

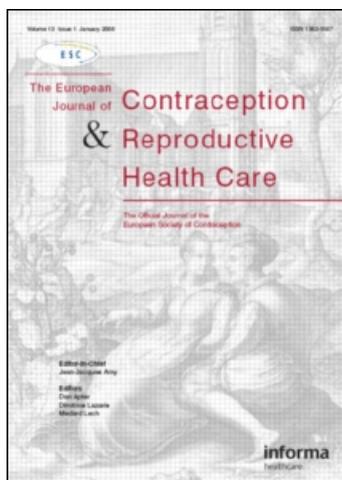
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A safe motherhood education and counselling programme in Istanbul

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ABSTRACT

Objective Evaluation of an education/counselling programme intended for pregnant/ puerperal women in a secondary health care facility.

Methods The education/counselling programme was launched in September 2004, following the preparation of environmental and material components. Evaluation of the two-year project was achieved by means of satisfaction surveys of service receivers and service providers, an information survey of service receivers and focus group discussions (FGDs) for both groups.

Results Forty percent of the pregnant women who attended antenatal visits and 90% of those who had recently delivered were given education/counselling in accordance with the project. The information survey showed that 92.5% of the pregnant women knew that they should take an iron supplement during pregnancy and the puerperium; 72% of the puerperal women knew of the danger signs postpartum and concerning the newborn, and 70% were aware of the methods of effective breastfeeding. The FGDs showed improved competence of the applicants in pre-delivery, pregnancy and puerperal care as well as in newborn nutrition. Feedback from service providers confirmed the patients' improved active participation in their self-care.

Conclusion The safe motherhood education/counselling programme was successfully completed. The applicants and health care professionals benefited from the service.

KEY WORDS Safe motherhood; Turkey; Education; Counselling

INTRODUCTION

Antenatal support, education and counselling programmes for pregnant/puerperal women and their families^{1,2} have only recently become available in developing countries. The provision of information and education on health-related topics and counselling services are inadequate in Turkey. Safe motherhood services are equally deficient³. Deliberate preparation for parenthood, however, could help lower maternal and neonatal morbidity.

Pregnant women, who participate in antenatal education programmes give birth more easily, start effective breastfeeding within half an hour and assume responsibility for their infants' care. Expectant parents are open and prepared for gathering information during this period and even short-term education can create significant changes in desired behaviour^{3–5}.

Antenatal education/counselling programmes preparing the parents for pregnancy, childbirth and the

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postnatal period^{3,5} preferably take place between the 20th and 30th weeks of pregnancy. The information which is delivered should be consistent and meet the needs of the couple^{3,5,6}.

The results achieved by a safe motherhood education/counselling programme are reviewed throughout this paper. The programme was prepared with a certain target group in mind and was conducted in a large maternity hospital in Istanbul. It comprised five modules: two concerned the pregnancy, two others the delivery and the last one the puerperal period.

We assumed that the programme would enhance participating women's knowledge and skills, and help them develop positive behaviours regarding their own and their infant's care.

METHODS

Setting

The project was conducted in the Ministry of Health Istanbul Bakırköy Women and Children Diseases Teaching Hospital, Istanbul, Turkey. The hospital is the busiest institution to provide maternal services in Istanbul: an average of 100–110 pregnant women are seen daily and 9000 deliveries take place in the hospital yearly. Patients are primarily from low to middle income labourer families.

A preliminary evaluation conducted in the facility showed that only four minutes could be spent on the physical examination of each pregnant woman. Women experiencing no problems postpartum were discharged within 24 hours following normal child-birth and within three days after a caesarean section. No organised education or counselling was provided to pregnant and puerperal women. Service receivers were dissatisfied and hesitant in asking health care workers questions regarding their most basic needs. Health care professionals also complained that they could not allow enough time to those who presented because of the many patients.

A multi-disciplinary approach characterised the project. Education/project consultants from the Turkish Family and Health Planning Foundation (TFHPF) were teamed-up with the hospital administration and professionals to form a workgroup of seven persons. The education programme was implemented by professional educators. The basic

activities that are presented in the methods section were carried out by this team.

