph 1: Average providers' scores in knowledge test, by department (ALK=85%)**



As Graph 1 shows, the scores observed at follow-up exceed 70%. The best scores achieved or exceeded the acceptable knowledge level (ALK)<sup>2</sup> asset at 85% and were accomplished by the providers of the Atlantic (88%) and Littoral (85%). Globally, individual scores range from 58% to 100%.

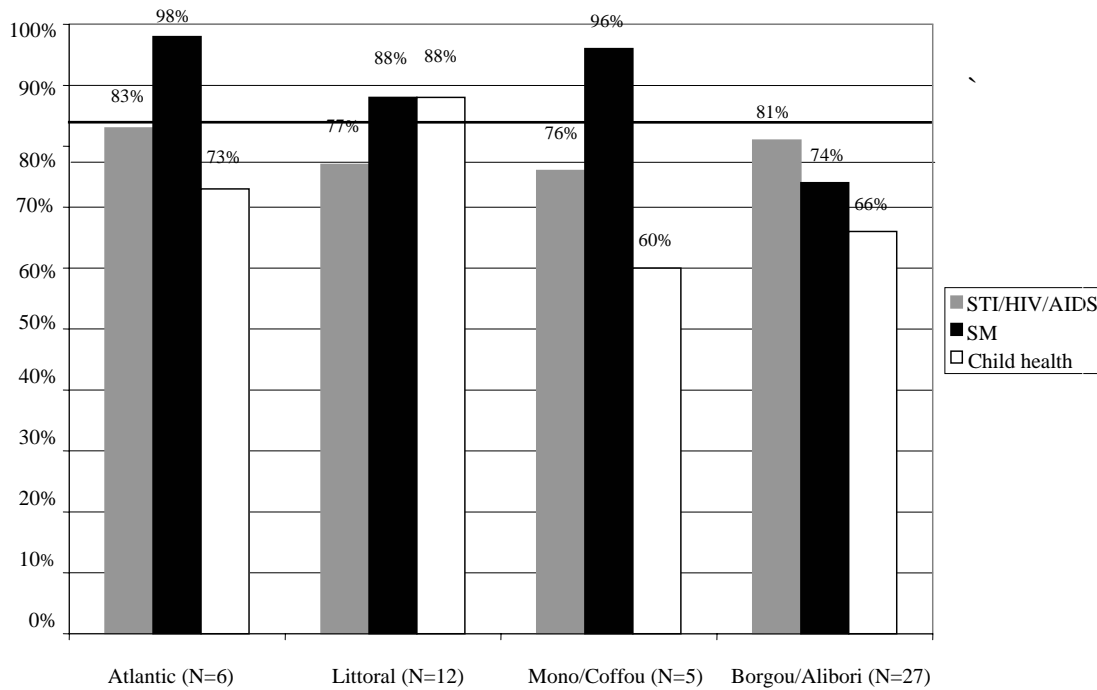
2 This indicates the minimum standard score in knowledge. ALKs can be set by the trainers, the organization or by professional associations. Several approaches can be utilized to establish the ALK but the practice, it is often set between 70% and 80% of the maximum score.

**Graph 2: Percentage, by department, of providers with a score equal to or above ALK in knowledge test**



Graph 2 indicates that globally one provider in two achieved or exceeded the ALK except for Borgou/Alibori where only 11% of the providers made it.

**Graph 3: Providers' average scores in knowledge test, by content area and department**

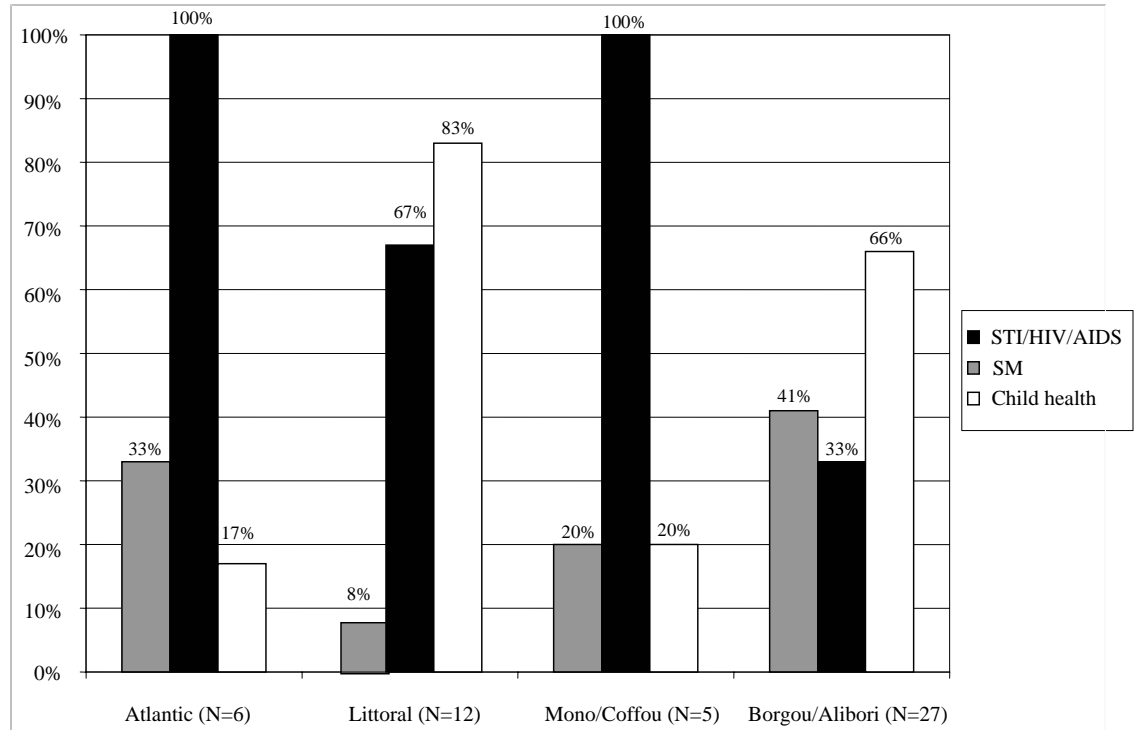


For STI/HIV/AIDS, the global average score achieved by the providers is lower than the ALK. The providers in the Atlantic and Borgou/Alibori departments achieved the best scores, respectively 83% and 81%.

The global average score achieved by the providers for Safer Motherhood is higher than the ALK. It should be noted that the providers in Borgou/Alibori had a score of 74% in this area, thus not achieving the ALK.

As regards to child health, the global average score accomplished by the providers is lower than the ALK. Only the providers in the Littoral performed better than the ALK with an average score of 88%.

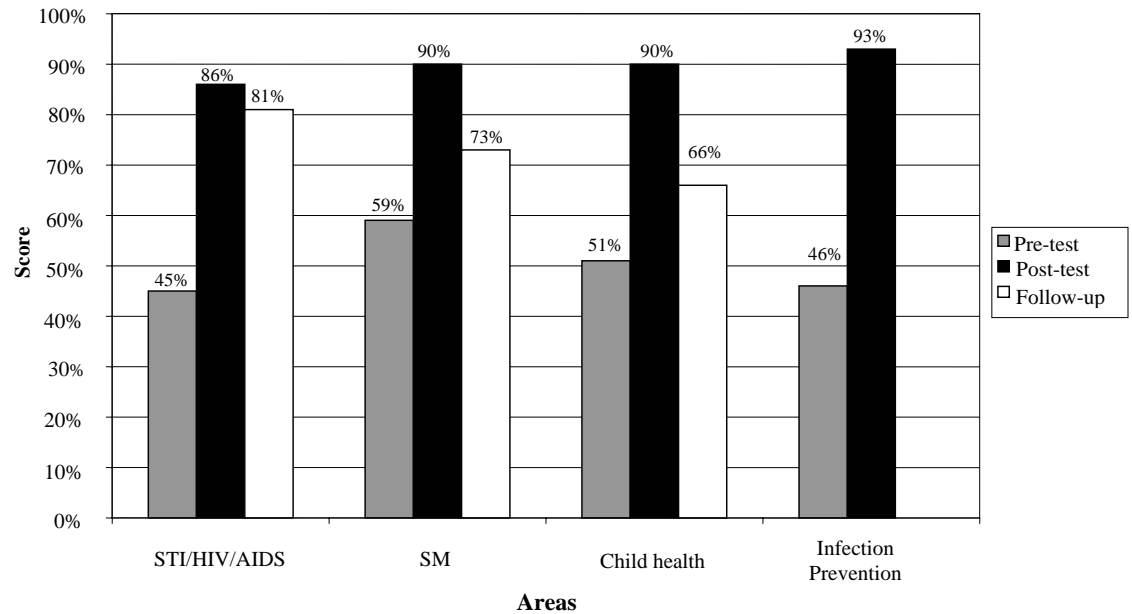
**Graph 4: Percentage, by area and per department, of providers with a score equal to or above ALK in knowledge test**



Safer Motherhood is a familiar area for all the providers in the Atlantic and Mono/Couffo although a low proportion (17% and 20% respectively) reached or exceeded the ALK for Child Health. On the contrary, 83% of the providers in the Littoral and 66% of those in Borgou/Alibori accomplished or exceeded the ALK in this area. However, 67% of the providers in the Littoral and only 33% of those in Borgou/Alibori reached or exceeded the ALK for Safer Motherhood.

STI/HIV/AIDS seems to be a problem area for the majority of the providers since only 33% in the Atlantic, 8% in the Littoral, 20% in the Mono/Couffo and 41% in Borgou/Alibori reached or exceeded the ALK.

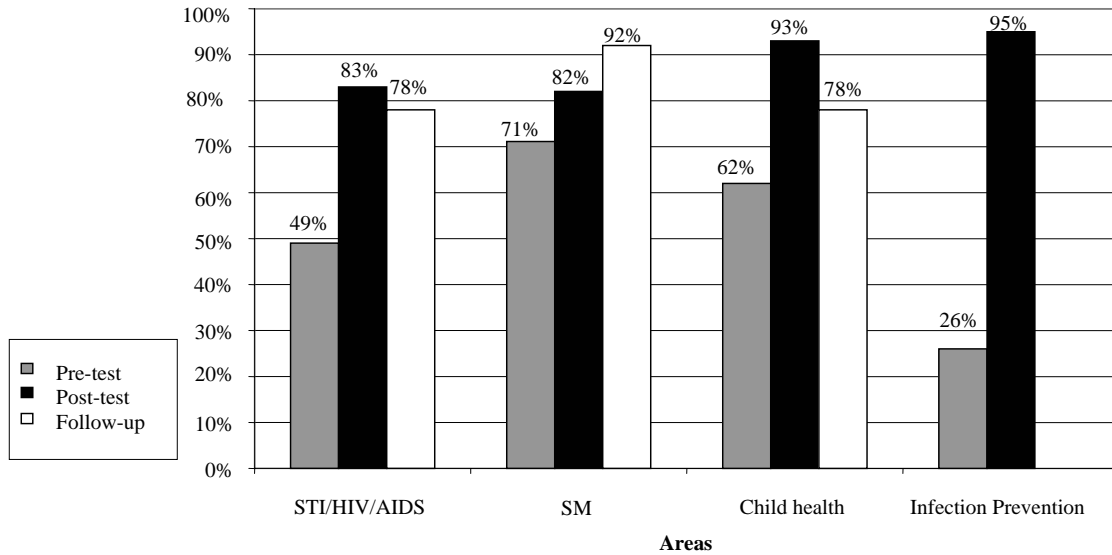
**Graph 5: Compared providers knowledge scores in pre- and post-tests and follow-up for Borgou/Alibori**



Compared scores in the knowledge test show significant differences between results in pre-test and post-test given to providers in Borgou/Alibori before and immediately after classic training, regardless of the areas. Furthermore all post-test results are above the ALK set at 85%. There is a decrease in knowledge scores between post-test and follow-up<sup>3</sup>, that can be considered normal given the time between training and follow-up (six months).

<sup>3</sup> Knowledge in infection prevention was not measured in follow-up.

**Graph 6: Compared providers knowledge scores in pre-and post-tests and six months after training (follow-up) for Atlantic/Littoral and Mono/Couffo**

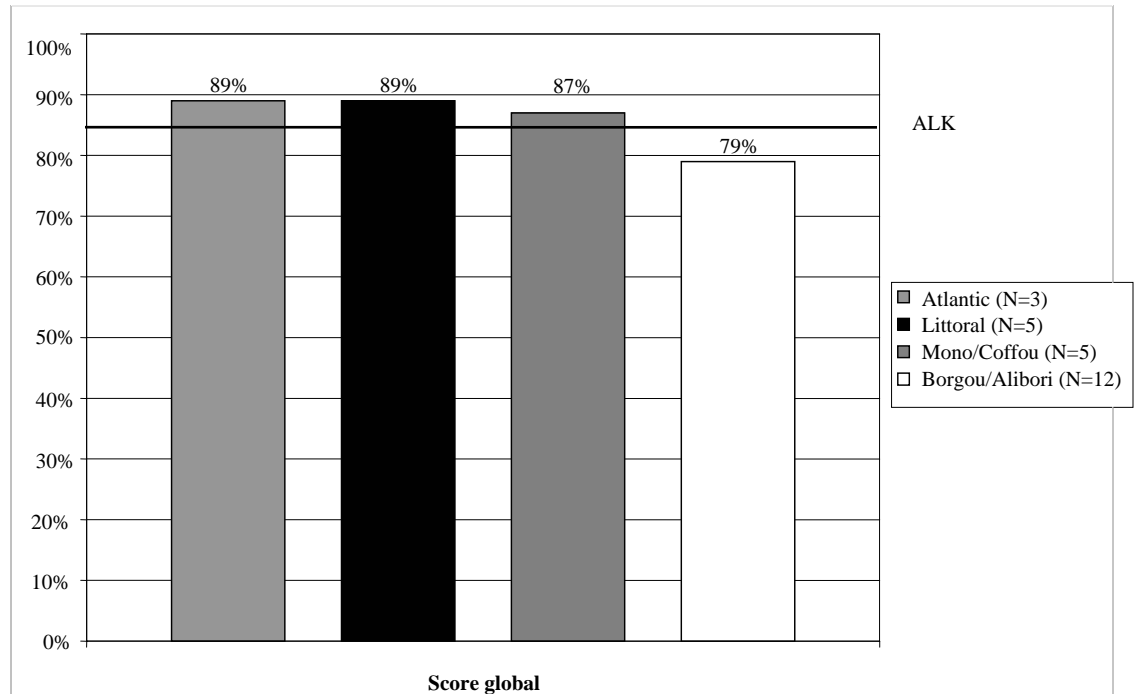


Compared scores in the knowledge test show significant differences between results in pre-test and post-test given to providers in the Atlantic/Littoral and the Mono/Couffo departments before and immediately after classic training, regardless of the areas. Furthermore, all post-test results are above the ALK set at 85% for child health and infection prevention.

