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EX-POST EVALUATION REPORT

ON

THE MATERNAL AND CHILD HEALTH IMPROVEMENT PROJECT IN NORTH-EAST BRAZIL

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March, 2005

JICA Brazil Office

Consultant: Daphne Rattner, PhD

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<tr><td colspan="2">Country: Brazil</td><td>Project title: The Maternal and Child Health Improvement Project in North-East Brazil</td></tr>
<tr><td colspan="2">Sector: Health Insurance / Medical Care</td><td>Cooperation scheme: Project-type Technical Cooperation</td></tr>
<tr><td colspan="2">Division: Medical Cooperation Department</td><td>Total cost: JPY 900 million</td></tr>
<tr><td rowspan="2">Period of Cooperation</td><td rowspan="2">R/D: from 04/01/1996 to 03/31/2001
Extension: No
F/U: No</td><td>Partner Country's Organization: Ministry of Health, Brazil / Secretariat of Health, State of Ceará</td></tr>
<tr><td>Organizational support in Japan: JICA, Health Planning: JICA, International Health Policy and Planning Department - Faculty of Medicine - The University of Tokyo</td></tr>
<tr><td>Other related cooperation</td><td colspan="2">National Conference on Humanized Maternity Care (August 1998)
International Conference on Humanization of Childbirth and Maternity (November 2000)</td></tr>
</table>

1.1 Project Background:

According to the 1993 United Nations Statistical Survey, the Federative Republic of Brazil had a population of circa 150 million people, with a 1.5% average growth rate and infant mortality rate of 57 per 1,000 habitants. The indexes of health and hygiene for the whole nation are equivalent to those of a developing country. Nevertheless, the basic infrastructure in the North and Northeast regions is weak, the mortality rate is 92 and the average life expectancy is 51, both per 1,000 habitants. The health indexes in these regions are equivalent to those in Sub-Saharan Africa.

Aiming at the elimination of these differences between North and South, the Brazilian government created the Unified Health System (SUS – Sistema Unificado de Saúde), in order to promote the consolidation of the health and medical systems.

In addition, infant and women healthcare planning and others were established, strengthening the medical care policy for the socially vulnerable. However, the low-income classes in the Northeast region are still in a condition where even the most basic needs for medical care services are far from being completely satisfied.

In order to obtain a good understanding of the current global medical care situation for the entire Northeast region and to further increase the possibility of additional cooperation therein, JICA has implemented a basic survey on population, and maternal and child health care. The results of the survey indicate the need for improvement of the conditions related to the introduction of appropriate family planning, along with maternal and child healthcare in the poor areas of the Northeast region.

Under these circumstances, in November 1993 the Brazilian government requested that the government of Japan implement a maternal and child health care project based on medical care support for newborn babies, management of patients with diarrhea, midwife care, family planning, etc.

1.2 Contents of Project:

(1) Main Objectives:

Improvement of maternal and child healthcare services in Brazil's Northeast area.

(2) Project Objective:

Improvement of maternal and child healthcare in the state of Ceará.

(3) Results Expected:

a) Improvement in awareness, knowledge and technical skills of those engaged in maternal and child health care.

b) Improvement of reference hospitals and maternity hospitals in the pilot area in the state of Ceará.

c) Dissemination of the "Humanized Maternity Care" concept throughout all the state areas. (campaign for the reduction of unnecessary medical care intervention and promotion of reasonable and natural childbirth)

d) Improvement of local residents' awareness and behavior towards the prevention of sexual infectious diseases.

(4) Results (output) :

a) Implementation of different types of training in order to reeducate those engaged in maternal and child health care related to childbirth, child delivery assistance, prenatal and postnatal health care, family planning, and emergency birth control methods.

b) Introduction of LDR (LABOR, DELIVERY, RECOVERY) in maternity hospitals and promotion of the building of "casas de parto" (Childbirth waiting rooms), as well as development of delivery beds suitable for the LDR system and their dissemination throughout the state.

c) Strengthening of public relation activities and promotion of healthcare education concentrated in the pilot area. Preparation of teaching aids for the visual and hearing-impaired, needed in the referred activities.

d) Implement a program to promote the use of contraceptive devices (condoms).

(5) Investments:

By Japan:

Long-term experts: 8	Equipment: JPY 170 million
Short-term experts: 34	Local cost: JPY 90 million
Trainees received: 16	Others:

By Brazil:

Counterparts placement, purchase of equipment, responsibility on local costs, etc.

2. Summary of Evaluation Research:

Researcher: Local Consultant Ms. DAPHNE RATTNER

Period of Evaluation: from 1/21/2004 to 3/8/2004 (45 days)	Type of Evaluation: Ex post-evaluation

3. Evaluation Results:

3-1 Summary of Evaluation Results :

(1) Confirmation of actual results (for details refer to sub item 4. Conclusions).

Main Objectives (Improvement of maternal and child health care services in Brazil's Northeast region) :

- At this moment the main objective has not been accomplished for states other than Ceará, as there was almost no ripple effect from the referenced project to other target regions of Northeast Brazil. However, the concept of "Humanized Maternity Care" has spread in the South region, particularly in the states of Rio and São Paulo.

  Project Objective (improvement of maternal and child health care services in the state of Ceará):
- Improvement of maternal and child health care services was confirmed particularly in the pilot area where the activities of the Project were implemented, in the contiguous areas, and in the organizations where the people engaged in the project operate. The objective of the project continues to be accomplished.

(2) Impact:

The following has been confirmed as to Impact:

- The referenced project contributed to the introduction of the "Humanized Maternity Care" concept in Ceará state and other regions in Brazil (namely Rio and São Paulo).
- In the state of Ceará, the dissemination of the "Humanized Maternity Care" concept was restricted to the pilot area and its surroundings. This was because the Secretariat of Planning of the State of Ceará did not participate as a counterpart (the counterparts were the Brazilian Ministry of Health and the Secretariat of Health of the State of Ceará), which made the development of the movement for dissemination to other regions of Ceará state insufficient.
- The "Humanized Maternity Care" concept spread in states other than Ceará, namely in Brazil's South region (particularly in the states of Rio and São Paulo) and the operations based on this concept have been developing actively. It is hard to affirm that the dissemination of the referenced concept to all regions of the Brazilian Northeast, which was the main objective, has been accomplished, as for states other than Ceará it was not lasting. Historically, each area in the Northeast region of Brazil has implemented many different activities independently, without the habit of cooperating in the activities. Therefore, except for the Secretariat of Health of the State of Ceará, the participation of the Secretariat of Planning of the State of Ceará and policies from the Brazilian Ministry of Health to the Northeast region lack effective activity. In Brazil's Northeast region, the independent spirit has been historically high, without the habit of cooperation in executing businesses. Although the Brazilian Ministry of Health, one of the counterparts, is engaged in the dissemination of the referenced activities to other states, it has failed to implement efficient operations aiming at spreading the activities to other areas of the Northeast region.

(3) Sustainable Development:

Sustainable development has been confirmed as follows:

- At the Secretariat of Health of the State of Ceará there was no continuity in the "Humanized Maternity Care" activities. There was neither continuity in the execution of training for persons related to obstetrical care, nor budget availability. There is no specific policy on that matter from the state government. The activities continue to be carried on by the personal efforts of leaders at the municipal level as there has been no policy implemented by the state government. In order to carry on these activities, it would be important to make local government leaders understand the relevance of the theme.
- These activities continue to be carried on by the municipal secretariats of health and

the medical service entities of the surrounding areas of the pilot area where the Project is being implemented.