The TFHPF is a non-profit private organisation that provides information and holds educational and communicational activities to raise awareness on the subject of reproductive health and family planning services. It has conducted nationally and internationally supported projects in various regions of the country. TFHPF took action to guide the development of education/counselling programmes for pregnant/puerperal women and their families who receive 'safe motherhood' services.

Basic activities

- A protocol was prepared in association with the hospital and then approved by the hospital's ethical committee.
- A safe motherhood education room equipped by the TFHPF was prepared in the antenatal outpatient clinic area. A specialist nurse was employed to provide education for a two-year period.
- An education programme and its supporting modules were developed; based on the needs of pregnant/puerperal women and their families. Expert opinion was incorporated during this phase; modules were tested and applied (Table 1).
- Communication/education courses were held with health care professionals in order to develop the institutionalisation and sustainability of the project.

Indicators

Providing education and counselling for 40% of the pregnant women at the antenatal clinic and 90% of the women who had recently delivered and were cared for in the postnatal ward, was set as the main indicator. Other indicators are presented in the first column of Tables 3 and 4.

Service receiver and health care professional satisfaction surveys

Pregnant women to be interviewed were selected through a non-randomised method among those who had participated in the education programmes. Of those who volunteered, 110 were interviewed. Each was given a questionnaire concerning the quality of service,

Table 1 Educational programme contents**Antenatal period education module***Adaptation to pregnancy and health in pregnancy*

(First two trimesters)

- Reproductive anatomy and physiology
- Fertilisation and fetal development
- Maternal changes and adaptation
- Common complaints in pregnancy and management
- Self care in pregnancy
- Pregnancy monitoring and evaluation of maternal-fetal health
- Warning signs in pregnancy

Preparation for childbirth

(Last trimester)

- Pregnancy and fetal development
- Warning signs in pregnancy
- Preparation for labour and delivery
- Early postnatal care and contraception
- Importance of mother's milk and breastfeeding
- Infant care

Intrapartal education module*Labour and delivery pain management*

- Stages of labour
- Pain management
 - Breathing techniques
 - Position
 - Massage
 - Focusing and feedback relaxation
 - Water therapy
- Standards of care during labour
- Pregnant woman's role during delivery

Maternity ward/Immediately after delivery

- Postpartum haemorrhage and involution
- Episiotomy/sutures and care
- Standing up
- Nutrition
- Rest-sleep
- Voiding/defaecation
- Pain and coping
- Puerperal fever and sweating
- Postnatal hygiene
- Postnatal family planning
- First breastfeeding

Postnatal period education module

(Before discharge)

Puerperal women's health

- Postnatal changes
- Perineum and suture care
- Taking a bath and general hygiene

*(continued)***Table 1** (*Continued*)

- Voiding/defaecation
- Nutrition
- Sleep and rest
- Postnatal check-ups
- Sexuality
- Postnatal medication use
- Postnatal body image
- Postnatal family planning counselling
- Common problems in early postnatal period
- Breastfeeding and mother's milk
- Infant care

consisting of 16 questions in a Likert type opinion scale. These surveys were conducted by midwives/nurses, using a one-to-one interview technique.

All midwives/nurses who took responsibility for educating the patients ($n = 23$) participated in a nine-item Likert type- and an open ended question survey for feedback.

Pregnant and puerperal women's information survey

After receiving verbal consent, a TFHPF counsellor administered the survey to each pregnant/puerperal woman over the telephone two to three months after the education, to determine how much of the information given had been retained and whether the recommendations had been carried out. The survey was completed by contacting a specific number of participants each month, following the completion of the first year of the project.

To determine the sample size, the 'minimum sample size table' in studies with a large measurement based population was used. Taking as the basis the number of pregnant and puerperal women who had received education/counselling in the previous year, the total target number for pregnant women was determined to be 4500 and for puerperal women to be 7500 at the end of the two-year project. Accordingly, the number of pregnant women to be administered the information survey was calculated to be between 341 and 361 and the number of early puerperal women between 361 and 368.

A 'random numbers table' was used for the sample selection. The survey contained questions about various evaluation indicators, such as the number of

antenatal visits the pregnant women attended, the medications they were instructed to take, warning signs. The questionnaire also evaluated the information regarding the appropriate time to start breastfeeding and its duration.