One can note an increase in the knowledge level for Safer Motherhood between post-test (82%) and follow-up (92%). This can be explained by the fact that 44% of the providers in these departments report having received further training in relation to FH protocols contents after these protocols were disseminated. There is a decrease in knowledge scores between post-test and follow-up<sup>4</sup> for the other areas that can be considered normal given the time between training and follow-up (six months).

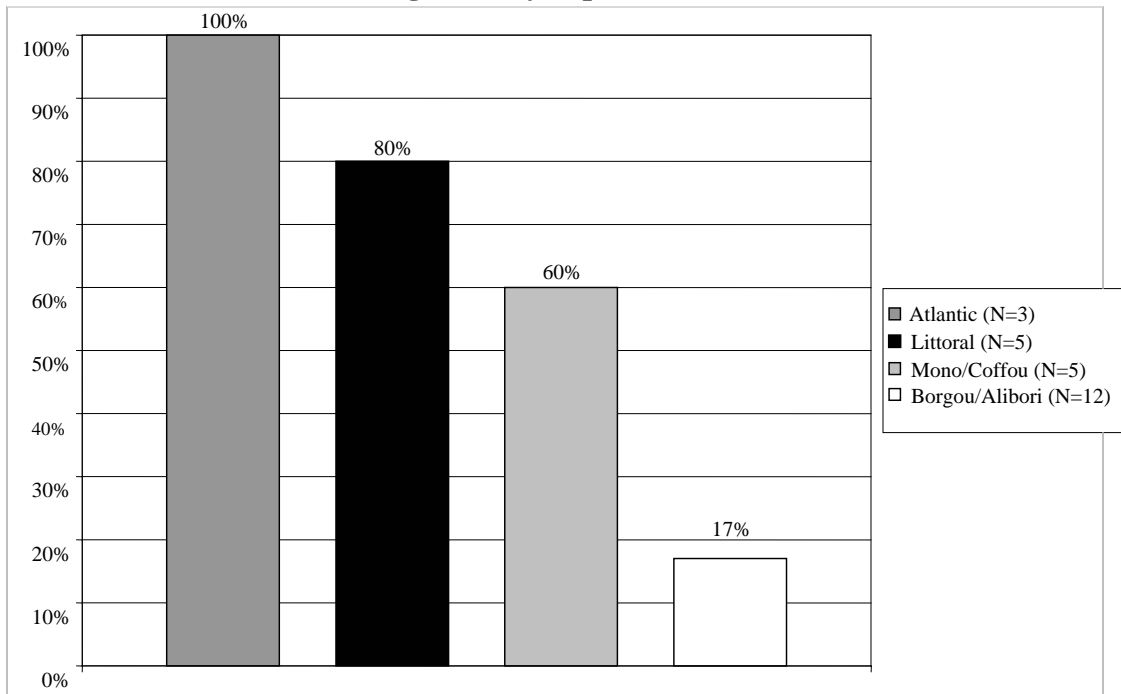
4 Knowledge in infection prevention was not measured in follow-up.

**Graph 7: Tutors' average scores in knowledge tests, by department (ALK=85%)**



As evidenced in Graph 7 above, with the exception of Borgou/Alibori providers who scored 79% only, average scores achieved by providers in the other departments attained or exceeded the ALK set at 85%.

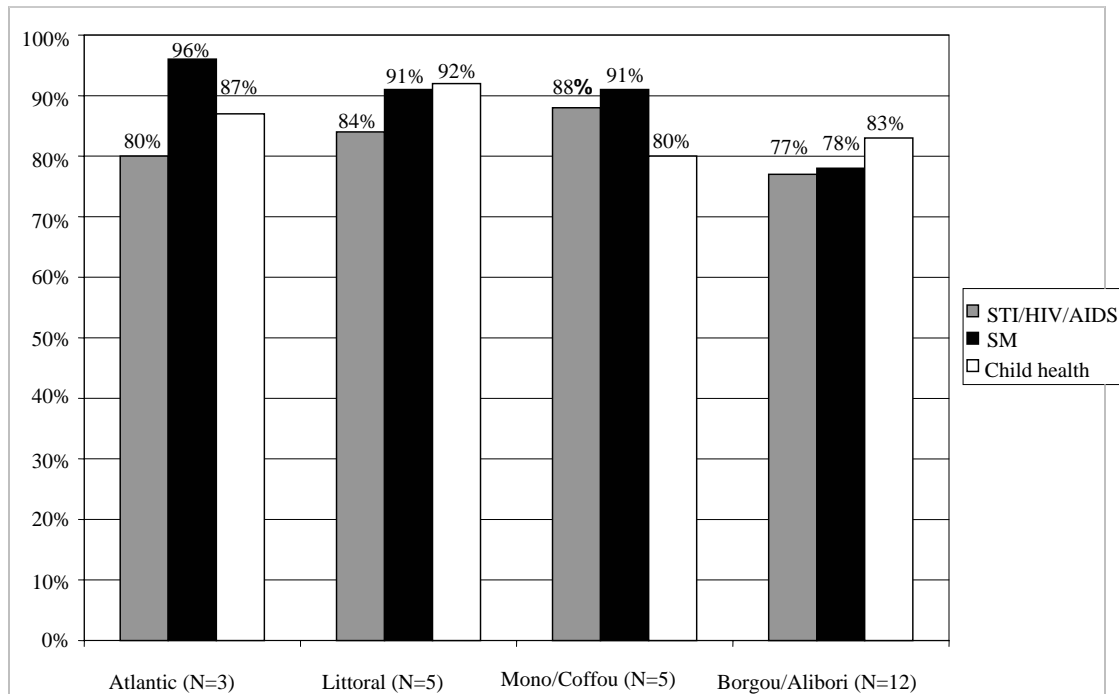
**Graph 8: Percentage of tutors with a score equal to or above ALK in knowledge test, by department**



All Atlantic providers and a large proportion of providers in Littoral (80%) and Mono/Couffo (60%) accomplished or exceeded the ALK. To the contrary, only 17% of Borgou/Alibori providers succeeded in attaining the ALK. Compared scores by professional category show that the providers who accomplished or exceeded the ALK were essentially midwives.

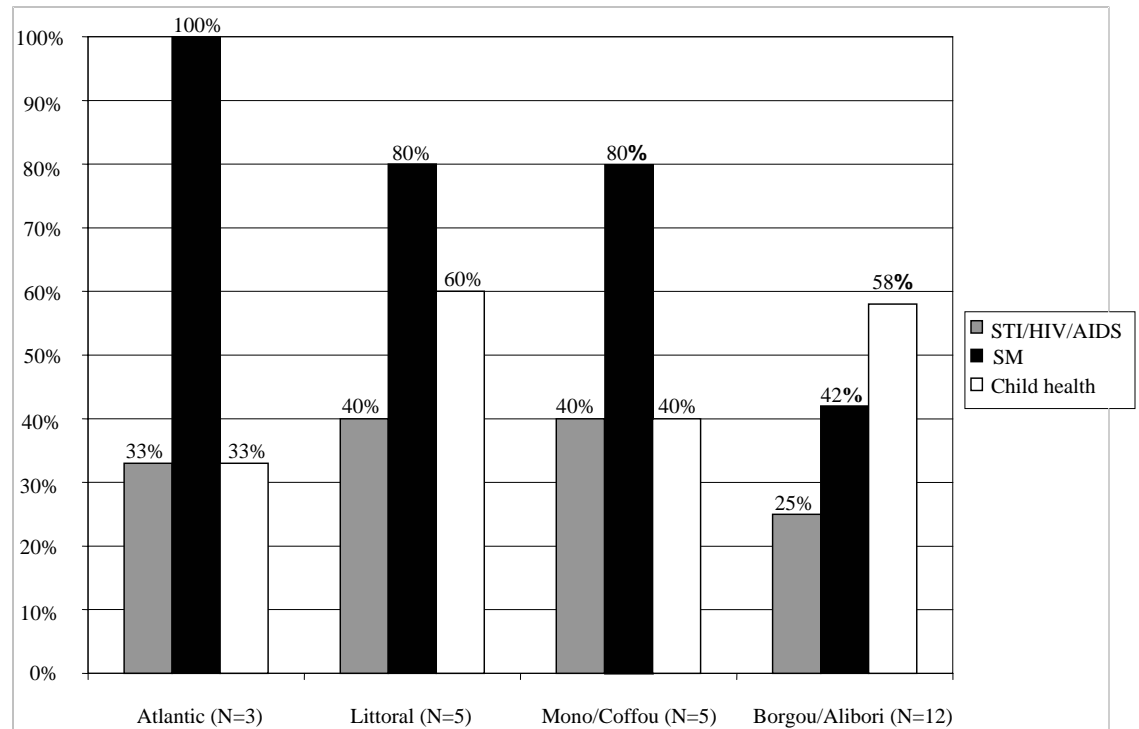


**Graph 9: Tutors' average scores in knowledge test, by area per department**



As can be seen in Graph 9 above, the scores are generally high for all the areas. The providers in the Atlantic/Littoral and Mono/Couffo departments attained or exceeded the ALK in two areas. STI/HIV/AIDS has the lowest knowledge scores (80%) in the Atlantic and Littoral whereas child health has the lowest knowledge scores in Borgou/Alibori. Although accomplishing high scores (77%, 78% and 83%), the providers in Borgou/Alibori did not attain the ALK.

**Graph 10: Percentage of tutors with a score equal to or above ALK in knowledge test, by area and per department**

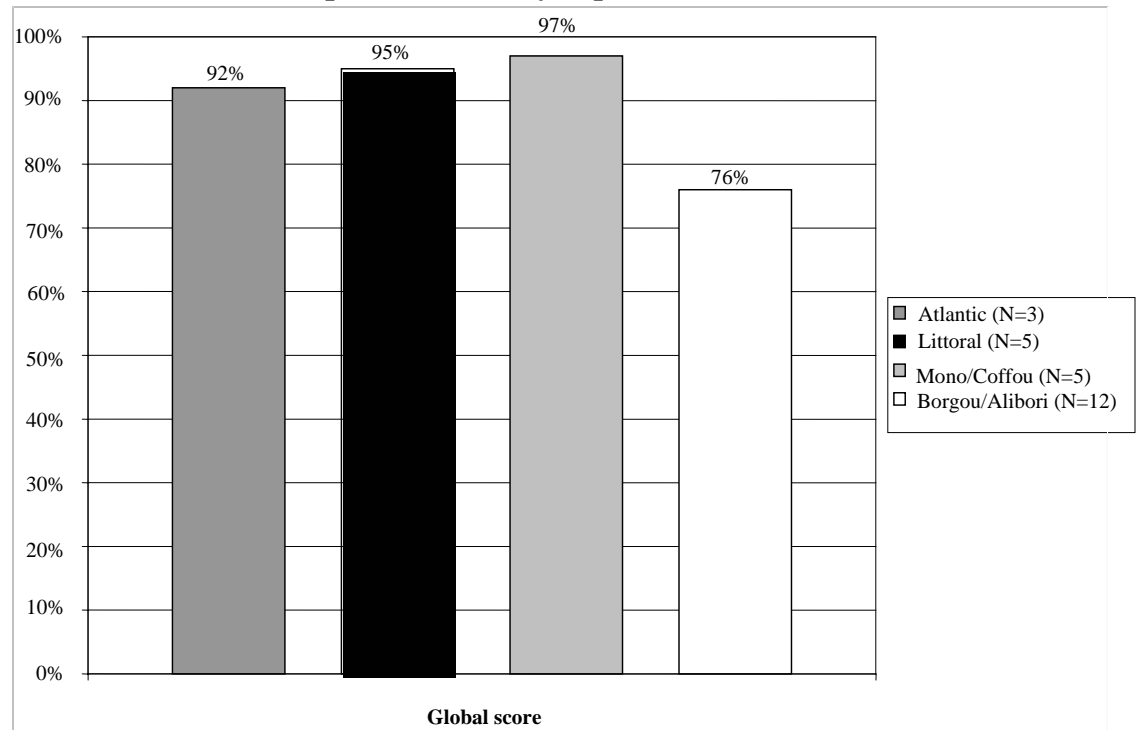


The graph above shows that the tutors are particularly comfortable with areas related to Safer Motherhood especially in the southern departments. This can be explained by the fact that these tutors are exclusively midwives.