3-2 Factors promoting sustainability and impact

We confirmed that the "Humanized Maternity Care" concept spread over the pilot area, the place where the training was executed during the Project, as well as among the training participants, through the execution of training as a Project activity. Although the activities based on this concept have not spread to all areas of the state of Ceará, the concept has spread and is recognized. Regarding the activities of buying and selling condoms, there was an increase in stores dealing with condoms in the state of Ceará and the use of this contraceptive device has spread. In addition, through the holding of an international seminar, the results of these activities were conveyed not only in the Northeast but also throughout Brazil and abroad. In Brazil, particularly in the Southeastern states of Rio and São Paulo, the activities carried on have been influenced by this Project.

3-3 Factors inhibiting sustainability and impact

The awareness regarding "Humanized Maternity Care" by the government of the state of Ceará and among people involved in the health care policy at the municipal level is low and the perception of its relevance and need is quite low. In addition, even if there were people among those concerned with health care policy interested in this concept and willing to spread the activities, it would be impossible to maintain policy continuity because of the high turnover in staff.

Throughout the 90's, the federal government's Ministry of Health created the new "obstetrician nurse" qualification (which is obtained by the nurse after completion of a one-year specialized course in obstetrics). As nurses who obtained the qualification should receive remuneration for childbirth care, there was fierce opposition from obstetricians who defended their vested interests. This Project also faced the opposition of many obstetricians and maternities, starting with the Ceará State Obstetricians Federation (SOSSEGO).

A reshuffling of the concerned health care policy staff occurred following the change in political power in Ceará state. Besides, due to the high turnover of the people engaged in health medical care, who were active at the state and municipal levels (obstetricians, midwives, etc.), it was difficult to maintain policy consistency and continuity. The internal structure is weak regarding political power changes and staff turnover.

3-4 Conclusions

The Conclusions are as follows:

- Improvement in awareness, knowledge and technical skills of people engaged in maternal and child health care:
  Through the reduction of infant mortality rates, and increased use of the materials supplied by the Project, we consider that there was an improvement in the awareness, knowledge and technical skills of people engaged in maternal and child health care at the Project counterpart, as well as the reference hospitals in the areas of Project activity and the pilot area.
- Improvement of reference hospitals and maternity hospitals in the pilot area in Ceará state :
  Most materials supplied to reference hospitals and in the pilot area are being used (except for materials which require maintenance and those which are not used due to problems of capacity to understand the specifications).

Based on the above mentioned, we may affirm that improvement could be seen in the obstetric installations of reference hospitals and hospitals in the pilot area.

- Dissemination of the concept of "Humanized Maternity Care" through all the state areas :
  Almost all reference hospitals and people engaged in maternal and child health care in the pilot area, which were the target of this Project, are aware of "Humanized Maternity Care" and continue to carry on their activities based on this concept. Nevertheless, in other regions there is no implementation of activities despite the awareness of this concept. Also in the case of Ceará state, budget for the implementation of trainings related to this Project has not been secured. Based on the above mentioned, there is no possibility of confirming whether the "Humanized Maternity Care" concept was disseminated to all areas of the state.
- Improvement of local residents' awareness and behavior towards the prevention of sexual infectious diseases :
  The most successful among the Project activities was the program for buying and selling contraceptive devices (condoms). Until now, the program has been actively developed, and the changes in the awareness and behavior of local residents have been confirmed.

3-5 Recommendations:

Based on the results of a local survey, the following is recommended for the attainment of the project goals, at both the state and federal levels.

At the level of the state of Ceará:

a) Concerned people at the Ceará state government, obstetricians and other interested parties have been invited to participate in the discussions on "Humanized Childbirth" (including symposiums and seminars) in order to understand the relevance of the concept.
b) Preparation of an infant mortality rate database for each municipality of the state of Ceará (factors, strategy), for many concerned persons and the general public to understand and participate in the discussions concerning this theme, by supplying information through the network system on the conditions of the referenced data to the concerned public entities of the state of Ceará, concerned medical entities, obstetricians association, universities and the general public.

At the federal level:

c) Effective planning of policies related to this field, through the exchange of information between the Brazilian federal government and international aid entities on "Humanized Childbirth".
d) Presentation of information, data, activities, etc. in this field from other countries through seminars to be held nationally. Symposiums where well-known researchers could present their work on this field.
e) Make available to people engaged in medical care, such as maternity doctors, etc. technical literature on "Humanized Childbirth". In addition, in order to make information in this field available to the general public, brochures should be prepared and distributed. This should improve the health care services through the increase of general public awareness.

f) The practice of "Humanized Childbirth" to be introduced at some famous maternities as reference centers, at multiple locations throughout the country. These core reference centers would implement training and seminars on "Humanized Childbirth", and should be useful in improving techniques and changing the awareness of people concerned with health care policy, obstetricians, midwives, etc.

g) Strengthen the training of obstetricians and midwives in the entire country. Continue to implement local activities such as training, workshops and others, with surveys and evaluation of the status of progress of activities after the trainees who received JICA's training, under JICA's scheme of receiving trainees in Japan, are back in Brazil.

h) Present and publicly inform JICA's activities related to the field in medical magazines, symposiums, academic meetings, etc.

3-6 Lessons learned:

On Impact:

This Project is highly appraised among obstetric midwives and people concerned with medical care related to childbirth and maternity. There are good response and high appraisal from other regions other than the state of Ceará, where the Project has been implemented, all regions of Brazil (particularly the South region), Japan, and countries of Central and South America. This is a result of the activities of public information of part of the Project (especially preparation of home page, and the holding of the international seminar). Even now, particularly in the Southern states of São Paulo and Rio, several activities based on the "Humanized Childbirth" concept have been implemented. However, the dissemination of this concept to the entire Northeast region of Brazil, the main objective of this Project, was unable to generate a substantial impact. In the planning activities of this Project, there was a need to strengthen cooperation between the federal government (Ministry of Health) the Secretariats of Planning of other states in the Northeast region and other state government organizations, with entities engaged in medical care (especially associations related to medical care), NGOs, etc. (this approach may be considered effective for Northeast states, where there is a strong tendency to rely on problems of fragile basic education, wealth disparities, and strong politicians leadership).

On sustainable development:

The Project activities received appraisal during the implementation of the cooperation, but the activities related to "Humanized Childbirth" were removed from the policy priorities of the Secretariat of Health of the State of Ceará, the implementation agency at the time, also as a result of the change in the political power, and the budget at the Ceará state government was not secured for training of obstetrician midwives and operation of maternity clinics. In addition, during the implementation of the Project, the trainees who received training in Japan, and the midwives who received local training continued their activities individually, and were not treated as part of the state government policy.