Pregnant and puerperal women's focus group discussions

Focus group discussions (FGDs) were conducted for mid-term and final evaluations. The *mid-term evaluation* consisted of four separate meetings. It was carried out to evaluate the trainings and the content and to introduce appropriate revisions as necessary. Two meetings with pregnant women and another two with puerperal women were planned. Using the table of random numbers, 50 women for each meeting were selected among those who had attended at least one education/counselling session within the last two to three months, and called over the telephone. Although 16 women for each meeting were enrolled in this way, for various reasons (traffic jam, adverse weather conditions, etc.) only 11 pregnant and 18 puerperal women could be interviewed.

The *final evaluation* also consisted of four separate meetings, the same procedure as for the mid-term FGD being applied. It involved 13 pregnant and six puerperal women.

The discussions, which were led by a facilitator with an observer in attendance, took place in a quiet room in the hospital to enhance confidentiality. Participants verbally granted permission for the discussions to be recorded on audiotape.

Health care professionals' focus group discussions

Three separate FGDs were organised with the participation of health care professionals at the end of the project. The purpose was to learn how the project had been reflected in the hospital health care and to get feedback regarding the project and its sustainability.

A total of 21 health care workers were interviewed in three groups: Two with 15 nurse/midwives who were responsible of educating women in the postnatal/delivery services and a third one with six health care professionals (midwives, nurses, physicians) who provided care for pregnant/puerperal women who had received education.

Statistical analysis

The participants' information records, satisfaction and information survey results were evaluated by means of percentages. FGDs were coded in Excel for further analysis.

RESULTS

The number of women who benefited from the services during the two-year project is shown in Table 2. These services are still being maintained exclusively by the hospital. Of the education/counselling sessions, 38.6% took place during pregnancy and 61.4% in the postnatal period.

Level of satisfaction among service receivers

In the opinions gathered following the education, the pregnant women stated that they were satisfied with the practice at the facility; they appreciated that adequate time should have been set aside for them and that they had been shown interest. They also stated that they had received new information, gained comfort in asking questions on anything which they were curious about and that the information they had received met their needs.

The information I received in the education room will be very useful during my delivery and when I breastfeed.

I wanted to have a caesarean section before the education; now I want to deliver normally because I know my responsibilities.

Table 2 Distribution of women who benefited from the 'safe motherhood' education/counselling services

Type of education/ counselling provided	Number of group education sessions	Number of participants
Pregnancy education	677	4618
Postnatal education	643	7616
Individual counselling	–	360
Telephone counselling	–	232
Total	1,320	12,826

Level of satisfaction among health providers

The 23 midwives/nurses responsible for providing safe motherhood education postpartum, stated that the group education for pregnant/puerperal women was informative, that they were no longer bothered by frequent questions and that their work had become much easier after the education. They also mentioned that they had experienced professional satisfaction whilst delivering the education; previously, on the wards, they were too busy to set aside time for their basic duties of education/counselling and the education they had received, provided them an opportunity to do so.

Acquirements of pregnant and puerperal women

Two to three months after receiving education, 350 pregnant and 365 puerperal women were telephoned and their level of information was assessed.

The mean age of the pregnant women who participated in the information survey was 26 ± 6 years; 84.9% had at most a primary education and 45.7% were in their first pregnancy. The results of this survey are shown in Table 3.

The mean age of the puerperal women who participated in the information survey was 26 ± 6 years and 75.5% had at most a primary school education. More than a half (55.4%) had two or more children (Table 4).