### **Capacity to utilize FH Service Protocols in decision-making**

Two case studies were presented to the providers and tutors during follow-up, respectively on pregnancy related high blood pressure and pathologic icterus of the newborn. The surveyors were asked to utilize their protocols document to make appropriate decisions within a given timeframe.

**Graph 11: Agents' average competence scores (providers and tutors) for service protocols use, by department**



Graph 11 above shows that globally the average competence score of the providers and tutors groups in use of FH Service Protocols is higher than 90% except for Borgou/Alibori where it nevertheless reaches 76%, and therefore is higher than the ALK set at 75%. It should be noted that generally the midwives achieved a far better score than the IDEs or IS.

Specifically, the average competence scores of providers in the Atlantic/Littoral and the Mono/Couffo departments range from 88% in the Atlantic to 100% in the Mono/Couffo department. On the contrary, in Borgou/Alibori, the providers barely exceeded the ALK with a score of 77%. It should be noted that in this department, SFEs and maternity IS demonstrated greater expertise in protocols use.

As regards to the tutors, their average competence score in the southern department is 94%. The tutors of Borgou/Alibori achieved a score of 72%. Here too, SFEs and IS attained or exceeded the ALK.

Notably in Borgou/Alibori, two IS out of 27 interviewed providers had problems with protocols use. In the Atlantic/Littoral and Mono/Couffo departments, answers were sent in on time.

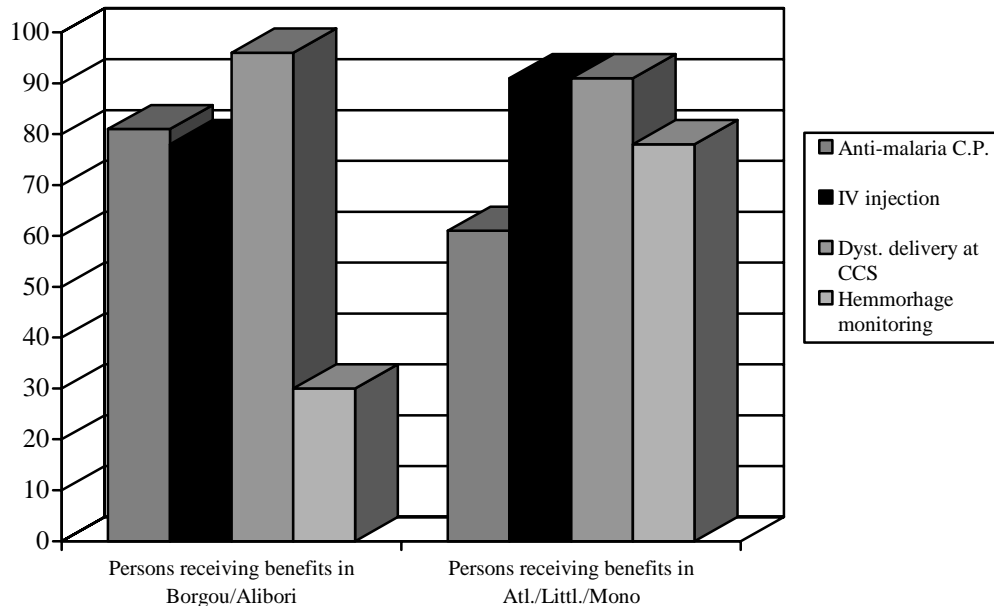
### **Changes in practices**

During training, the following inappropriate practices were found among the providers and tutors:

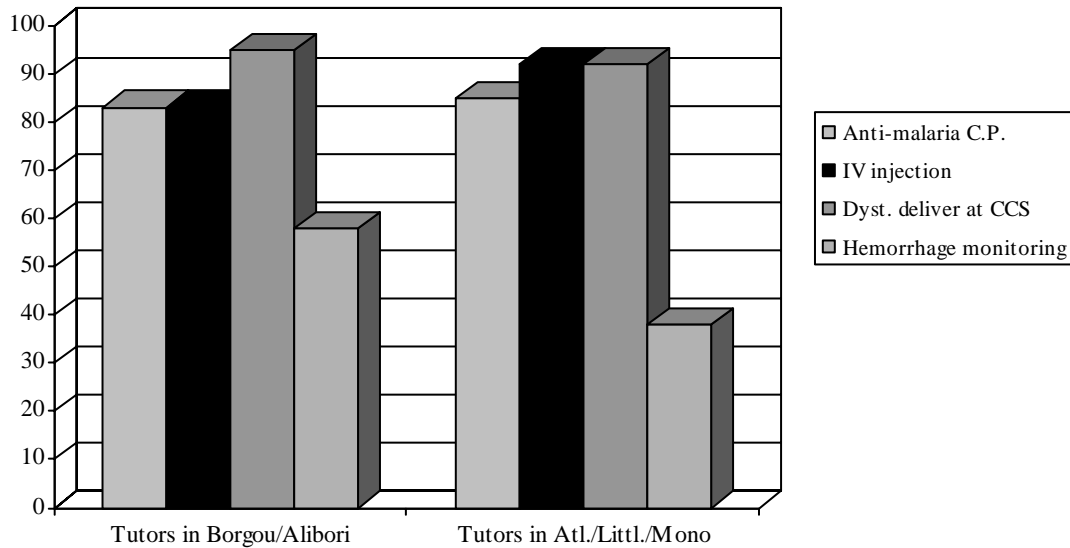
- **Anti-malarial chemo-prophylaxis for pregnant women:** Prescription of three 100 mg chloroquine tablets weekly on a set schedule, or one daily 100 mg chloroquine tablet for chemo-prophylaxis without presumptive treatment for pregnant women.
- **Intravenous injection for women in pregnancy, labor or postpartum:** Using an epiflex instead of a catheter.
- **Dystocic delivery at CCS:** Syntocinon infusion or abdominal expression at complete dilation.
- **Monitoring of obstetrical hemorrhage:** Consider BP reading, examination of the mucous membranes, monitor waking state as the most important components of clinical monitoring for any hemorrhage instead of the pulse rate.

The extent to which these practices are abandoned was assessed during follow-up. Globally, one-third of the agents interviewed (27 providers and 12 tutors) have abandoned all inappropriate practices for which they were tested. This specifically concerns 54% of the providers and 44% of the tutors. In general, most of the agents (82%) have abandoned three to four inappropriate practices. It should be noted that three providers and two tutors or 7% of the agents still continue with inappropriate practices.

**Graph 12a: Percentage of providers adopting new practices, by department (n=27)**



**Graph 12b: Percentage of tutors adopting new practices, by department (n=12)**



The Graphs 12a and 12b above show that in the southern departments the providers and tutors for respectively 61% and 85%, and in Borgou/Alibori for 81% and 83% have abandoned inappropriate practices related to anti-malarial chemio prophylaxis for pregnant women. Good practices in relation to obstetrical hemorrhage seem less familiar in Borgou/Alibori. As regard to professional qualification dispensary IS have achieved the best percentage of abandonment (100%).

In the southern departments, 91% of the providers and 92% of the tutors versus 78% of the providers and 83% of the tutors in Borgou/Alibori know that intravenous injection with a catheter should be done with women in pregnancy, delivery and postpartum<sup>5</sup>.

In the southern departments, two midwives out of 23 (9%) versus one tutor out of 13 (85%) do not know that at CCS level dystocic deliveries should be referred. In Borgou/Alibori, except for one tutor and one provider, all providers and tutors are aware that at CCS level dystocic deliveries should be referred.

Five providers out of the 23 (22%) and eight tutors out of 13 (62%) in the southern departments do not know that pulse rate is the single most important clinical element for monitoring obstetrical hemorrhage. In Borgou/Alibori, 70% of the providers and 42% of the tutors are ignorant of this.

Other practices were improved due to protocols use. In fact, data collected in the facilities during coaching visits indicate that use of FH Service Protocols ensures greater quality of services and care.

Thus, for infection prevention, the following new behaviors were observed among the providers:

<sup>5</sup> As can be seen from work conditions presented later, Catheters are the materials that lack the most.

- Prickly objects are systematically kept in specific boxes;
- Glove wearing was observed during practice;
- Hand washing before and after each contact or care;
- Wet cleaning and floor washing techniques are well rehearsed.

For obstetrical and neonatal care, the providers documented in their self-learning guide the services provided to mothers and newborn for cases of: urinary infection, eclampsia, prolonged labor, birth hemorrhage, neonatal, fetal and icteric distress.

In Borgou/Alibori, one midwife at Bembéréké said:

*"In our hospital it was nearly unthinkable to see a nurse, midwife or care assistant without a skirt under he white coat. But since the training on the use of FH Service Protocols and the introduction of principles and practices for infection prevention, everybody wears white coats exclusively."*

At Tori Bossito, one tutor wrote the following lines in his report after a delivery performed by a trained provider:

*"Infection prevention measures in the delivery room are strictly observed (no shoes coming from the outside in the delivery room, aprons are systematically worn during deliveries, materials and needles are decontaminated immediately after use and the needles are discarded in a tightly shut box). Labor monitoring and ordinary care to the newborn are adequately done according to the health service protocols. The only weak point noted in this activity was insufficient monitoring of women in the immediate postpartum."*

Follow-up results also indicate changes in service provision. Though modes yet, these changes are nevertheless encouraging.

**Table 8: Average number of days when SMI activities are conducted before and after training, for all departments**

Facilities	Average number of days	
	Before	After
Antenatal consultation	4.3	4.9
Postnatal consultation	2.6	3.2
Consultation of healthy children	2.6	2.8

According to the table above, it seems that health activities are better integrated in all departments after training and that some of them have increased daily practice. In fact, the results indicate a change in the average number of days when some services are provided, with an average gain of one day. The case of Borgou/Alibori should be noted more particularly because the average number of day for ANC went from three to 4.5 weekly, and from 1.3 days to 2.5 for PNC.

**Table 9: Average number of maternity cards with timed fetal heart sound (FHS), by department, before and after training**

Facilities	Average number of maternal cards	
	Before	After
Borgou/Alibori	0.6	3.5
Atlantic	0.8	2.2
Littoral	1.4	3.1
Mono/Couffo	0.6	3.9
Total	<b>0.8</b>	<b>3.2</b>

In each facility, ten maternity cards filled out before training and, ten others filled out after, were randomly drawn to check whether they mentioned fetal heart sound, which is one of the delivery monitoring indicators. It seems that the average number of maternity cards with timed fetal heart sounds has increased in all departments from barely one to more than three cards. The most important changes are noted in Mono/Couffo and Borgou/Alibori.

## **FH protocols availability and applicability**

### **Protocols availability**

**Table 10: Proportion of providers having documents of FH Service Protocols**

Protocols	Borgou/Alibori		Atlantic/Littoral Mono/Couffo		Total	
	Freq.	%	Freq.	%	Freq.	%
Available	38/39	97%	36/36	100%	74/75	99%
Not available	1/39	3%	0/36	0%	1/75	1%

For the departments as a whole, the providers received the FH Service Protocols documents during training in the use of these. Nearly all of the providers interviewed (995) during the follow-up had FH Service Protocols. The only provider who did not have them explained that he nurse was absent at the time of the interview and had locked them up.

### **Applicability of the protocols document**

**Table 11: Proportion of agents seeking information in service protocols, at least once after training**

Modality	Borgou/Alibori		Atlantic/Littoral Mono/Couffo		Total	
	Freq.	%	Freq.	%	Freq.	%
Seeking at least once	37/39	95%	36/36	100%	73/75	97%
Did not seek	2/39	5%	0/36	0%	2/75	3%

The majority of the agents trained (97%) indicated having used the protocols one time at least. Only two agents out of the 75 declared never having looked for information in the protocols, namely one ZH agent who had become a hospital ward

monitor after training, and one CCS nurse due to retire soon, and seemingly not motivated any longer.

**Table 12: Frequency of protocol use for service delivery by the trained agents**

Modalities	Borgou/Alibori		Atlantic/Littoral Mono/Couffo		Total	
	Freq.	%	Freq.	%	Freq.	%
Every time	7/39	19%	14/36	39%	21/75	28%
Often	13/39	35%	17/36	47%	30/75	40%
Sometimes	16/39	43%	5/36	14%	21/75	28%
Never	1/39	3%	0/36	0%	1/75	1%

For the departments as a whole, the agents declare consulting the protocols often (40%) or every time (28%) for service provision. Twenty-eight percent of the providers consult them sometimes, and one agent declares not having been able to do so. In the southern region, the providers refer to the protocols twice as much as in the other regions. This may be due to better follow-up or to the qualification of the providers who all are midwives.

**Table 13: Frequency of protocol use, by post-training function**

Modalities	Tutors		Providers	
	Freq.	%	Freq.	%
Every time	11/25	44%	10/50	20%
Often	9/25	36%	21/50	42%
Sometimes	5/25	20%	16/50	32%
Never	0	0%	1/50	2%

The tutors seem to better observe reference to the protocols than the providers. In fact, more than half the trained providers (62%) indicate consulting protocols often or every time versus 80% of the tutors.