Thus, the changes of policy resulting from the changes in the political power in the state government, together with the strong opposition of the Obstetricians Association, led to a situation where it was difficult to obtain sustainable results, with the strengthened actors and investments isolated during the term of Project implementation. The obstetricians and other concerned people continued to carry on the activities individually, and it became complicated to obtain sustainable development of the referenced activities in a social

environment where the importance of the "Humanized Childbirth" concept has not been sufficiently understood,

It is necessary to work continuously until the activities related to "Humanized Childbirth" can develop in a sustainable manner.

3.7 Follow-up situation:

The trainees who received training in Japan under this Project became its core and, as a cooperation follow-up, the holding of a "Seminar on the Propagation of Humanized Childbirth" has been proposed. The state government leaders and the representatives of concerned medical care organizations of the state of Ceará and the other regions of all the Northeast states (8 states) should be invited to participate in this Seminar. The leaders and concerned medical care people related to the Project in the state of Ceará at the time should reconfirm their understanding of the relevance of the "Humanized Maternity Care" and a new presentation should be made on the relevance of the activities to concerned people in the government of other states and people concerned with medical care and its dissemination.

REPORT

Project Luz defined different intervention proposals in regard to the:

1) Pilot area, comprehending Aracati, Beberibe, Fortim, Icapui, Itaiçaba and Pindoretama municipalities: establishment of a new model of humanized care and provision of all the equipment needed.
2) Metropolitan Region of Fortaleza, comprehending the bigger hospitals, including the teaching hospitals.
3) Involvement of professionals of the whole state of Ceará in the training activities, as well as in participating in the International Conference on the Humanization of Childbirth, November 2000.

As for the **expected results** mentioned in the **Reference Term**:

1 – Improvement in the level of technical and scientific knowledge of the professionals of the Maternal and Child Health area:
This objective was achieved, at least where this evaluation was performed. A group of professionals chose 'emotional support by a kin' as the topic of their conclusion paper in a course on Reproductive Health. In my conversations with the health professionals of the Pilot Area, they showed significant differences in their approach to childbirth from the vision of the Brazilian traditional medical establishment. The main concepts of humanized care are part of their daily professional activities.

2 – Improvement in the structure of the health services of the Pilot Areas, as well as in the reference hospital of Aracati, in terms of humanization and quality, in order to offer humanized care to childbirth.

Improvements in terms of structure occurred as listed below:

Physical resources: Reforms in order to offer access to the LDR system took place in Hospital Gonzaguinha of Messejana, Hospital Municipal / Casa of Parto in Pindoretama, Hospital Santa Luiza of Marillac of Aracati, Maternidade Escola Assis Chateaubriand (MEAC), Maternidade Cesar Cals, Hospital Municipal of Icapuí, Hospital São Lucas of Juazeiro of the Norte and Hospital São Vicente in Barbalha.

Equipment: see item 3 of Sustainability below.

Norms and Procedures: Norms for humanized childbirth care were elaborated and are followed in Aracati, Beberibe, Pindoretama, Icapuí, Itaiçaba and Barbalha.

Planning, administration and evaluation: Routine data collection is not systematical. Data are collected usually for financial uses of the Health Care System. There is NO routine registration of infant or neonatal mortality, proportion of low birth weight babies, in the most of the hospitals. Some refer improvement, but this deficiency is very pronounced.

Human Resources: Many hospitals invested in their human resources, mainly in hiring obstetric nurses and courses of specialization. The number is still low, and in

some places there is a dispute whether the childbirth care will be provided by the nurse or by the physician.

3 – Socialization of the concept of humanization of childbirth care for the whole state of Ceará

This objective was achieved. In all places visited, professionals remembered the projects of humanization of childbirth care, the training received – and cherished that memory. However, to really achieve humanization, it's important to continuously stimulate them in the direction of humanization, for there is a tendency to become accommodated to small changes, and falling back in old practices.

4- Increase in knowledge about sexually transmitted diseases prevention.

There is an indirect form to evaluate this objective: since the distribution of preservatives increased, as well as the marketing and distribution points, representing increase in its utilization, the answer is positive.

IN REGARD TO ITS IMPACT:

MAIN QUESTIONS

1. Did the project achieve its superior objective? If yes, to what extent? Which were its positive and negative aspects?

   To really improve maternal and child health, the process of change is slow and demands continuity, given this is a case of paradigm shift in care. There were significant improvements in most of the services visited, people were sensitized by Project Luz and sad of its discontinuation (for impact indicators, see Table 1 at the end of the Report).

   As reported by a nurse interviewed by us: the greatest investment was in **qualification of the care.** Under the guidance of JICA, hospitals underwent reforms and became birth centers, services were equipped, and professionals were trained.

2. If it wasn't achieved, which were the difficulties, what could have been done?

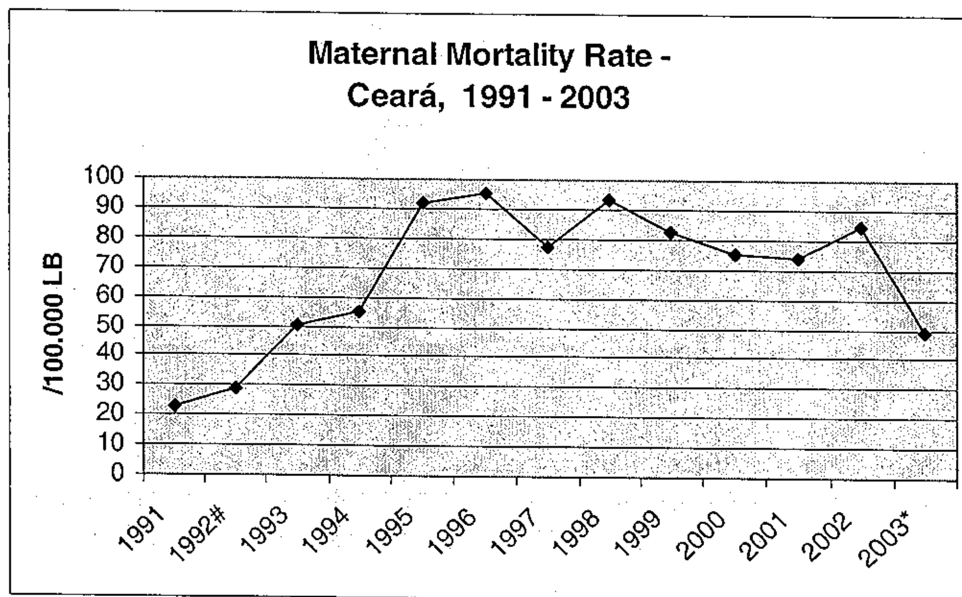
   Some of the problems that impeded greater achievements were:

   - There was no sensitization of the municipal administrators (Health Secretaries of the municipalities); hence, much of the investment in sensitization of the professionals was lost because of lack of continuity, given this decision would be of these administrators.
   - High turnover of municipal administrators – their constant substitution means restarting the process of sensitization from the beginning.
   - High turnover of professionals- their constant substitution means restarting constantly the process of sensitization and training of the newly admitted.