**Table 14: Cases for which protocols were utilized (n=73)**

Clinical Cases	Total	
	Freq.	%
Pregnancy illness (HBP in pregnancy)	30	41%
Newborn resuscitation	27	37%
Newborn infection	27	37%
Premature delivery threat	22	30%
Pregnancy hemorrhage	22	30%
ANC/PNC/normal delivery/FP	15	21%
Addressing STIs	7	10%
Infection prevention	7	10%
Labor eclampsia	5	7%
Reception	5	7%
Erection dysfunction	4	5%



Cases for which the trained agents indicate having utilized the protocols are (in ranking order):

- Pregnancy illness (41%)
- Newborn resuscitation (37%)
- Newborn infection (37%)
- Pregnancy hemorrhage (30%)
- Premature delivery threat (30%)

In Borgou/Alibori, it seems that the agents never consulted the protocols for ANC, PNC, normal delivery, FP, infection prevention, addressing STIs, whereas in the southern departments protocols were not consulted for labor eclampsia, erection dysfunction and reception.

**Table 15: Protocol use for service delivery by the agents**

Modalities	Total	
	Freq.	%
Identifies appropriate protocol	4/68	6%
Identifies appropriate protocol and follows adequate procedure	64/68	94%

The agents interviewed were asked to utilize the protocols to solve one typical case. Nearly all the agents trained (94%) in all the departments were able to identify the adequate protocol to solve the case presented and to follow the proper procedure.

The majority of the agents trained (94%) deem the protocols useful in addressing cases presented. Only four agents out of the 34 in Borgou/Alibori did not find them useful.

When interviewed providers stated that they used the protocols for the following:

- Adequate addressing of cases
- Good diagnosis
- Decision making

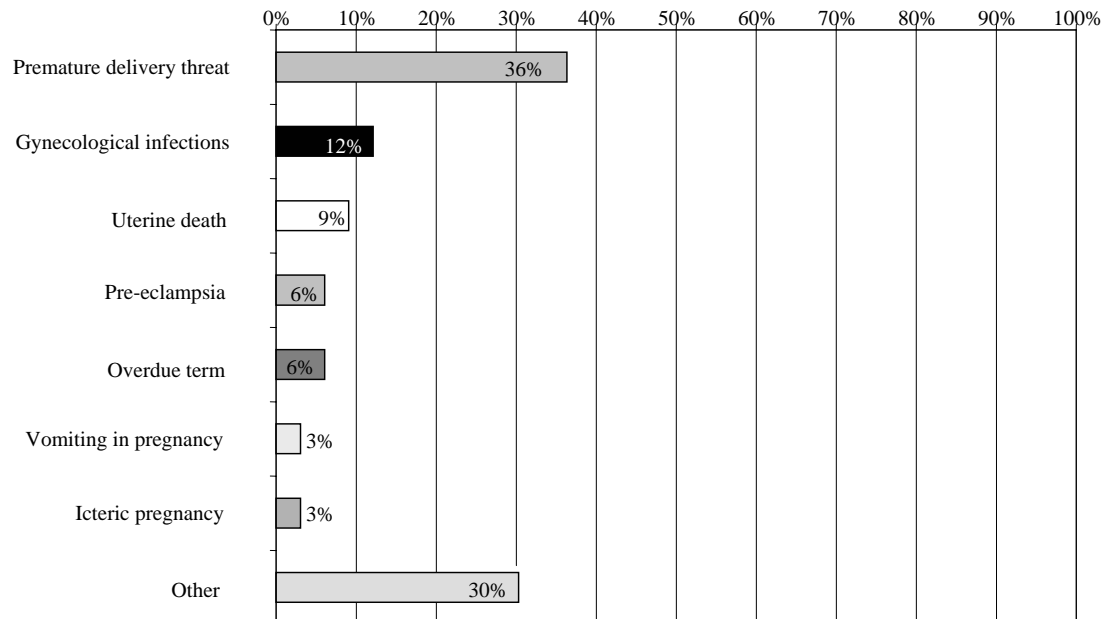
One midwife in the Burgoo said:

*"Family health protocols make my work easier and help me quickly make decisions in addressing cases."*

One tutor midwife in the Borgou testified:

*"At the beginning of tutoring training, the woman in charge of the midwives was really reluctant. She would hear nothing about any role that I could have in the care team. She felt that I would take her place. But after a while, having noted our care in handling the patients and how we discarded the syringes, needles and other soiled objects, she finally understood. She called me in to tell me that I had to be available to help improve my colleagues' skills."*

**Graph 13: Areas agents faced not included in protocols**



The agents were asked whether they had been faced with cases not addressed by the protocols. The cases that were most frequently cited by the 33 agents included premature delivery threat (12/33), gynecological infections (4/33) and uterine death (3/33).

However, it should be noted that except for malnutrition, the other cases cited above are already addressed by the protocols, which indicate insufficient protocol reading or use by some trained agents.

### **Dysfunctions in the protocols**

Further investigations done by the tutors and analysis of tutoring reports indicate that the following protocols should be revised:

#### ***Component on women***

- Menstrual cycle dysfunctions
- Menopause
- Anemia and pregnancy
- Drepanocytic anemia and pregnancy
- Abortion and postpartum care

#### ***Common components***

- FP (NORPLANT® Implants)

#### ***Component on the child***

- Newborn resuscitation

Further protocols should be added for the following clinical cases:

- Icterus and pregnancy
- Diabetes and pregnancy
- Interrupted pregnancy (uterine death)
- Pelvic and abdominal mass and pregnancy (cyst, myoma, ascites)
- Premature delivery threat
- Eclampsia with pregnant woman not in labor
- Overdue term
- Venereal vegetations, STIs
- Treatment of mammary engorgement
  - Breast abscess
  - Breast ulcer
- Postpartum eclampsia
- Pre-eclampsia
- Addressing 0 to 15 year child
- Minor menstrual cycle dysfunction in a woman wishing a pregnancy
- Addressing isolated edema in pregnancy
- Addressing isolated proteinuria or associated with edema in absence of HBP
- Nervous/undesired pregnancy
- Treatment for a patient wishing a pregnancy

### **Organization/Structuring of the protocol documents**

To measure their appreciation of the protocol information access, the trained agents were asked to express their views on four aspects of protocol documents' binding:

- Ease of information search
- Binding
- Document presentation

**Table 16: Appreciation by providers of ease of information search in the protocols**

Modalities	Total	
	Freq.	%
Very easy	5/75	7%
Easy	51/75	68%
Difficult	19/75	25%

As shown in the table above, 7% of the trained agents find it easy or very easy to search for information in the protocols. The reason given by those of a different opinion include:

- Errors in page numbering
- Landscape presentation
- Glossy pages under artificial light

The agents feel that binding enables:

- Easy document opening (64%)
- Long document conservation (54%)
- Quick access to information in presence of a client (62%)

On the other hand, the majority of the agents (69%) say that the same document cannot be utilized simultaneously at several stations. Suggestions were made, including:

- Coil binding
- Stronger cover (hardback and/or plastic coat)
- Sewn with thread and not stapled
- Bind all three books together
- Binding per activity and per station
- Put in a filing folder

A presentation of protocols by level would be acceptable to 56% of the agents trained as well as a color presentation of protocol sections (73%). Also, 85% of the agents would like to have a presentation with wall posters, by workstation.

The following sections were cited:

- *"Newborn resuscitation"*
- *"Addressing newborn infection"*
- *"Addressing placenta praevia"*
- *"Addressing delivery hemorrhage"*
- *"Labor monitoring"*

Last, the majority of the agents interviewed (86%) find the manuals attractive.

Further investigation of protocols dysfunctions conducted in October 2002 by the tutors emphasized the need to:

- Deal with pregnancy HBP and related complications in the same chapter
- Document pre-menopausal and menopausal physiology
- Explain physiological addressing and substitution hormone treatment

- Define treatment posology and duration
- Harmonize the delivery test

It also uncovered needs for posters and other IEC support (picture box) in relation to the following topics:

➤ **Posters**

**Component on women**

- Addressing pre-eclampsia
- Treatment and monitoring of normal postpartum
- Treatment and monitoring of pathological postpartum
- Addressing placenta praevia
- Essential actions for ANC at 1<sup>st</sup> and 3<sup>rd</sup> terms
- Delivery hemorrhage
- Eclampsia in labor
- Ectopic pregnancy

**Component on the child**

- Newborn resuscitation
- Diagnosis of physiological and pathological icterus
- Diagnosis of fetal and neonatal distress
- Diagnosis of neonatal infection

**Infection prevention**

- Preparation of 0.50% chlorine solution using concentrated bleach in percentage or degree

➤ **Picture box**

- STI/AIDS
- FP

**Clarity/Legibility of protocol documents**

**Table 17: Opinions of agents interviewed at follow-up on service protocol print size and legibility**

Modalities of size	Total	
	Freq.	%
Satisfactory	63/75	84%
Too small	19/75	25%
Easy reading	67/75	89%
Difficult reading	8/75	11%

Eighty-four percent of the agents interviewed find print size to be satisfactory and 89% find the protocols easy to read.

The reasons given by those finding the size too small or the document difficult to read include:

- Glossy paper under light
- Small character size.

As regards to other aspects related to clarity and legibility, 80% of the trained agents indicate that the glossary had all the words/expressions needed for comprehension and 77% of them indicate that there were no parts difficult to understand.

**Work conditions**

The interview established a minimum list of materials needed for adequate protocol application. Each trained agent was asked to say whether these materials were available or not in their centers. Sixty-five percent of the agents indicate having the materials needed for protocol application. The remaining 35% indicate the following insufficient materials:

- Newborn resuscitation materials (58%)
- Small equipment/consumables for infection prevention (apron, glasses, boots, bleach, liquid soap) and other small equipment (uterine forceps, stop watch, etc.) (42%)

This situation does not enable adequate protocol application particularly for cases of icteric newborn, newborn resuscitation and for infection prevention measures.

**Table 18: Availability of technical materials, by type and by department**

<b>Modalities</b>	<b>Borgou/ Alibori</b>	<b>Atlantic/Littoral Mono/Couffo</b>	<b>Total</b>
Infection prevention	75%	80%	77%
Pregnancy consultation materials	85%	90%	87%
Delivery room materials	93%	95%	94%
Reference and counter reference materials	46%	56%	51%
Injection materials	84%	77%	80%
Cold chain materials	90%	92%	91%

The inventory conducted in the surveyed health facilities revealed that generally, the availability of technical materials ranges between 51% and 94%. Maximum availability is for the delivery room (94%) and cold chain (91%) and the lowest concerns reference and counter reference (51%). On this point, what is lacking most often pertains to conditions for adequate application of references, including micro health insurance, and a working telephone radio.

Pregnancy consultation materials are available in 87% of the facilities, which is a favorable condition for the application of the ANC related protocol. According to the results, delivery room materials/equipment/consumables are the most available in the

facilities (more than 94%). These materials are crucial for the application of the protocol in normal deliveries.

**Table 19: Availability of infection prevention materials, by facility type and by department**

Facility <sup>6</sup>	Number	Department				
		Borgou/ Alibori	Atlantic	Littoral	Mono/ Couffo	Total
CCS	25	73%	85%	83%	81%	81%
CSCU	4	83%	-	79%	75%	79%
CSSP	5	67%	62%	-	83%	71%
HZ	10	75%	75%	83%	81%	78%
Maternity lagune	1	-	-	92%	-	92%
Total	45	74%	74%	84%	80%	80%

Availability of materials for infection prevention enables applying STI/AIDS related protocols and protecting the medical personnel and clients. It is recommended to have these materials in full, and at all times in all facilities, considering the gravity of HIV infection.

Good working order of the following existing materials enabled appreciation for the availability of infection prevention materials:

- Incinerator
- Sterilization materials
- Decontamination materials
- Materials for disposal of prickly objects
- Providers protection materials (cleaning gloves, coat, apron, glasses, boots/sandals, cap)
- Liquid soap and topical antiseptic

In general, infection prevention materials are available for 80% in the facilities. In most of the facilities, materials that are missing most often are incinerators and providers' protective materials.

**Table 20: Availability of materials/equipment for reference/counter-reference, by facility and by department**

Facility	Number	Department				
		Borgou/ Alibori	Atlantic	Littoral	Mono/ Couffo	Total
CCS	25	42%	50%	37%	50%	45%
CSCU	4	50%	-	62%	25%	46%
CSSP	5	50%	37%	-	62%	50%
HZ	10	50%	50%	75%	75%	62%
Maternity lagune	1	-	-	100%	-	100%
Total	45	48%	46%	69%	53%	61%

6 CUGO not included.

The availability of materials/equipment and reference/counter reference systems is assessed from the existence and good working order of the following components:

- In the maternity consultation room: examination table, speculum, gloves, gynecological gloves, sphygmomanometer and stethoscope, thermometer, tape, scales, height gauge, testing strips (protein, glucose), obstetrical stethoscope, maternal card, health card, GARE notebook, C5 register, STI/HIV/AIDS algorithms;
- In the delivery room: delivery table, kidney basin, full delivery kit (two Kocher forceps, one pair of scissors and one urinary catheter), wall clock/alarm clock with second hand, infant scales, Apgar score table, resuscitation area well arranged with resuscitation materials (view on vulva of delivering woman, FH service protocols manual; and,
- For the reference and counter reference system: working telephone radio, accessible transportation (motorcycle/car), micro health insurance, reference/counter reference card.

In all the facilities, there is insufficient reference and counter reference materials/equipment (about 40%). Only the Maternity lagune is fully equipped. The materials that are lacking most often in the facilities are working telephone radios and micro health insurance.

CCSs are less endowed in reference equipment than the other levels. Also, facilities in the Littoral and Mono/Couffo seem better equipped than the other departments.

**Table 21: Availability of drugs to facilities, by facility type and by department**

<b>Drugs</b>	<b>Borgou/ Alibori</b>	<b>Atlantic/Littoral Mono/Couffo</b>	<b>Total</b>
Solutions	85%	77%	81%
Antibiotics	77%	79%	78%
Anti-malarial	96%	93%	95%
Anti-pyretics	99%	90%	94%
Anti-anemics	98%	98%	98%
Anti-hypertension	31%	48%	39%
Tocolytics	47%	76%	61%
Ocytocics/uterotonics	70%	81%	75%
Anti-spasmodics	91%	95%	94%
Tranquillizers/anti-convulsants	60%	70%	65%
Vitamin k1 + mebendazole	63%	75%	70%
Vaccines	78%	79%	78%

Adequate application of FH Service Protocols requires permanent availability of drugs listed in the above table. The interview revealed breakdowns in stocks. The drugs that were most available are anti-anemics (98%), anti-pyretics (94%),



anti-malarial (95%) and anti-spasmodics (94%). The most unavailable are anti-hypertension drugs (39%), tocolytics (61%) and tranquillizers/anti-convulsants (65%). The situation is identical in the north and south departments except for tocolytics, which are available for 47% only in Borgou/Alibori.

### **Solutions**

The protocols have provisions for obligatory IV injection before any reference and to all women in labor. For this, solutions (salt and/or glucose, Ringer lactate) should be available in all the facilities.

The interview revealed that solutions were available for more than 80% in all the facilities. Their availability is lower in the Atlantic as one hospital did not have any at the time of the interview.

### **Antibiotics**

Infection is included among the main causes of maternal and infant mortality/morbidity (urinary, neonatal and puerperal infection, abortion, ...) and several protocols cannot be applied without antibiotics. The interview indicated that antibiotics were available for 77% in all of the facilities, the Atlantic having the lowest level of availability (70%).

### **Anti-hypertension**

Toxemia of pregnancy and eclampsia are among the four leading causes of maternal death, and result in several cases of prematurity. Anti-hypertension drugs are the main component for the treatment of pregnancy HBP and the prevention of its complications.

They are available for 28% only in CCS and for 58% in ZHs. This situation does not enable suitable protocols' application.

### **Tocolytics**

These are drugs for protocols' application in relation to the addressing of premature delivery threats. As such, they should always be available at all levels to prevent prematurity and contribute in decreasing neonatal mortality.

Interview results showed that tocolytics are available for 80% in all the facilities, with ZHs enjoying a more favorable situation than CSCUs, and the Littoral better endowed than the other departments.

### **Uterotonics**

They are available for more than 80% in all facilities, with more favorable rates in the Littoral and the other departments. Their availability is higher in the ZHs and at the Maternity lagune than in the peripheral facilities. This situation is in line with protocol prescriptions on limited use of these products in CCS and CSSP, which are not equipped with surgery wards. This enables adequate protocol application to address delivery hemorrhage and dystocic deliveries.

### **Tranquillizers/anti-convulsants**

Tranquillizers/anti-convulsants are drugs that enable controlling of eclampsia or newborn convulsions. Thus, they enable stopping any attack and protect the brain. These drugs should always be available at all levels.

According to interview results, tranquillizers/anti-convulsants are available for 65% only in all the facilities. They are less available in CCS and the Atlantic (51%) compared to the other departments.

### **Vaccines**

The efficiency of immunization has been established in the fight against infant mortality. For 15 years now, Benin has been developing an extended immunization program including BCG, DTC, polio, VAT and VAT vaccines. These are free and widely available in the national cold chain.

Interview results revealed that vaccines are available for 80% in the facilities, although to a lower extent in the Mono (74%) than in the other departments.

### **Vitamin K1 and Mebendazole**

Vitamin K1 is needed for the prevention and treatment of newborn hemorrhagic disease. Protocols prescribe one Vitamin K1 injection to all newborns at birth. Consequently, this drug should be available in all of the facilities. Likewise, Mebendazole is indispensable for the prevention of parasitic anemia among pregnant women.

It appears from the interview results that these products are available for 67% only in the facilities. They are more available in the Atlantic than in the other departments and particularly more so in the CCS than in the other health facilities.

## **Utilization of self-learning guide by the providers and tutors/providers**

The self-learning guide includes the following activities that must be implemented by the health agent:

1. Self-evaluation of knowledge at the beginning of self-learning;
2. Documentation of FH cases observed during service provision;
3. Examination of the protocols and identification of constraints;
4. Case studies;
5. Final self-evaluation.

### **Completing the self-evaluation questionnaire**

The tutors and providers adequately completed the self-evaluation questionnaire for 85% in Borgou/Alibori against 100% in the southern departments. Those who had only partially completed the questionnaire advocate the following reasons:

- Negligence (3/5)
- Tutor expectation (1/5)

- Poor comprehension (1/5)

### **Correcting the self-evaluation questionnaire**

The interviewed tutors and providers in Borgou/Alibori entirely corrected their questionnaires for 55%, against 92% among their southern counterparts. In Borgou/Alibori, the proportion of tutors (90%) who correctly completed the self-evaluation questionnaire is considerably higher than the providers (39%).

Reasons advocated for not correcting or only partially correcting the questionnaire include:

- Poor comprehension of questionnaire use
- Insufficient time

### **Case recording**

The cases received were recorded in the guide by 67% of the tutors and providers in Borgou/Alibori versus 100% of those interviewed in the two southern departments.

In Borgou/Alibori, the tutors performed better case recording (80%) than the providers (61%). Those who did not record the cases received advocated in general poor comprehension of the instructions (3/11). This situation seems to prevail mostly among the providers (4/9). The tutors justify this by the fact that the cases received are sent immediately to the maternity.

Also, 58% of the tutors and providers correctly recorded the cases received while their counterparts in the southern departments accomplished a performance of 100%.

For those providers and tutors not correctly recording the cases, the following components were missing:

- Errors in numbering of pages
- Incomplete recording
- The presumed diagnosis is not indicated

The cases that were most often recorded in the self-learning guide include:

- Urinary and genital infections/STI/pregnancy infection
- Dystocic deliveries and premature rupture of the membranes
- Incomplete abortion/abortion threat
- Newborn and infant diseases
- Pregnant women's diseases
- Newborn resuscitation

### **Utilization of problem solving cards**

The providers and tutors' cards in Borgou/Alibori indicate the protocols read and constraints found in 55% of the cases. This proportion is 86% among their counterparts in the southern departments. The tutors and providers as a whole

correctly completed the problem solving cards for case studies in a proportion of 48% in Borgou/Alibori against 97% in the Mono/Couffo, Atlantic/Littoral.

The reasons advocated by those not completing or only partially completing the cards include:

- Incomplete treatment
- Poor comprehension

The synoptic card for the constraints shows the main problems faced by 45% of the providers and tutors in Borgou/Alibori during self-learning, and by 86% of their counterparts in the southern departments.

### **Completing the final self-evaluation questionnaire**

The self-evaluation questionnaire was thoroughly completed by 52% of the tutors and providers in Borgou/Alibori against 97% for their counterparts in the southern departments.

The providers and tutors who completed only partially the questionnaire advocated the following reasons:

- Poor comprehension of guide use (4/17)
- Insufficient time/negligence (3/16)

Forty-five percent of the tutors and providers in Borgou/Alibori completed the self-evaluation questionnaire versus 94% for their counterparts in the Mono/Couffo, and Atlantic/Littoral. The majority of the tutors and providers who corrected the self-evaluation questionnaire compared the results to measure progress made.

In summary, all the activities related to the completion of the self-learning guide are better performed by those interviewed in the southern departments. This could be explained by the following reasons:

- All the agents in the south work in maternities where the FH service protocols are utilized more frequently, which is not the case in Borgou/Alibori where a considerable proportion of trained agents do not have any activities in maternity hospitals (nurses working in the dispensaries).
- All the agents interviewed in the south are state midwives (with the exception of one health nurse) while the agents of Borgou/Alibori are nurses.

### **Implementation of the action plans**

Upon completing training, the agents (providers/tutors) prepared action plans individually or in groups. These plans generally reflected FH activities that had to be innovated or improved in their respective services including:

- a) Infection prevention
- b) The health of the mother (e.g., ANC, labor addressing complications, catheter use, etc.)

- c) The health of the child (newborn care, newborn resuscitation, umbilical care care).

In addition to the above activities, the agents had also included other activities aiming at abandoning the inappropriate practices earlier discussed in this report.

Data collected through observation or interview indicate by target type the extent to which the actions planned were completed.

### **Providers**

In Borgou/Alibori, it should be noted that all action plans were accomplished for 50% at least. The providers in Bembèrèkè/Sinende (23%) and Malanville/ Karimama (8%) had accomplished between 50% and 75% of their planned actions. The providers in Banikoara (31%), Bembèrèkè/Sinende (23%) and Malanville/Karimama (15%) completed between 75% and 100% of their actions. The CCS providers had a better completion rate than their ZH counterparts, probably because of administrative red tape.

In the Atlantic/Littoral and Mono/Couffo departments, it should be noted that one provider could not accomplish 50% of his planned actions, 27% of the providers had a completion rate between 50% and 75%, and 67% of the providers accomplished between 75% and 100% of their plans.

### **Tutors**

In Borgou/Alibori, 67% of the tutors in the ZH of Malanville/Karimama health zone only had achieved between 50% and 75% of their action plans.

In the Atlantic/Littoral and Mono/Couffo departments, all the tutors accomplished between 75% and 100% of their plans, except for one who completed only 50 % to 75% of his plan.

### **Examples of action plans completion and protocols use**

After two coaching visits to the Central Communal Health Complex in Gbegamet (Cotonou - Zone 6), the tutor reported the following:

*"With the provider, we performed a gemellary delivery, antenatal consultations, and consultations of healthy children. Using the FH service protocols, we could detect risk factors during antenatal consultations including: Drepanocytic women (SC), women with short height (1.42 m), and refer to a more specialized center for increased monitoring. We noted that corrective action plans were elaborated, posted and being implemented. The provider works in a pleasant environment. The prescribed uniform is clean. The work atmosphere is good. The meeting with the chief doctor is useful. He is available. The provider made good use of the FH protocol and self-learning guide. Hygiene and infection prevention rules are well observed. The reception is well done throughout antenatal consultations and the partograph is well traced."*

At the Maternity lagune in the Littoral, the tutor reported the following:

"[...] This was noted: Compliance with infection prevention rules. The agents were wearing their proper work uniforms (recommended uniform). Reception was cordial, interview well conducted, with agent expressing thanks, accompanying client back, reminding her of next appointment. Good counseling during pre-test with client totally at ease about confidentiality. Examination done according to chronology (according to the protocols). Partograph well traced during monitoring with all the elements mentioned. Usual additional tests are requested (GS – RH – Hb. Rate, BP reading, Electrophoresis of Hb, Alb – glucose, TPHA, etc.)."

At the Health Center in Houéyogbé Sub-prefecture (Coffou), the tutoring coach writes in his report:

"During the second day, we carried out consultations of immediate postpartum women. The provider brought in the protocols, and together we consulted the delivered women and the babies.

We started the third day with a gemellary delivery of two girls. Delivery was done naturally, using Baudelocque's mode. The woman was vaccinated. The partograph was well traced. The protocols helped us in correctly performing the delivery and providing care

The strong points include: protocol use, application of the action plans, the old clients are vaccinated at the first contact and maternity cared are systematically filled out during antenatal consultation."

### **Constraints in implementing the action plans**

According to the agents interviewed, the main constraints in implementing the action plans are summarized in the following table:

**Table 22: Constraints in implementing action plans**

<b>Modalities</b>	<b>Numbers</b>	<b>Frequency</b>	<b>%</b>
Insufficient maintenance materials and consumables	53	11	21
Clients reluctance to tests	53	6	11
Finance related problems	53	5	9
Insufficient resuscitation materials	53	4	8
Omission in care process	53	4	8
Lack of vehicle for evacuation (Ambulance)	53	4	8
Reluctance to protocols application	53	3	6
Theft or inadequate use of uniforms in delivery rooms	53	2	4
Lack of funds for confection of uniforms	53	1	2
Unavailable standby personnel during dissemination sessions	53	1	2
Training on emergency notions not conducted due to unavailability of doctors	53	1	2

The main constraints in implementing the action plans include: Insufficient maintenance materials and consumables (21%), clients reluctance to gynecological tests (11%), finance related problems, insufficient resuscitation materials, omission in

care process, lack of vehicle for evacuation (ambulance). However, 29% of the providers did not mention any particular constraints.

Suggestions were made principally concerning:

- Needs in materials: for example, filing cabinets for protection materials, purchase or donation of consumables or infection prevention materials.
- Needs in personnel.

Other suggestions include:

- Sensitizing the communities;
- Strengthening agents' supervision and good collaboration;
- Integrating tutoring activities in the health zones' action plans.

## **Providers' perspectives on tutoring**

### **Perspectives on support received during tutoring**

After classic training, the providers should receive two visits from the tutors. In Borgou/Alibori, 58% of the providers and 78% in the Atlantic/Littoral and Mono/Couffo indicate having received two visits.

One of the first tasks for tutors was to analyze the centers that they had tutored. This should result in elaborating a corrective action plan in relation to service organization problems, hygiene and cleanliness in the centers, condition of equipment and recordkeeping. The majority of the tutors in Borgou/Alibori (85%) conducted analyses of their centers against 48% of the tutors in the south region. This activity was carried out with facility personnel in 65% of cases in Borgou/Alibori against 82% in the south. In Borgou/Alibori, the COGEC/ COGEA and/or community members were associated in 31% of the cases against 18% in the Mono/Couffo and Atlantic/Littoral.