COMPLEMENTARY QUESTIONS

1. After the end of the project, how was the maternal mortality in the intervention area?

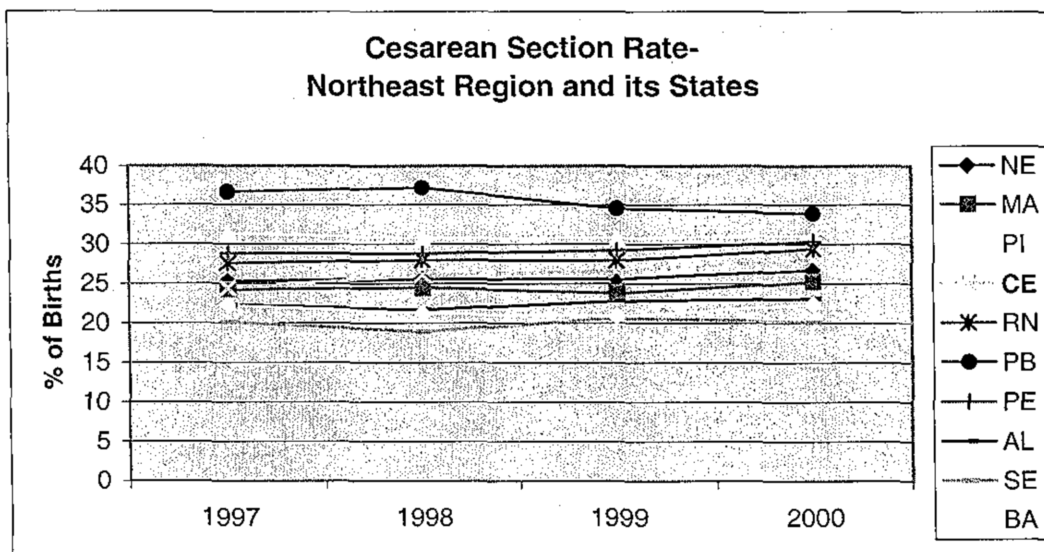
Maternal mortality is an indicator estimated on a 100 thousand live births denominator; hence, it is applicable only for larger populations. All births of the pilot area and Fortaleza did not add to 50 thousand. Hence, this indicator was studied for the whole state. From 1998 on, there is a consistent reduction in the maternal mortality rate up to year 2000; it stabilizes in 2001 and rises again from 2002 on. As there was no change in the procedures for data collection, and as better quality care reduces avoidable maternal deaths, we may suppose that the reduction seen can be associated to the intervention offered by Project Luz. We cannot state whether 2002 data is an atypical artifact and the trend downwards was resumed in 2003, since these last data are incomplete.



Source- CEEPI- SESA/ CE
Beginning of the activities of the Maternal Mortality Committee
* Incomplete data

2. Was there any change in the rate of surgical deliveries after the end of the project at the state level? What about the other states of Northeast Brazil?

Throughout the project, there was a slight increase in the c-section rates of the state of Ceará (CE), while we would expect a reduction. Ceará's rates are very similar to the other Northeastern rates, and practically superposed on the region median.



Source: DATASUS
NE= Northeast; MA= Maranhão; PI= Piauí; CE= Ceará; RN= Rio Grande do Norte; PB = Paraíba; PE = Pernambuco; AL= Alagoas; SE= Sergipe; BA=Bahia

3. How is the concept of humanized care to childbirth perceived in the Pilot Area, in the other cities of Ceará and in the other states of Northeast Brazil?

   In the Pilot Area, the concept was well absorbed and spread, and is being practiced, in some of its aspects, practically in all the institutions involved in the Project Luz, even those that showed more resistance. State-wise there is knowledge about the concept, because of the effort of the members of the Project Luz in broadcasting it, but almost no practice. As for the other Northeastern states, the activities under way are not a result of the Project Luz efforts.

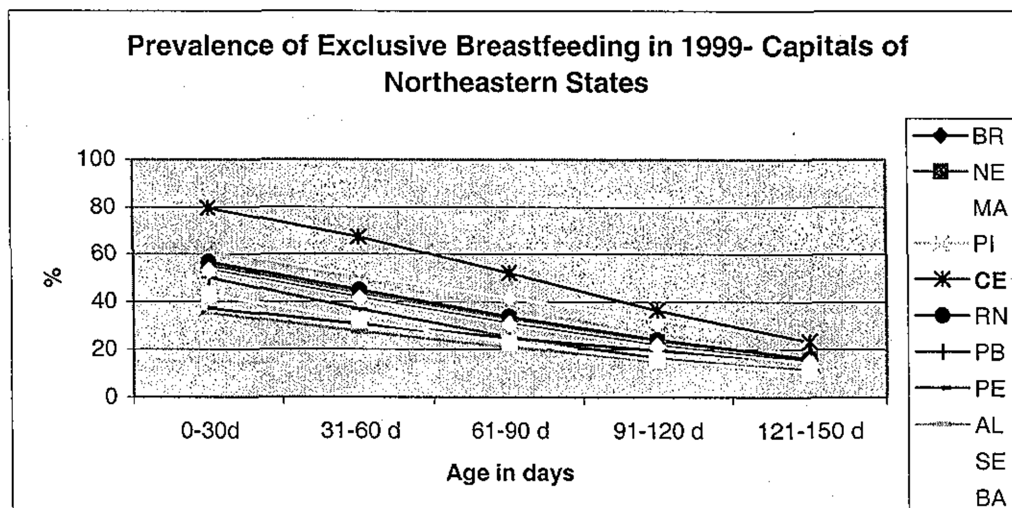
4. Was there any increase in courses of obstetric nursing in the state of Ceará? Was there any increase in the number of vacancies for such courses?

   At the beginning of the Project there was only one course of specialization in Obstetric Nursing, in the Federal University of Ceará. Currently there is a new course in the State University of Ceará, which means increase of vacancies. One of the problems of the prior course has been always the availability of a hospital for field practice, since the Maternity School of MEAC is exclusive for medical students and residents. Hospital Gonzaga Motta of Messejana would be available for such mean.

5. Was there any increase in Birth centers in Ceará and in other Northeastern states?

   During the Project Luz period, the Birth centers of Pindoretama, Hospital of Messejana and others were inaugurated. The Birth Center of MEAC only offers pre-natal care and pre-natal courses, it does not function effectively as a Birth Center. The policy of opening Birth Centers was discontinued, since the person responsible for the Women's Health Program in SESA was not

favorable to obstetric nurses being in charge of care in childbirth. As a consequence, there was no diffusion to other Northeastern states.



Source: DATASUS/ BR = BRAZIL; NE= Northeast; MA= Maranhão; PI= Piauí; CE=Ceará, RN= Rio Grande do Norte; PB= Paraíba; PE= Pernambuco; AL= Alagoas; SE= Sergipe; BA= Bahia

OBSERVATION: A positive finding in comparison of Ceará with the other Northeastern States was the higher prevalence of exclusive breastfeeding in its capital (Source: DATASUS). There is no way to know if this is a consequence of the activities of Project Luz; however, the higher proportion of babies being exclusively breastfed is constant through all ages.

IN REGARD TO THE SUSTAINABILITY:

MAIN QUESTIONS

1. What are SESA and the Municipal Health Secretariats doing in regard to the practices and attitudes of humanized childbirth care? To what extent the diffusion of these ideas is still being carried on?

   Again, given the person in charge of the Women's Health program in SESA-CE did not comply with such line of action, there was discontinuity in the realization of courses and in the incentives for humanized care. In the last three years the activities launched by Project Luz were discontinued at the state level. Some Municipal Health Secretariats of the pilot area kept working in this line of action, due to the professionals that had been sensitized and were committed to change for more humanized care.