During their stays in the centers, the tutors elaborated corrective action plans for 70% of the cases in Borgou/Alibori. This proportion is 35% only for the south region because corrective action plans had already been elaborated when introducing the tutoring. This work was done nearly everywhere with the health team in 95% of the cases in Borgou/Alibori and 88% in the south region.

These plans were only partially implemented for 79% in Borgou/Alibori and 75% in the south. The reasons often advocated to explain incomplete application included:

- Lack of the equipment
- Reluctance to change
- Absence of change/complex administrative procedures.

In 85% of the cases in the Borgou/Alibori and 70% in the south, the tutors helped the providers in better utilizing FH service protocols. This assistance enabled them to:

- Resolve some cases together with the tutors (43%)
- Address abortion and STI/AIDS (33%)

- Process the exercises/update the table of contents (17%)
- Address newborn diseases (9%)
- Conduct training on IV injection with catheter.

The providers who declared not having received any help explained this by the fact that the tutors were absent/on leave, or to the lesser extent of protocols' use in the dispensaries.

Seventy-four percent of the providers in Borgou/Alibori and 61% in the south region feel that the tutors help them in better organizing services in the following areas:

- Distribution of tasks/integration of services
- Service organization
- Work organization
- Cleanliness/maintenance/hygiene

According to the providers, the introduction of tutoring in the centers helped improve working conditions in the following areas:

- Obtaining small materials, infection prevention materials (more than half of the providers declared having benefited from infection prevention materials and consumables).
- Improved collaboration between the various personnel categories.

Moreover, they declared having received positive feedback from the community on reception and care quality.

### **Availability and usefulness of the self-learning guide**

At the time of the interview, 70% of the providers in Borgou/Alibori and 96% of those in the south had self-learning guide. Those who did not have any attributed this to loss of the document or to a loan to tutors for a feedback.

As regards to its use, 39% of the providers in Borgou/Alibori against 100% in the south declared having utilized the guide. The reasons given for not using or only partially using the guide were the following:

- Work overload/lack of availability
- Negligence
- Tutor absence
- Poor comprehension of the instructions.

Eighty-one percent of the providers in Borgou/Alibori and 83% of those in the south who utilized the guide found it useful. According to them, it enabled them to familiarize themselves with the FH service protocols and strengthen their skills in addressing the cases.



### **Support received in self-learning**

During the self-learning sessions, 63% of the providers in Borgou/Alibori versus 78% in the south region declared having received support from the tutors. This support enabled them to:

- Solve the case studies
- Address actual cases
- Better utilize the protocols.

Those who felt having received no support advocated various reasons to the following:

- No tutors
- Health reasons/absence/negligence
- Tutors overloaded.

### **Perspectives on the effect/utility of tutoring**

Eighty-nine percent of the providers in Borgou/Alibori and 87% in the south region feel that tutoring strengthens the support to the activities in the centers. The examples that were most cited are:

- Protection of the personnel/infection prevention/hygiene and sanitation
- Integration of services and activities
- Improved attendance of centers
- Improved reception.

Tutoring was deemed useful in similar proportion in Borgou/Alibori and the southern departments. This was evidenced in the various areas:

- Improved reception
- Better coordination/collaboration
- Better addressing of the cases.

For 78% of the providers in Borgou/Alibori and 87% in the south, the combination of the self-learning and tutoring approaches helped in applying FH service protocols. According to them, this synergy:

- Facilitates and improves the application of FH service protocols
- Allows for accurate diagnosis
- Strengthens skills towards good protocol use.

## **Providers/tutors' perspective on tutoring and self-learning**

### **Perspectives on support received**

Nearly all the providers and tutors of both regions indicate having received the visit of one national or departmental tutor.

According to all the tutored agents in Borgou/Alibori, the national or departmental tutor analyzed the situation versus 75% of those tutored in the south region. This analysis was done with:

- Health team alone (63% of the cases in Borgou/Alibori versus 33% in the other departments)
- Health team and COGEC members (25% in Borgou/Alibori and 56% in the southern departments).

At the end of their stay, the national or departmental tutors elaborated a corrective action plan with 83% of the tutors/providers interviewed in the south versus 100% of those in Borgou/Alibori. This plan was prepared with a health team in 67% of cases in Borgou/Alibori and 20% for the south. COGEC members were also associated in plan preparation.

According to 67% of the providers/tutors in Borgou/Alibori and 20% in the Atlantic/Littoral and Mono/Couffo, the plan was entirely applied. Cases of partial application were due to:

- Insufficient financial means
- Lack of equipment
- Long waiting of clients
- Relocation of collaborator's post.

The providers/tutors view that tutoring allowed improvement in working conditions for the agents tutored in the following areas:

- Acquisition of infection prevention materials
- Acquisition of small equipment
- Better collaboration/good work atmosphere
- Better coordination of activities
- Acquisition of furniture and other equipment

Feedback was received on the following points:

- Integration of services/activities
- Improving infection prevention practices/maintenance of premises
- Positive appreciation of the reception
- Compliments expressed by the managers and patients.

### **Availability and usefulness of the learning guide**

Eighty-nine percent of the providers/tutors had one self-learning guide at the time of the interview in Borgou/Alibori against 100% in the south. Those who did not have any, either had left it at home or lost it.

This guide is utilized completely by 83% of the providers/tutors in Borgou/Alibori against 100% in the southern departments. Reasons given for partial or non-use include lack of time or availability.

All the providers/tutors found it useful. This is evidenced through:

- Improved service delivery
- Assistance in protocol understanding and use
- Assistance in self-evaluation
- Assistance in updating knowledge.

### **Support received in self-learning**

The providers/tutors declare having all received support during self-learning sessions through:

- PROSAF specifically for those in Borgou/Alibori
- DDSP/National Tutoring Coordinator, EEZ (Zone Coaching Team) and trainers team for the two interview regions.

### **Perspectives on the effect/utility of tutoring**

The providers/tutors in the two regions estimate that tutoring strengthened support to their centers' activities, particularly for:

- Services integration
- Cleanliness/infection prevention/better addressing
- Improved attendance
- Reorganization

The providers/tutors of the southern departments, and to a lesser extent (92%), those in Borgou/Alibori, estimate that tutoring was useful, as evidenced through:

- Strengthening knowledge/skills
- Infection prevention/hygiene/cleanliness.

The coordinating doctors/training doctors think that tutoring is presently accepted in the health zones of both interviewed regions. This can be seen through:

- Communities' appreciation of the tutored agents
- Expressed desire of non-tutored agents to benefit from this training approach
- Agents commitment to implement tutoring activities

For the providers/tutors, the two combined approaches were useful for protocols' application. This is demonstrated through:

- Strengthening knowledge/skills
- Better protocols' use.

Seventy-five percent of the coordinating and training doctors in Borgou/Alibori against 94% in the southern departments, noted change resulting from the “tutoring” approach, of which the most noticeable were:

- Personnel protection (clothes)
- Hygiene and sanitation in the centers (cleanliness)
- Infection prevention measures (good maintenance of the materials)
- Effective use of the protocols in service provision
- Improved work organization
- Improved reception.

### **Providers’ perspectives on the usefulness of tutoring and self-learning**

Generally, the providers in Borgou/Alibori and those in the southern departments appreciated support received during the tutoring session primarily in the following areas:

- Protocols use
- Organizational support (service organization, reorganization of furniture and interpersonal relations).

The providers and tutors, in Borgou/Alibori as well as in the southern departments, agreed that tutoring helped in improving collaboration among facilities’ personnel. Tutoring is an adequate method to apply the protocols at the operational level. Through tutoring, the providers as well as the tutors acknowledge their supplies of small equipment and infection prevention materials.

Although widely available and utilized by the providers and tutors in Atlantic/Littoral and Mono/Couffo, however, in Borgou/Alibori, the self-learning guide is utilized by the tutors up to four times more than by the providers, which indicates their interest in this approach to improve agents’ performances.

The self-learning guide is deemed more useful by the tutors than the providers (92% versus 81%) in Borgou/Alibori, and by 100% of the tutors and 87% of the providers in the southern departments. This is due to a more frequent use of the guide by the tutors. According to those interviewed, this tool enabled them to strengthen their skills and improve service delivery. The providers as well as the tutors view tutoring useful in the following areas:

- Services/activities integration
- Personnel protection
- Infection prevention
- Hygiene/sanitation.

The combination of both approaches – self-learning and tutoring – towards FH service protocols application is more widely accepted by the tutors.

The main innovations in relation to tutoring that both categories of agents recognize include:

- Improved reception
- Infection prevention
- Services integration.

### **Tutors' perspectives on usefulness of the tutoring and self-learning approaches and their acceptance by the providers**

The tutors have mitigated views on approach acceptance. Fifty-five percent of them feel that self-learning is not totally accepted by the providers in Borgou/Alibori. On the contrary, the tutors and 87% of the providers in the southern departments estimate that it is totally accepted. Those holding different views give the following explanations:

- Lack of motivation
- Constraints in guide use
- Time constraints.

The tutors recommend continued use of self-learning through:

- Improved follow-up/supervision/tutors meetings
- Training for all nurses and midwives on FH service protocols including supplying them with self-learning guides.

The coordinating and training doctors recommend improved/continued tutoring through:

- Improved tutors motivation
- Increased numbers of tutors
- Setting up a mechanism to follow-up the tutored agents.

Eighty-two percent of the tutors think that the tutoring approach is accepted in Borgou/Alibori facilities versus 100% in the southern departments. Those with different views (two out of 11) give the following reasons:

- Traditional reluctance to change
- Lack of information on the approach

The tutors suggested for tutoring to be totally accepted:

- One tutor per center at least
- Regular follow-up
- Allocations to the tutored agents
- Sensitizing the communities and personnel on the benefits in tutoring.

The tutors think that their work is useful to the providers, advocating the following justifications

- Acquisition of new knowledge
- Improved care quality.

Other reasons given include client satisfaction, regular consultation with tutors and improved services/activities integration.

The tutors think that using both approaches was helpful in disseminating FH service protocols. They say that the two approaches are complementary because tutoring strengthens knowledge acquired through self-learning.

## **Tutors' perspectives on tasks**

### **Work volume**

Thirty-one percent of the tutors made the two prescribed visits. It could be noted that 46% of the tutors visited two centers at least. Three tutors conducted tutoring in five centers. Seventy-eight percent of the tutors made at least two visits in the tutored centers.

### **Performance factors**

#### **► Task knowledge**

For the four tasks assigned to them, 7 out of 11 in Borgou/Alibori versus 11/13 in the southern departments know what their tasks were, namely:

- Analyzing the situation in the centers
- Planning corrective actions
- Organizing the services
- Coaching the providers to strengthen their skills.

Seventy-three percent of the tutors in Borgou/Alibori and 92% in the southern departments had at least one discussion on their tasks with one supervisor:

- During EEZ supervision
- At DSF follow-up
- At PROSAF follow-ups in Borgou/Alibori
- During supervision by the national tutors.

Fifty-five percent of the tutors in Borgou/Alibori had no special problems with analyzing the situation in their centers and planning corrective actions versus 31% in the southern departments. The problems encountered pertained to:

- Narrow premises
- Financial constraints in implementing action plans
- Unavailable personnel, reluctance of colleagues who did not attend training (the personnel feels put down in front of the population when analysis is disseminated).

Eighty-two percent of those interviewed in the Borgou/Alibori versus 62% of their counterparts in the southern departments estimate they faced problems related to service organization including:

- Reluctance of the personnel to change habits
- Inadequate premises
- Unfavorable work conditions
- Conflict management.

Fifty-five percent of the tutors in Borgou/Alibori against 46% of those in the southern region consider that support to the providers in utilizing FH service protocols was difficult due to:

- Lack of spontaneous reference to the protocols/difficulties in consulting the protocols during consultations
- Some providers were absent from posts
- Difficulties to support the providers in some cases

Sixty-nine percent of the tutors in the south and 73% in Borgou/Alibori declare not having any difficulties in supporting the providers to utilize the self-learning guide. Those who had difficulties advocate the following reasons:

- Lack of time/negligence
- Problems with the questionnaires and case studies
- Problems in utilizing the guide
- Poor guide completion by some providers

The tutors had difficulties mostly in service organization.

#### ► **Feedback on work**

Ninety-one percent of the tutors in Borgou/Alibori versus 85% of those in the south declare having received feedback in the frame of their work. Given the diverse feedback sources, one can realize that no organized system is set-up. In fact, the feedback sources cited include:

- National tutor
- Zone coordinating doctor
- DDSF team
- Service providers

According to those interviewed, feedback is utilized towards improved task completion and protocols' application.

#### **Tutors' sharing meetings after each visit**

These meetings have been institutionalized in the south (Atlantic/Mono) and they are regularly held with the participation of the DSF, the concerned DDSF and the

national tutors. On the contrary, they are neither systematic nor regular in the north (Borgou/Alibori).

**Extent of actors' involvement (supervisors) in tutoring**

The supervisors/actors' involvement is total and intense at all the levels: national (DSF), intermediary (DDSP) and operational (EEZ and chief doctors) in the south. In Borgou/Alibori, there is considerable involvement by DDSP, PROSAF and at a lesser extent by the actors of the operational level (EEZ).

Also, one could note rations of one tutor for two providers in the south and one tutor for four providers in the north with longer distances to be covered by the tutors in Borgou/Alibori, when this activity was not planned for in program budgets by and EEZ.