2. If there was an interruption why did it happen? What could have been done to improve?

   See answer above.

COMPLEMENTARY QUESTIONS

1. Do the maternal and child health professionals that received training during the execution of the project are still in the same positions in the state of Ceará?

Most of the professionals trained are still in Ceará, usually in the same positions. There are situations such as Icapuí, where none of the nurses currently working was trained. On the other hand, the nurse that was trained while she was in Icapuí moved to Brejo Santo, where she still practices care following the guidelines received in her training. The high turnover of professionals hinders the continuity of the projects, imposing new sensitizations and training courses periodically.

2. Are the hospital and training structures that were constituted in the pilot areas and in Fortaleza, during the execution of the project, still being managed and utilized?

   There was no continuity in the training courses. Humanized care continued, since pregnant women continue to have babies, that continue to be born, and some professionals continue to practice what they have learned, but humanized care is not found everywhere.

3. Is the equipment that was developed and donated during the execution of the project still in use?

   The donation of equipment was huge. Equipment was donated to Hospital Infantil Albert Sabin. The Casa da Gestante of the Maternidade Cesar Cals was erected basically with the support of JICA. Along the years of the project there were many other donations, equipment for ecography, ultrassonography. In the last shipment there were: 10 heating nursery cots, 20 electric PPP beds, 30 normal PPP beds, 10 wrist oximeters, 10 photo therapy instruments, 5 televisions with videos, 10 kits for resuscitation, 10 glucose meters, 10 aspirators, 2 colposcopes, 2 cardiotocographers, 300 portable fetal detectors, 300 table fetal detectors and 50 CD players.
   In most of the places visited the equipment was being used and was in good shape. As for the PPP beds: in some places, given its continued use, the cushions had opened and need to be replaced. This repair can be done locally, if there is such an initiative (Aracati, Pindoretama). Given the proximity to the sea, some instruments became rusty (Pindoretama- table fetal detector). The PPP bed from the hospital in Crato was not in use, but no one could inform where it was ("sent to repair" – even if it had not been used). MEAC had a nursery epidemic that killed over 30 babies in recent years, and in consequence their number of hospitalization was reduced dramatically. During our visit we observed an entire ward of over 10 PPP beds, completely idle.

4. Did the Health Secretariat of the State of Ceará continue its interventions focusing humanized childbirth care?

   After the end of Project Luz, humanized childbirth care was NOT prioritized and hence it was discontinued. However, the current Women's Health Coordinator, Dr. Dirlene Mafalda Silveira, considers humanized care a priority and intends to recover and intensify the activities of humanization of care in childbirth.

The continuity depended on the involvement of local professionals, and it has happened in some places (such as Hospital of Messejana in Fortaleza, Santa Luiza de Marillac in Aracati, and São Vicente in Barbalha). There is the need of a firm policy definition, establishing execution goals, and close supervision of the implementation, with frequent stimuli. Particularly, it is very important to involve the municipal executive power (mayors and health secretaries) in this process. The positive disposition of the Health Ministry, with its favorable directions for quality improvement (which includes financial incentives) may ease the accomplishments.

5. Were the auxiliary nurses training courses continued, after the end of Project Luz?

   For a while the teams of Messejana and Barbalha continued the training courses. LAPEL became available and offered some continuity, becoming a reference for this training. Currently these activities are performed only eventually, and locally.

6. Is the program that promotes the use of condoms still active?

   The program is still active, in spite of their difficulties, and has spread from 18 to 54 towns, with 900 selling points in the interior, and 350 in the metropolitan region of Fortaleza. It has gained state and national recognition. Márcia Martins has shown great determination and wish of making it happen, hence the favorable results. She has had very difficult times, with unexpected losses, and would need support for a short while, till she re-establishes her stability. A donation of a supply of condoms enough for six months might be of great help, as well as a pick-up car.

7. Is there continuity in the diffusion of humanized care?

   Project Luz did not achieve diffusion to the other Northeastern states. They were not receptive and no contact was established with the state and local public agencies. Eventually JICA would be in touch with the Health Ministry, but not with the policy execution divisions (ex. FUNASA = Fundação Nacional de Saúde), the ones that might influence the expansion of the program. However, it did articulate with a pioneer movement for Humanization in Brazil, REHUNA= Rede pela Humanização do Parto e Nascimento (the Brazilian Network for the Humanization of Childbirth). According to Paula Viana, Executive Secretary of ReHuNa during that period, "*it was the first international agency to listen and give support to our proposals of humanization of care, sharing the organization of the International Conference and increasing the visibility of the activities of ReHuNa members nationwide. It visited places like Curumim, Maternidade Leila Diniz, Hospital Sofia Feldman, and organized visits of professionals from Ceará to these services, which also empowered them. This happened during the period of the project, from 1997 till 2000, and continues up to now, since some nurses that are being trained in Japan are members of ReHuNa*". "*There is a partnership ReHuNa-JICA built on affinity, on trust.*" If Ceará state did not undertake this diffusion, the members of ReHuNa did, and they

have been partners up to now. According to Marcos Dias, then Director of Maternidade Leila Diniz and now responsible for the Women's Health Program in the Municipality of Rio de Janeiro, and also a member of REHUNA, "*JICA played an important role in reinforcing the discussion about humanized care that was being carried on by the members of ReHuNa in our country, and even proposed the PPP bed and diffused it as an alternative to the traditional gynecological bed. They also contributed to the discussion of which is the professional that should be in charge of the care in childbirths. A landmark was the International Conference, which offered us the opportunity to discuss these of foreign authors, as well as to present Brazilian initiatives in humanized care in childbirth. Members of ReHuNa were also responsible for the dissemination of the publications produced by JICA, such as manuals, posters etc. Of extreme importance was its partnership with the Health Ministry in the translation of the WHO publication: 'Care in Normal Birth: A practical Guide'. The support of JICA to Favela Monte Azul was a source of inspiration to many professionals that visited that place, got in touch with Angela Gehrke, which was a great contribution to change their practices.*" According to another member of ReHuNa: "*It's fantastic that an organization for international cooperation will develop projects for health services in other developing countries. JICA does it in Africa, Asia and Brazil, offering her technical personnel that share their knowledge and resources. These technicians are outstandingly diplomatic and delicate, such as Daisuke Onuki, which manages to build a bridge between the Brazilian and the Japanese cultures. They are fantastic!*"

8. Are the Birth Centers built during the project period still being maintained and used up to now?

   The Birth Centers of Icapuí, Pindoretama, Itaiçaba and Hospital Gonzaga Mattos of Messejana are active and working, but the one linked to MEAC does not offer childbirth care, only pre-natal care and courses for pregnant women.

CONCLUSIONS

The evaluation of the results of Project Luz must be considered under the frame and the context of Brazilian care. Since 1988 the Brazilian National Healthcare System is under construction, constituting the Sistema Único of Saúde – SUS, whose main features are the decentralization of the activities to the municipal level and their consequent capacitating and empowerment to accomplish such task. Furthermore, there are federal programs of municipal execution, with support of the intermediate state level, such as the Community Health Agents Program = Programa de Agentes Comunitários de Saúde (PACS) and the Family Health Program= Programa de Saúde da Família (PSF), which are responsible for many health activities in maternal and child health, such as prenatal care, for instance. In spite of the federal regulations, communication between these providers and childbirth care providers is not usual, and many providers of both programs were not trained about humanized care, which influences the outcome indicators. Our evaluation came to the following conclusions:

1) Our evaluation of the activities of JICA in Ceará showed their high level of commitment with humanity, a great concern with the effective change that is needed for us to become a Humanity with less violence. Its activities and realizations were of great importance for the development of the concept of humanization, as well as its diffusion in Ceará state and other parts of Brazil. All the professionals interviewed in the health services of Ceará showed great respect for JICA's performance: "*We had not done our job. Someone from abroad had to come and sensitize us, change our culture through words. We were acting mechanically. I was sensitized. Now I know that pregnancy is not a disease, it is the most important state a woman can be at. We used to create a hostile environment, an aggressive one. Someone came to show the importance of silence, respect for the childbirth process, the importance of emotional support, of being affectionate, and the strength of the nurse. We lost our fear, and trust and courage appeared. It was an internal awakening to work as obstetricians*" (from the focus group realized with the nurses).

2) Both the RAP researches, of 1997 and 2000, identified serious problems of under-reporting of births and deaths that, unfortunately, are still happening. Depending on the source, different findings are reported. Taking the municipality of Aracati as an example: the various information systems offered various numbers of birth for 2003: 997, or 1062, or 1019, or 1381. Thus it becomes practically **impossible to evaluate the <u>real</u> impact** of the performance of JICA during the period, in terms of maternal and neonatal mortality reduction, since neither the baseline, nor the conclusion, and not the data from three years after the end may be considered as precise.

3) In regard to the **sustainability**: in order to occur a real change of mentalities and practices, <u>continuity of stimulus</u> is imperative (sequential training, supervision of the care, opportunities for updating, etc), as well as positive reinforcement. This is needed to overcome resistance, which is more frequent among medical professionals. There are professionals that, having become sensitized, manage to seek by themselves alternatives for continuity. However, the majority is expectant of directions coming from the upper hierarchical levels, in our authoritarian and centralized culture.

4) It is evident that the Health Secretariat of the state of Ceará SESA-CE did not assume the continuity of the activities after the end of the project. The resistances came from professionals linked SOCEGO (OBGyn Society of Ceará), MEAC and others. The nurses are not empowered enough to assume the childbirth care and do not have conditions, by themselves, without the support of a public policy, to face the conflicts resulting from a more active approach.
Dr. Dirlene M. I. of the Silveira showed concern and interest to resume such activities, through sensitization and re-opening the issue for discussion.

5) The much needed structuring and agile functioning of the information system **<u>has not yet occurred.</u>**

6) The need for systematization of the prenatal care for the PACS and PSF teams, and its interaction with the services that deliver childbirth care is imperative.

7) In regard to the **<u>lessons learned</u>**: in order to have a real dialectical transformation of the model of care, there should be continuity of stimuli, up to the moment when the qualitative change occurs. The interruption of Project Luz generated a discontinuity,

since there was no critical mass of people committed with the needed change, principally among state and municipal decision making levels.

RECOMMENDATIONS

A. At the state level, for Ceará:

In order to occur an effective change in the model of care, it is important that all, or the majority of the professionals, feel they are participating in the decisions. Hence, it is important to involve the physicians from the beginning, since this is the group where the accommodation to the current model is more pronounced.

We suggest a Seminar presenting local, regional and national data that shows the need for intervention in order to reduce the high maternal and neonatal mortality indicators, as well as the high cesarean section rates. It would be also important to show models of care of countries that deserve do be copied, such as Japan, or the Netherlands. Using a simplified worksheet, they could in smaller groups elaborate a local and regional plan of action, including the care and diffusion of the ideas, and defining goals, timelines and monitoring systems. Thus it is possible to involve these professionals in all the phases, from planning to the follow-up.

In terms of practical training: it is important to establish reference centers at regional levels. We suggest Hospital de Messejana for the metropolitan region of Fortaleza, Hospital Santa Luiza of Marillac for Aracati and its region, and Hospital São Vicente in Barbalha for the Cariri region.

It is also important to keep in mind the continuity, in order not to lose the investment made. This can be done through semestral updating courses, complemented by workshops, where the professionals may show what they are doing and how, with quantitative and qualitative data, as an opportunity for exchange and mutual reinforcement.

The Seminar that is being proposed by the Health Secretariat of the State of Ceará is a very good beginning of such process. With the name of HumaLuz, reminds us of the ideas of Humanization and is a reference to Project Luz, reinforcing and restating the grandiose dimension of the proposed change. The video-film that is being proposed could become a means, suing sensitive images, to provoke positive reactions in the direction of re-lighting favorable motivations.

Following suggestion offered by one of the interviewees, it would be important to involve state and municipal decision-making personnel in the process of discussion about humanized care. And, doubtlessly, offer to physicians the opportunity to participate right from the beginning.

Another form of sensitization and acting would be to create committees for the investigation of all maternal and perinatal deaths, both at municipal and regional levels, counting with physicians, nurses, and representatives from the community, besides the technical personnel. It also would be important to offer a means of diffusion of such data to the population regularly, as well as its interpretations,

through the media means (TV, radio, newspapers), in order to increase popular awareness about the importance of quality care.

In parallel with all changes to be introduced in the execution of the activities of care, it is of utmost importance to invest in the qualification of the information system of the state of Ceará. It is very important to have a trustworthy means to show all the marvelous work that is being done, under the format of quantitative objective data, such as the maternal, neonatal, perinatal mortality rates and others. A partnership with the Planning Secretariat of the state of Ceará, as well as with the universities, could be a possible way for such improvement.

B. At the national level:

JICA, given its profound knowledge about models of care in childbirth, may be in a special position to stimulate the debate about humanized care in childbirth, as well as have a role in the definition and execution of national policies. It is suggested some articulation with the Health Ministry, the Pan-American Health Organization, UNICEF and other important agencies.

Taking the deeds as a baseline, the suggested continuity includes:

1. Organizing events

This can be done through support for already programmed events, or even the proposition of new events. For instance, while launching the book "A Guide to Effective Care in Childbirth", by Enkin et al, whose translation is being fostered by JICA, regional events could be organized, bringing up the discussion about evidence based obstetrics. Given the resistance coming from the medical corporation, courses and events could also be directed to the Counselors of the Regional Medical Councils; the contents would be, again, evidence based care, with renowned speakers. One of the ReHuNa members suggested inviting also Experts (Peritos) from the Justice Department and from the Social Security System to attend, since they constantly consider the physician at fault if s/he did not perform a cesarean section.

Another important debate that could be fostered by JICA is on professional training, or the curricula for teaching Obstetrics and Neonatology. Given the existing partnership with CEMICAMP in Campinas State University, seminars or workshops could be held there with the representatives from both the Health and the Education Ministries. In these events the discussion would broach obstetric professional training, including the gender approach, and focusing on humanized care to childbirth, abortion, emergencies, urgencies etc., in order to not only reduce maternal and perinatal mortality, but also to improve the quality of the human relationship. Humanized care to newborn babies would also be debated.