# *Results and Recommendations*

## **Lessons learned on the dissemination process**

1. Post-training activities to disseminate family health service protocols are better implemented in the southern departments interviewed. The factors that resulted in this situation include:
  - The providers and tutors are state midwives actually working in facilities where the protocols are supposed to be utilized more often.
  - The tutors have all attended both training phases in the two southern departments.
  - The coordinating doctors/Chief doctors of the Health Centers and Heads of hospital maternity services (St Luc, CHD- Maternité Lagune, Ouidah hospital etc.) all had received orientation on the approach and training in protocol use.
  - Implementing action plans that they had designed themselves facilitated achievement of objectives (elaborated budget, procurement of infection prevention materials). They could perform proximity follow-up.
2. Systematic and regular meetings of tutors, trainers, and SSF (Family health Service) department heads were very efficient in the two southern departments. Furthermore, the actors at all levels (DSF, DDSP, EEZ, MC) were very strongly involved in the south.
3. Tutors/providers ratios (1/2) in the southern department positively contributed in improved follow-up of the providers.
4. Despite the mitigated results in Borgou/Alibori department, the actors are strongly resolved to obtain full expertise in the approach.
5. PROSAF is strongly involved throughout the process in Borgou/Alibori department.
6. The providers as well as the tutors have a good opinion on the effects and usefulness of tutoring.
7. The actors do not have clear enough understanding of the instructions on best use modes of the learning guide.

## **Recommendations**

In order to correctly implement next steps in disseminating FH service protocols, the follow-up team recommends:

### ***To the BMOH***

- Disseminate follow-up results among all actors in order for them to take the necessary steps to correct insufficiencies noted;
- Utilize the approaches tested in the southern departments for better dissemination and application of protocols by operational staffs;

- Utilize the experience of the national trainers/tutors group which participated in the process through survey departments;
- Set up a mechanism/system to motivate agents and boost experience;
- Provide health facilities with small materials/equipment to support experiences.

***To the Department Head Offices/Health Zones***

- Include protocol implementation follow-up in DDSF and Zones action plans;
- Conduct advocacy among the development partners for technical, material and financial support to the process.

**Lessons learned on FH service protocols**

*1. Applicability of protocols document*

As elaborated, the protocols are applicable since:

- The majority of the agents trained have found the protocols useful to address the cases.
- The majority of the agents trained effectively utilize the protocols.
- The trained agents are able to identify the adequate protocols, and they know the appropriate procedures for care delivery.

*2. Organization/structuring of protocols document*

Information is easy and quick to find in the protocols; however, the document has some insufficiencies as to form and substance:

- Page numbering in the summary does not match with document pages;
- The paper shines under artificial lighting;
- Present binding does not facilitate simultaneous use of the document at several work stations;
- Clinical cases not addressed, or only partly addressed, in the protocols.

Suggestions were made about:

- Presenting the protocols level by level;
- Utilizing different colors for different parts of the protocols;
- Presenting some parts of the protocols in a poster format.

*3. Clarity/legibility of the protocols document*

Protocols document is attractive and does not present any confused or difficult reading.

*4. Working conditions*

The present working conditions are good though not allowing optimal application of the protocols in all the facilities due to lacking materials and drugs including:

- Intravenous catheter;
- Providers' protection materials for infection prevention;
- Reference and counter reference materials;
- Drugs (anti-hypertension, tocolytics and tranquilizers/anti-convulsants).

In summary, one can say that the protocols are available and applicable. The trained agents recognize their utility. However, it would be desirable to improve the form of the document and to take into consideration the various dysfunctions identified by the tutors. Moreover, though needing improvement, the work conditions are favorable for efficient application of the protocols.

## **Recommendations**

### ***To the BMOH***

- Review protocol documents so as to improve form and substance. Specifically:
  - Review the summary and match page numbers
  - Utilize dull paper to print protocols, thus making reading under artificial light easier
  - Utilize binding that will make it possible to use protocols simultaneously at several posts. For instance, have protocols in sheets or detachable booklets
  - Utilize coil binding for plastic covers of different colors
  - Look into the possibility of:
    - Binding by component and utilizing colors
    - Presenting certain parts of protocols in posters or memory aids
  - Include comments made by tutors and providers on substance (see body of report).

### ***To the Department Head Offices/Health Zones***

- Sensitize managers in centers on the need to obtain relevant materials and equipments for optimal protocol implementation including IV catheters, protection material for infection prevention, drugs;
- Staff in health centers should urge COGECs to set up a small health insurance system for reference.

### ***To DSF and Department Head Offices***

- Improve communication systems between centers for reference;
- Considering the population's reluctance towards evacuations due to non use of occytocics, study ways to allow midwives to utilize occytocics in some centers;
- Train all midwives in MVA;
- Train AVS in partograph tracing.

## **Lessons learned on the tutoring approach**

1. The tutoring approach is well accepted by the providers, tutors, zone coordinating doctors and trainers.
2. It should be noted that use of IS in Borgou/Alibori did not affect the overall work quality of the tutors.
3. Some insufficiencies were noted in implementing tutoring in Borgou/Alibori including:
  - Insufficient training of some of the tutors (three tutors did not attend practical tutoring training)
  - Insufficient involvement by some of the actors (some of the zone coordinating doctors/program managers had not received sufficient information/training on the "tutoring" approach)

The consequences were:

- Non-integration of the activities in zones' action plans by the tutors, resulting in insufficient follow-up of the providers by the tutors;
  - Insufficient clarification of the tutors' roles/tasks at the level of the providers/communities/managers;
  - Insufficient information sharing on the activities among the tutors themselves and with zone coordinators;
  - lack of coordination,; which caused conflicts between the tutoring activities and the other department activities
4. Lastly, the diverse sources of feedback and motivation seem to indicate a lack of structured systems for the tutors in these areas. However, it should be noted that the prevailing situation appears to be acceptable for them globally.

## **Lessons learned on the self-learning**

- The self-learning approach is well accepted by the tutors and providers although the self-learning guide presents some limitations. In fact, the follow-up enabled to note:
  1. Negligence on the part of some of the providers and/or lack of time in relation to guide use.
  2. Incomplete use of the tools by some of the providers due to poor comprehension of the instructions.

## **Lessons learned on the combination of the two approaches: tutoring/self-learning**

- It is globally well accepted by the actors (providers/tutors/managers) since it facilitated and improved protocols application while enabling better addressing of the cases.

## **Recommendations**

- Give orientation to the doctors, zone coordinators and DDSP on the protocols and dissemination approaches;
- Integrate the follow-up of protocols application into the health zone action plans;
- Provide practical training to the three tutors;
- Disseminate follow-up results among all the actors in order for them to take the appropriate steps to correct the insufficiencies observed (follow-up, clarification of the tutors' roles/tasks, etc.)



# Conclusion

The follow-up of the agents trained in the use of FH service protocols aimed primarily at assessing the adequateness of FH service protocols and efficiency of the approach utilized for their dissemination.

The results show that globally the FH service protocols are relatively easy to use, applicable, accessible and available. The adequateness and efficiency of their dissemination approach were recognized by most of the actors at the various levels. It should be noted that a certain number of factors positively influenced the implementation of the dissemination strategy, including:

- Active involvement of the BMOH (DSF, DRH/CPNFT)
- Support of the departmental FH services (mobilizing the tutors)
- Proximity coaching
- Strict follow-up of the coaching team
- Collaboration between the partners
- Grassroots planning
- Involvement of MCZ and MCs
- Sensitizing of the COGECs

However, certain aspects are yet to be improved concerning the form and substance of the protocols document. Furthermore, steps should be taken to resolve the following constraints that do not facilitate protocols application:

- Insufficient or lacking small materials. For instance, the providers noted the lack of bleach, absence of eosin for umbilical cord care, uneasy access to umbilical stethoscopes or absence of gynecological gloves.
- Unsuitable work environment in some of the facilities. For instance, once provider noted:  
*"The women cannot make any confidences. They are received in consultation at the very same place as the other women who are waiting for their turn."*
- Reluctance to change on the part of some of the specialist due to lack of information. Thus, some of the gynecologists and pediatricians oppose to implementing the protocols because they still believe in what they are doing.
- Conflicts of competence. For instance, some of the providers refuse to go ahead with the protocols application process simply because they were not trained like their colleagues. They systematically refuse innovations.
- Insufficient basic skills for some of the providers. For instance, the providers show considerable insufficiencies in infection prevention whereas this is a cross-running skill, and it is applied in several protocols. The same goes for IV infusion.

One of the follow-up objectives was to assess post-training change in knowledge And skills of the health service providers and tutors/trainers. The results indicate a clear improvement of knowledge levels in relation to the protocols contents and development of skills for protocols use, particularly in the southern departments. The follow-up also showed some change/innovations in the services as results of the application of FH service protocols particularly concerning the average number of days during which mother and infant health services are provided, infection prevention and the use of maternity cards for pregnancy follow-up.

These results are globally very encouraging and advocate on behalf of scaling this dissemination approach to other departments. To this end, the following elements should be taken into consideration:

- Involving the partners in the next steps (dissemination of the follow-up results);
- Updating the document on FH service policy, norms and standards;
- Integrate the protocols dissemination activity in DDSP and Health Zone (ZS) operations plan;
- Strengthen the training supervision system;
- Coordinate training in protocols use and emergency obstetrical and neonatal care;
- Disseminate the protocols in the frame of improving providers performance;
- Utilize data obtained from this follow-up in advocacy among the donors in order to mobilize the necessary resources for efficient protocols dissemination.



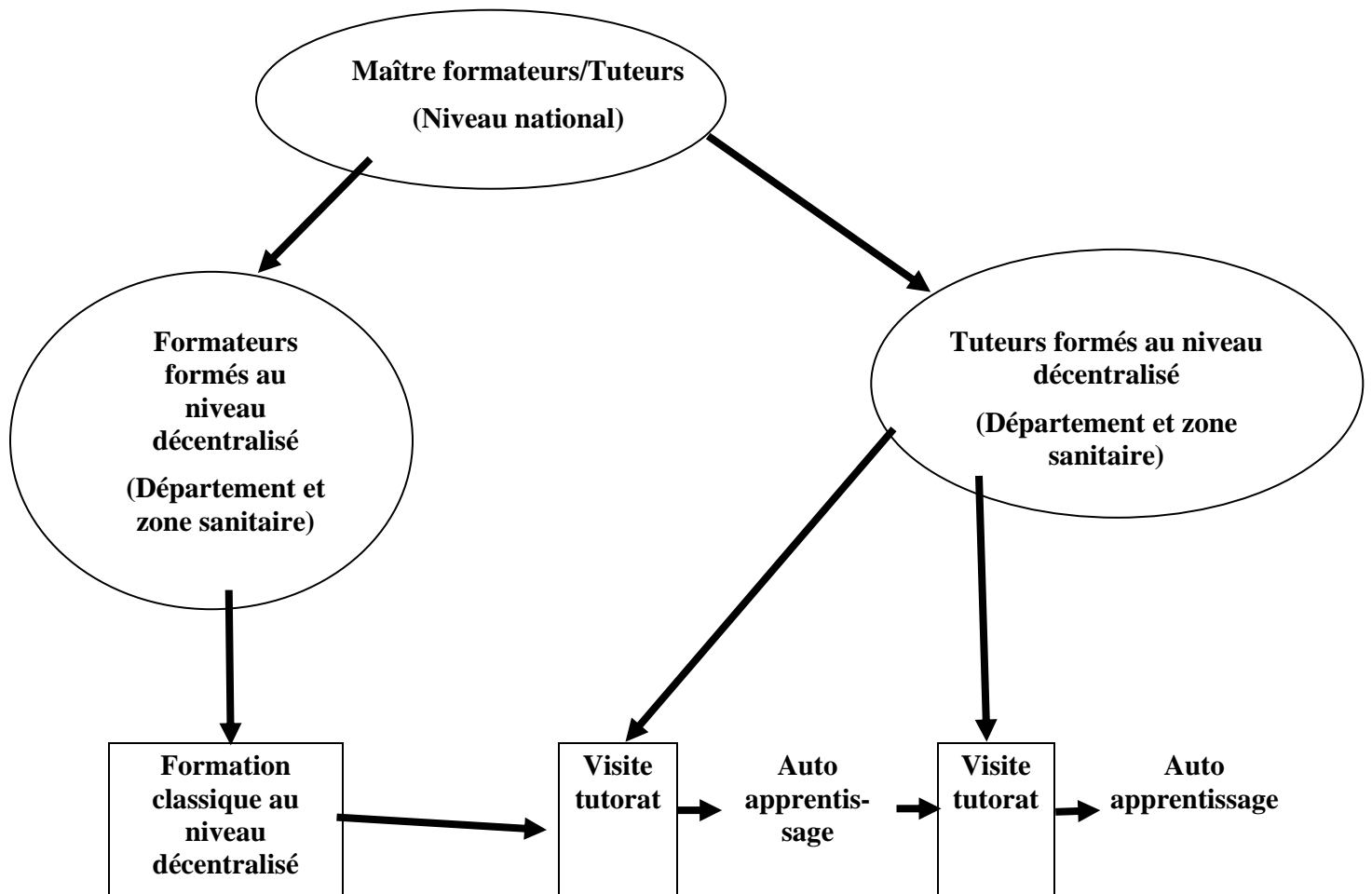
# ***Annexe 1: Thèmes retenus pour la formation classique*** (*Topics selected for classic training*)

- Prévention de l'infection en milieu de soins
- Consultation prénatale
- Anémie chez la femme enceinte
- Infection urinaire chez la femme enceinte
- Hypertension artérielle et ses complications sur grossesse
- Crise d'éclampsie pendant le travail d'accouchement
- Hémorragie de la grossesse (GUE, avortement, en cours et placenta praevia)
- Accouchement normal
- Accouchement dystocique/travail prolongé
- Hémorragie pendant le travail d'accouchement
- Fièvre pendant le travail d'accouchement
- Prise en charge syndromique des IST
- Prise en charge des personnes vivant avec le VIH/SIDA
- Post partum normal
- Post partum pathologique
- Souffrance néonatale
- Nouveau-né ictérique
- Nouveau-né infecté



## ***Annexe 2: Cadre conceptuel*** (Concept frame of dissemination)

**Approche Combinée de Formation à l'Utilisation des Protocoles de Services de Santé Familiale**





# ***Annexe 3: Rapports de Suivi des Protocoles***

## ***(Protocols follow-up reports)***

### **Rapport 1**

VOLET:

Composante:	2 CPN.....	page 31
Activité:	.....	page

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape Harmoniser la posologie de Fer + Foldine dans le traitement préventif et curatif

### **Rapport 2**

VOLET: Femme

Composante:	3 Maternité à moindre risque/grossesse à risque élevé.....	page 38
Activité:	N° 1 prendre en charge la GEU .....	page 38

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Prise en charge de la trompe saine.