2. Publications

It is suggested to launch a series of books (some of them translated) in order to make such information available for non-speakers of foreign languages in Brazil. There is a need of books directed to health professionals, that will be partly covered by Enkin's book, and also a lack of publications directed to the lay public of health services users – as we know, public opinion pressure is a great contribution for health services changes.

3. Training
It is very important to create Reference Services on Humanized Care that would be available for in-service training, in different regions of Brazil. This is an important way to speed the process of professional training in the new model. It would be even better if we could involve the current University System, where it is already sensitized and providing humanized care, such as the University Hospital of the Federal University of Santa Catarina. São Paulo, the greatest city of the country, could also become a Reference. Another possible site would be Hospital Sofia Feldman, in Belo Horizonte, that already offers obstetric residence for nurses. In Ceará, these would be Hospital Gonzaga Motta of Messejana and Hospital São Vicente of Barbalha, as mentioned. These Reference Centers for Training in Humanized Care could train jointly health teams, so that physicians and nurses would learn how to work together, sharing responsibilities, establishing jointly the care protocols, and dividing the attributions of the physician and the nurse.

We also suggest workshops one or twice a year, as a continuity for the nurses and administrative professionals trained in Japan. They would evaluate the current stage of development of their work, how much they managed to multiply this investment, while also offering opportunities for updating (conferences, classes, videos, body activities etc.).

JICA could also offer scholarships for the ALSO course = Advanced Life Support in Obstetrics, which is backed by the American Academy of Family Physicians, and supported by the ACOG = American College of Obstetrics and Gynecology. In Brazil it is currently under the coordination of Dr. Marcos Ymayo. The first stipends could be directed to opinion maker physicians.

4. Production of educational materials
We suggest that Enkin's book should be distributed to the Medical Council (National and Regional ones), as well as to the Justice Departments and the experts of the Social Security area. Such distribution could occur during the event proposed above. We are aware of the excellent proposal of a video and a poster on different positions for labor and delivery, which we applaud.

5. Financial support for trips
It is suggested to include in the trips to Japan physicians that are opinion makers, so they will become aware of different realities.

6. Diffusion
It is important to broadcast more openly JICA's realizations in Brazil, either through publications or other diffusion mechanisms, among the medical organizations. These could be publications or other diffusion mechanisms. It could be advertising in medical journals such as Femina, Revista Brasileira de Ginecologia e Obstetrícia, and Revista da SOGESP (Journal of the OBGyn of São Paulo state). It could also be renting stands in medical events (Congresses, Symposia, Meetings) and distributing educational material created by JICA.

For some of these activities, it is suggested to articulate with the NGO Rede pela Humanização do Parto e Nascimento = ReHuNa. In spite of not being the main focus of JICA (their members were only partners in the organization of events), they

showed sustainability: after the International Conference on the Humanization of Childbirth, they have already promoted the I International Conference Ecology of Childbirth, in Rio de Janeiro and Florianópolis, in 2002, and now they are preparing the II International Conference Ecology of Childbirth, in partnership with the team of the journal Midwifery Today. The speakers of the International Conference have been invited to participate in other Brazilian events, such as Michel Odent, Robbie Davis-Floyd, Ina May Gaskin etc. The I International Conference was a milestone for the movement of humanization of care in Brazil and Latin America, and opened many new possibilities for action for the members of the NGO. Its members have been key-people for achieving change, making it really happen, such as the Health Secretariat of the Municipality of Rio de Janeiro that on the last March 8th opened a new Birth Center in Realengo, a suburb of Rio of Janeiro, and intends to open two more soon, in spite of the resistance of the medical establishment. Hence, working with people tuned to the same objectives might potentiate the results.

TABLE 1 - Indicators available related to maternal and neonatal health, before and after Project Luz

Indicator	Local	Year	Source		Year	Source		Obs.
Population	Ceará	1991	IBGE	6.366.647	2001	DATASUS	7.547.684	
Female Population	Ceará	1991	IBGE	3.776.404	2001	DATASUS	3.862.257	
Women 15-49 years old	Ceará	1991	IBGE	1.589.404	2001	DATASUS	1.978.700	
Literate women	Ceará	1991	IBGE	67,04 %	2000	IBGE	78,5 %	
Family income below 1 Minimal Wage			PESMIC	32% (Fortaleza) 73% (Interior)	2001	PESMIC IV	50%	
% Pop. in poverty	Ceará			---	2001	IBGE	52,1 %	38,8 % RM Fortaleza
Homes with tap water		1991	DATASUS	67%% (Fortaleza) 27% (Interior)	2000	DATASUS	79%(Metr.Reg.Fort) 48% (Interior)	
Pop. < 1 Year	Ceará	?	DEEPI/SESA	165.222	2001	DATASUS	156.041	
Infant mortality rate	Ceará	1994	PESMIC	57/ 1000 LB	2000	DATASUS	53,3/1000 LB	
Neonatal Mortality	Fortaleza	1995	Alvoro et al.	15,2/1000 LB *	2000	DATASUS/ Early NNMR	17,8/1000 LB	*In 1995, data from 17 big hosp. Fortaleza
Perinatal Mortality	Fortaleza	1995	Alvoro et al.	32,8/1000 TB				
% Low birth weight	Ceará	1997	DATASUS	6,29 %	2000	DATASUS	5,99 %	
Maternal Mortality rate	Ceará	1995	DEEPI/SESA	67/100 000 unadj, 107/100 000 adj.	2002	SESA-CE	84,5/100 mil	Possible improvement in recording data
Malnourishment in women 12-49 Years	Ceará	1994	PESMIC	12-17 %	2001	PESMIC IV	12%	
Use of contraceptives	NE- BR	1991	Estudos DHS	59% (38% sterilized)	2001	PESMIC IV	89% (39% sterilized)	
Prenatal coverage (1 or + visit)	Ceará	1994	PESMIC	83 %	2001	PESMIC IV	98 %	
Prenatal coverage (6 or + visits)	Ceará				1997 2000	DATASUS	32,9% 29 %	
% with prenatal care and card	Ceará	1994	PESMIC	72%	2001	PESMIC IV	79 %	
%with prenatal blood tests	Ceará	1994	PESMIC	82 %	2001	PESMIC IV	94 %	
% received prophylactic iron in Prenatal visit	Ceará	1994	PESMIC	74 %	2001	PESMIC IV	70 %	
% hospital births	Ceará	1994	PESMIC	95 % (Fortaleza) 86% (Interior)	2000	DATASUS	96,3 %	
% Physicians'cared childbirth	Ceará	1994	PESMIC	56 % (Int. 34%-1996 McAuliffe et al.)	2001	PESMIC IV	65%	
% cesarean section	Ceará	1994	PESMIC	22% (34% Fort., 28% Ceará, estudo of 1996, Correia et al)	1997 2000 2001	DATASUS DATASUS PESMIC IV	24,4 % 28,1 % 25% (28% Fort. 23% Interior)	
% with post-partum visit	Ceará	1996	Correia et al.	Fortaleza 26%, Interior 11%	2001	PESMIC IV	24 %	

Cesarean Section Rates:

According to the PESMIC data, in 1987 the c-section rate in Ceará was 10 %, in 1990 became 13%, in 1994 rose to 22% and in 2001 reached 25%, being 28% in Fortaleza and 23% in the interior. These are some specific hospital rates:

Cesarean section rates in selected health services of Ceará, 1996 to 2003

Hospital	Municipality	1996	1997	1998	1999	2000(until sept)	2001	2002	2003
Hosp. Sta. Luiza of Marillac	Aracati	30%	27%	26%	21%	20%	27%	33%	33%
Hosp. Beberibe	Beberibe	14%	?	14%	18%	14%		12,2%	
Mat. N.S.Soledade-Icapuí	Icapuí	17%	21%	22%	19%	23%			
Fortim	Fortim	30%	27,3%	5,8%	3,7%				
Hosp. S. Lucas	Juazeiro do Norte								36%

Sources: Project Luz – General Report of Activities. Hospitals'data.