Etape N° 5	Instaurer le traitement .....	page 40
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Niveau, hôpital de zone/CHD/CNHU.

Ajouter - Prendre en charge la trompe saine en per post opératoire.

- Faire les soins post opératoires
- antibiotique
- anti inflammatoire
- anti anémique

### **Rapport 3**

VOLET: Femme

Composante:	N° 3 Maternité à moindre risque.....	page 56
Activité:	5 prendre en charge l'anémie chez une femme enceinte .....	page 56

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Page 58 Niveau CCS – Etapes N° 5 six pour l’abord veineux chez la femme anémie et la perfusion d’extran, nous proposons qu’ on le remplace par du G10, sauf s’il y a une hémorragie associée – (risque d’OAP).

Page 59 Etape N° 8 – niveau HZ/CHD/CNHU – contrôler la NFS tous les mois. Compléter jusqu'à obtention d'une NFS normale → Tx d'Hb  $\geq$  11g ldl.

Composante:	N° 3/Activité N° 5
- préciser l'utilité d'antibiothérapie systématique chez la femme enceinte anémiée	

En Particularité

- Certaines molécules utilisées dans les CCS et UVS n'nt pas une posologie bien définie (Fer foldine, Mébendazole, etc.)
- Il faut relataiviser la transfusion systématique chez la femme enceinte à Tx d'Hb < sept g/dl; car le fer foldine et les conseils d'hygiène diétiques sous surveillance peuvent suffire si la femme supporte son anémie

## Rapport 4

VOLET: Femme

Composante:	3 .....	page 60
Activité:	6 .....	page 60

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Page 62 Etape N° 5 A tous les niveaux les éléments de surveillance de la femme: compléter la fréquence respiratoire.

## Rapport 5

VOLET: Femme

Composante:	3 .....	page 60
Activité:	6 .....	page

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etapes N° 5 Page 62

Cas N° 1 Niveau CCS

- Corriger: Alpha Methyldopa 500 mg deux fois/jour per os au lieu de un g deux fois/jour.

## Rapport 6

VOLET: Femme

Composante:	3 .....	page 61
Activité:	6 .....	page 61

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 4: Niveau CSSP/CSCU compléter la glycémie aux examens complémentaires

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## Rapport 7

VOLET: Femme

Composante:	3 Maternité à moindre risque/grossesse à élevé.....	page 64
Activité:	7 Prendre en charge la drépanocytose chez la femme enceinte .....	page 64

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 4: Niveau CSSP/CSCU compléter la glycémie aux examens complémentaires

Etapes N° 5/Page 66: la Transfusion d'échange systématique vers la fin de la grossesse à clarifier et à justifier. (Peut-être au niveau du CNHU).

VOLET: Femme

Composante:	3 Maternité à moindre risque/grossesse à élevé.....	page 65
Activité:	7 Prendre en charge la drépanocytose chez la femme enceinte .....	page 65

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 4: Niveau CSSP/CSCU compléter la glycémie aux examens complémentaires

Page 65 Niveau CCS/Etape N° 3: A la fin de l'examen ... référer vers un centre Médico-chirurgical compléter avec un abord veineux au cathéter.

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## Rapport 8

VOLET: Femme

Composante:	3 Maternité à moindre risque/grossesse à élevé.....	page 64
Activité:	7 Prendre en charge la drépanocytose chez la femme enceinte .....	page 64

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Page 66/Etape N° 5: Niveau CSSP/CSCU: dernier point si accouchement inopiné au CSSP/CSCU perfusion abondante de rhéomacrodex ou de Ringer: préciser la quantité.

VOLET: Femme

Composante:	3 Maternité à moindre risque/grossesse à élevé.....	page 69
Activité:	7 Prendre en charge la drépanocytose chez la femme enceinte .....	page 69

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 5/Page 71:

- 1) Inadéquation du traitement du paludisme avec la chloroquine:
  - Préciser le nombre exact de comprimé au niveau UVS
  - Préciser le nombre de comprimé pour la chimioprophylaxie aux différents niveaux.
- 2) Disparité dans l'application des protocoles du traitement du paludisme à base de quinine entre PNLN, SONU et protocoles DSF: Nécessité d'harmoniser les points de vue sur la dose.

NB: Le traitement parentérale du paludisme grave ne se réfère qu'au vomissement chez la femme enceinte, il est indispensable de l'évoquer aussi devant les autres signes de gravité (anémie, ictère etc.).

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## Rapport 9

VOLET: Femme

Composante:	N° 3 Maternité à Moindre Risque/GARE.....	page 70
Activité:	N° 8 Paludisme chez la femme enceinte.....	page 70

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etapes 5: de boire beaucoup d'eau ou lui donner des sachets de SRO.

- Donner à boire à la parturiente en déshydratation avant la référence à éviter.

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## Rapport 10

VOLET: Femme

Composante:	3 Maternité à moindre risque/grossesse à élevé.....	page 77
Activité:	10 Prendre en charge la drépanocytose chez la femme enceinte .....	page 77

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Page 80/Etape N° 5: Instaurer le traitement. Nous suggérons avoir la CAT en cas de la présence de bacille gram négatif à l'ECBU.

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## Rapport 11

VOLET: Femme

Composante:	3 Maternité à moindre risque/grossesse à élevé.....	page 77
Activité:	7 Prendre en charge l'infection urinaire chez la gestante .....	page 77

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

- Etape N° 4: Examen complémentaire en grand nombre exiger l'essentiel
- Etape N° 5: Instaurer (antiseptique non prescrit est-ce un oubli)
  - L'utilisation des antibiotiques pendant combien de jours?
  - Tocolyse les produits à préciser Page 80
  - En cas d'hyperthermie associer traitement curatif du paludisme.

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## Rapport 12

VOLET: Femme

Composante:	N° 3 Maternité à Moindre Risque/GARE.....	page 82
Activité:	N° 11 Prendre en charge la menace d'avortement .....	page 82



Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

- Préciser si nécessaire, l'utilité du diazépam dans la menace d'avortement.

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## Rapport 13

VOLET: Femme

Composante:	3 .....	page 83
Activité:	11 prendre en charge la menace d'avortement .....	page 83

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape 4/Page 83/Niveau CSSP/CSCU.

Supprimer KOP?

VOLET: Femme

Composante:	3 Maternité a Moindre Risque/GARE .....	page 86
Activité:	12 prendre en charge les avortements et les soins du post abortum ..	page 86

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 5 (terme >12 SA) faire le curage digital indiqué si le col est ouvert qu'à deux doigts.

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## Rapport 14

VOLET: Femme

Composante:	N° 4 Maternité à moindre risque.....	page 97
Activité:	1 Prendre en charge un travail d'accouchement.....	page 97

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Abord veineux systématique au cours du travail d'accouchement, mais à la phase active?

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## Rapport 15

VOLET: Femme

Composante:	4 Maternité à moindre risque/accouchement .....	page 101
Activité:	1 Prendre en charge l'accouchement normal.....	page 101

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 9/Niveau CCS: Prendre le pouls et non le poids.

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## Rapport 16

VOLET: Femme

Composante:	4 Maternité à Moindre risque.....	page 102-104
Activité:	2 Prendre en charge l'accouchement dystocique pendant le travail .....	page 102-104

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Page 104/Etape N° 5 cas1:

Au niveau CCS ou CSSP/CSCU sans bloc Opératoire, la sage-femme peut: poser la perfusion de syntocinon et bien surveiller.

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## Rapport 17

VOLET: Femme

Composante:	4 Maternité à Moindre risque pendant l'accouchement .....	page 109
Activité:	2 Prendre en charge l'accouchement dystocique.....	page 109

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 3 - Niveau UVS pour le NB: la durée de l'expulsion de l'enfant est de 30 mm. Si elle dépasse un h, il faut référer au Centre Chirurgical le plus proche: Nous proposons qu'on réfère après les 30 mm. Au lieu d'attendre un h de temps.

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## Rapport 18

VOLET: Femme

Composante:	4 Maternité à moindre risque/accouchement .....	page 115
Activité:	2 Prendre en charge l'accouchement dystocique.....	page 115

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape E/Cas I Niveau CSSP/CSCU HZ/CHU – CNHU

Dernier tiret:

1. Ajouter sondage vésical + sac de sable
2. Remplacer le méthylergométrine par l'ocytocine.

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## Rapport 19

VOLET: Femme

Composante:	4 Maternité à Moindre risque pendant l'accouchement .....	page 117
Activité:	3 Prendre en charge la rupture prématurée des membranes.....	page 117

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 5/Page 119: La durée d'antibiothérapie chez la mère et le nouveau-né dans la prise en charge de la rupture prématurée des membranes paraît insuffisante. Repréciser les doses et durées optimales de traitement.

VOLET: Femme

Composante:	4 Maternité à Moindre risque pendant l'accouchement .....	page 117
Activité:	3 Prendre en charge la rupture prématurée des membranes.....	page 117

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 5/Page 119: Instaurer le traitement 119 cas n° cinq gestante non en travail sans complication référer (est-ce qu'il ne faut pas donner un délai avec un risque potentiel établi).

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## Rapport 20

VOLET: Femme

Composante:	4 Maternité à Moindre .....	page 122
Activité:	3 Prendre en charge les crises éclamptiques pendant le travail .....	page 122

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 5/Page 123

- L'injection de catapressan ne maîtrise pas la TA pendant les huit heures préconisées dans les protocoles des services de Santé Familiale. Que faire?
- Préciser le dosage du phénobarbital à injecter.

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## Rapport 21

VOLET: Femme

Composante:	4 Maternité à Moindre risque.....	page 123
Activité:	4 Prendre en charge les crises éclamptiques pendant le travail .....	page 123

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 5/Page 123

- Ajouter Fréquence respiratoire et diurèse aux éléments de surveillance et gardénaïl: Préciser le dosage: 200 mg.

VOLET: Femme

Composante:	4 Maternité à Moindre risque.....	page 123
Activité:	4 Prendre en charge les crises éclamptiques pendant le travail .....	page 123

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 5/Page 123/Niveau CCS

Préciser la quantité de ringer lactate à perfuser. Le groupe propose 3l/24 h au maximum.

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## Rapport 22

VOLET: Femme

Composante:	4 Maternité à Moindre risque/accouchement.....	page 126
Activité:	5 Prendre en charge les crises éclamptiques pendant le travail .....	page 126

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Etape N° 5 Niveau CSSP/CSCU.

Ajouter au point 2: placenta praevia recouvrant aux cas référer.

Activité 6 Page 131 Prise en charge de PP non recourant est-ce qu'on ne peut pas faire accoucher si la dilatation est avancée (CCS).

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## Rapport 24

Composante:	1 planification familiale .....	page 50
Activité:	10 débiter une planification par Norplant® .....	page 50

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Page 51:

- 1) Dans les effets secondaires du Norplant® préciser si un des effets secondaires est bien la nostalgie qui est psychique.

Page 55:

- 2) Disparité dans le deuxième rendez-vous du Norplant® sur le terrain.
- 3) Effets secondaires: céphalées à la page 55. Notons qu'il y a une confusion entre le Nonistérat et le Norplant®.

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## Rapport 25

VOLET: Enfant

Composante:	1 Maternité à moindre risque/néonatalogie .....	page 10
Activité:	Activité: N° 3 réanimer le nouveau né en SA – aspiration bouche à bouche (quelle précaution pour la prévention de l'infection).....	page 10

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Dans oxygénation: préciser la quantité d'oxygène à donner.

VOLET: Enfant

Composante:	1 Maternité à moindre risque/néonatalogie .....	page 10
Activité:	Activité: N° 3 réanimer le nouveau né en SA – aspiration bouche à bouche (quelle précaution pour la prévention de l'infection).....	page 10

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Dans oxygénation: préciser la quantité d'oxygène à donner.

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## Rapport 26

VOLET: Jeunes

Composante:	N° 2.....	page 8
Activité:	N° 1.....	page 8

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

Dans oxygénation: préciser la quantité d'oxygène à donner.

Etape n°3 remplacer «désinfectés au formol» par gants DHN.

VOLET: Femme

Composante:	.....	page 83
Activité:	11 et 12.....	page 83

Problème/Disfonctionnement par étape ou par activité (en indiquant la page):

CAT en cas de menace d'avortement sans hémorragie.

KOP (utilité) en cas de menace.

Document 4: l'utilisation du Diazépan est-il prescrit?