SUMMARY

Introduction

The Japan International Cooperation Agency (JICA), a governmental organ linked to the Foreign Affairs Ministry of Japan, elaborated the Project for the Improvement of the Operational Conditions of the Maternal and Child Health Services in Brazil, in partnership with the Brazilian Health Ministry and the Health Secretariat of the State of Ceará (SESA-CE). It received the title of Project Luz (meaning Light). The main objective was to reduce maternal and neonatal morbidity and mortality, through the empowerment e reorganization of the healthcare services. The strategies adopted were: personnel training, both of those that work at community level and at institutional level; increase in activities of health education and communication; and improvement of the health information systems in order to be able to monitor and evaluate the project. There was also an impressive donation of equipment. The activities of Project Luz were integrated to the processes of the Program Viva Mulher (of SESA-CE). There were two phases, one of studies and the second of interventions. The results of the 1997 study reported low quality of care in childbirth and in the professional involvement. Its conclusions emphasize "**the need of profound changes in the culture of childbirth care**". In its intervention phase, from 1997 on, Project Luz's main concern was to disseminate the concept of Humanized Childbirth Care through specific training. In March 2000 a second research was performed, with the same instruments and procedures of the previous one, aiming to detect changes introduced by Project Luz. It found that many problems still persisted. In March 2001 the five-year period of the project ended. The current evaluation aims to assess: the impact; whether there was continuity after the end of the Project; and the current state of the materials and equipment that were donated.

Objetive

To evaluate the impact and the sustainability of the cooperative actions of JICA in the period of 1996-2000 after 3 years of the conclusion of Project Luz, in 2003, according to the Term of Reference offered by JICA.

Metodology

1- **Reading of reference documents** (circa 35 documents).
2- **Visit** to the services to interview health professionals and to verify *in loco* the conditions of the services and the equipment donated by JICA (visits realized between February 3 and 13, 2004).
3- **Search of indicators** in official databases (DATASUS, SESA-CE, in the places visited, as well as in the documents available)
4- **Telephone interviews** with selected key-informers.

Evaluation

One must acknowledge that:
a) There is a model of care that became traditional and is known to the health professionals; it is excessively interventionist, and WHO recommends it should be abandoned. However, there is an accommodation to the current model, mostly for its convenience for the professionals, and any proposal of change will have to deal with such accommodation.
b) For change in attitudes and practices to occur, a few phases are needed: sensitization, exemplifying the changes bound to happen, institutional support of these changes, and close supervision, with continuity, until the effective compliance with the new model of care happens.
c) Proposals of humanization of care, even if they mean improvement in the quality of care and in the well-being of women, their babies and even for the health professionals, will not occur only because they mean better care. There is the need of great investment of resources – equipment, capacitating, supervision and, mostly, time and continuity of positive stimuli, in order for changes to occur and have continuity.
d) Professionals already working in the services, that are already sensitized and have initiative, achieve better and deeper modifications.

On the other hand, we have to acknowledge the fact that, before the beginning of Project Luz, the extent of the problem was large, hence it is no surprise that after the end some problems still exist. There are still avoidable maternal and perinatal deaths. Quality of care improved where the intervention was specific (although it did not continue in all the sites of intervention – in some, people re-accommodated to the old levels of care). Also, it did not reach the localities of Ceará state that did not receive frequent stimuli.

In regard of the sites where the **intervention** was specific (pilot area, metropolitan region of Fortaleza, and Cariri):
The activities of humanization were continued and even expanded at:
Hospital Gonzaga Motta in Messejana, Birth Center in Pindoretama, Maternity Santa Luiza de Marillac in Aracati, Hospital São Vicente in Barbalha, Hospital of Itaiçaba and Hospital of Beberibe.

Some advances happened in the other places of intervention, but in Icapuí the high turnover of professionals impeded the continuity. In Maternity Cesar Cals some of the activities proposed remain, but there is still progress to be made in terms of humanization of the care. In Maternidade Escola Assis Chateaubriand, since it is a school hospital for medical students, very much influenced by the medical corporative mentality, some humanized practices that do not touch the medical "establishment" remained, such as the use of the ball, the "horse" or the doulas. Nothing else was altered, such as unnecessary interventions like the episiotomy. In some other places, such as Hospital São Lucas in Juazeiro do Norte, people were sensitized, they are willing to practice – but are still awaiting initiatives to happen.

And, finally, there are places such as Hospital São Francisco in Crato, where the donated equipment is not in use and the proposals of humanization of care are barely remembered.

In most of the places, the donated equipment is in good shape and in use (up to now, only the neonatal resuscitation kits were not used at all).

The health information system of Ceará still does not provide precise information.

Our evaluation is that, if there is no more continuity (with more frequent stimuli) to the local proposals of humanization, with investment in the structure and processes of care, much of the investment of Project Luz might be lost. It is of utmost importance the support to the initiatives of the current Women's Health Program Coordination of the state of Ceará, in order to recover the lines of action started some years ago.

In regard to the **Special Projects**:
In Paripueira, the Project of generation of income (sewing dolls, for instance) was continued and is autonomous. The Project of family vegetable gardens continued, depending on the family, but the community vegetable gardens were discontinued, for lack of initiative from the local leaders. The Project of Phyto-therapy Pharmaceutical Laboratory was also interrupted, because of political disputes.

The Project "Rotational Fund of Condoms" has expanded to 54 towns, with more than 900 selling points in the interior and around 350 in the metropolitan region of Fortaleza. It is acquiring state and nationwide recognition. However, some misfortunes, such as a very serious damage in the car, implied in exorbitant costs that are making difficult the continuity of this Project. Given the effort and striving of the person responsible for it, it is important a substantial support in order for her to maintain this excellent initiative

General Evaluation:

For the development of Ceará state, in terms of Health, it was of utmost importance the existence of Project Luz. The process of improvement of the quality of care in health services through equipping them and capacitating their professionals was given a great push forward. It is imperative to have continuity to what was begun, so this great effort will not be lost.

The current recommendations are linked less to acquiring and distributing equipment and more to investment in human resources: courses; creation of Reference Centers for care and teaching purposes (teaching the practice of good childbirth care- the investment in equipment could be concentrated in these Centers); investment in publications for professionals and for the lay public; organization of events; and others in the same perspective. It is also suggested to seek opinion makers of the medical environment and ask their support to our proposals of a new model, in various forms. Finally, it is suggested that JICA invite as partners organizations of civil society that are tuned on the same purposes.