Table 3 Evaluation results of information survey for pregnant women ($n = 350$)

Identified indicators	Achieved results		N	%
All pregnant women will have at least four appointments	99.5% (348 women) had at least four appointments	1–2 times	2	0.5
		At least 4–6 times	14	4.0
		At least 8 times	21	6.0
		Every month	313	89.5
		Bleeding	305	87.1
50% of the pregnant women chosen for the sample group will know at least three of the warning signs in pregnancy	78.3% (274 women) mentioned at least three of the warning signs	Severe headache	28	8.0
		Hand/face/feet swelling	60	17.1
		Severe vomiting	8	2.3
		Problems with vision; blurring or flashing before the eyes	15	4.3
		Increased blood pressure	70	20.0
		Fever	18	5.1
		Abdominal and groin pain	207	59.2
		Foul smelling discharge	29	8.3
		Premature rupture of membranes	145	41.4
		Decreased or absent fetal movements	136	38.8
		Other (increased blood sugar, going past expected date of delivery)	15	4.3
		40% will know at least two vitamins or minerals that need to be taken during pregnancy and postpartum	76.5% (268 women) named at least two vitamins or minerals	Iron pill
Folic acid pill	16			4.5
Vitamins	288			82.3
Minerals	29			8.3
Other	37			10.5
Received two doses	315			90.0
90% will receive tetanus vaccine before delivery	90% received two doses of tetanus vaccine	Received one dose	35	10.0
		Not vaccinated	–	–

Table 4 Evaluation results of information survey for puerperal women ($n=365$)

Identified indicators	Achieved result		N	%
50% of the postnatal women chosen for the sample group will know at least two warning signs in the postnatal period	72.3% (264 women) mentioned at least two warning signs	Bleeding	348	95.3
		Foul smelling vaginal discharge	69	19.0
		High fever	66	18.0
		Breast engorgement/mastitis	131	35.8
		Frequent and painful urination	27	7.4
		Severe abdominal pain	128	35.0
		Others (inflammation suture line, headache)	58	15.8
50% will know at least two of the health problems in newborns	59.2% (216 women) knew at least two problems	Jaundice	255	69.8
		Umbilical cord inflammation	78	21.3
		High fever	173	47.4
		Febrile convulsion	9	2.4
		Rash	82	22.4
		White patches in mouth	124	33.9
		Other (gas, constipation, diarrhoea, vomiting, low blood sugar)	73	20.0
50% will breastfeed their infant within 30 minutes after delivery	57.2% (209 women) breastfed within the first half hour	Within ½ hour (in delivery room)	209	57.2
		Within first 2 hours (on ward)	120	32.9
50% will know at least two effective breastfeeding techniques	70% (256 women) mentioned at least three ways of achieving successful breastfeeding	After 2 hours or more	36	9.9
		Only mother's milk in the first six months	255	69.8
		Breastfeeding until baby stops	141	38.6
		Breastfeeding every time baby 'asks for'	217	59.4
		If sleeping, waking up every 2 hours to breastfeed	188	51.5
		Breastfeeding until 2 years old	215	58.9
		Entire areola in mouth	243	66.5
		Cheeks round and full	91	25.0
		Lower lip turned out	69	19.0
		Chin touching mother's breast	71	19.5
40% will know at least two drugs to be taken postpartum	55% (201 women) mentioned at least three correct breastfeeding techniques	Infant has swallowing movements	208	57.0
		Other (infant's breastfeeding position, frequency of breastfeeding, not making noises while breastfeeding)	146	40.0
		Painkiller	110	30.0
		Iron pill	215	59.0
		Vitamin	54	15.0

Focus group discussion (FGD) results

Pregnant/puerperal women

A total of 24 pregnant and 34 puerperal women participated in the FGDs. Most participants were 20–29 years old (81%) and had at most a primary school

education (80–85%). This was the first pregnancy/delivery for 45% of the participants.

In the mid-term evaluation, pregnant women stated that the education was beneficial and they had felt worthwhile in the particular educational environment. They requested for the programme to be expanded within the hospital and made available for all.

Increased notification of the programme throughout the outpatient clinic for raised awareness, strengthened emphasis on infant care during puerperal term education and effective communication between patients and health care workers to be established were among other concerns. These suggestions were taken into consideration throughout the rest of the study.

During the evaluation of information, issues regarding pre-delivery, pregnancy and puerperal care, signs of danger, fetal conditions and feeding of the newborn were on the forefront.

She told me to get my blood pressure checked, so once a week I have it checked The baby should move 10 times she said and so I constantly check the baby's movements. (26-year-old primary school graduate, pregnant for the second time and at 27 weeks' gestation)

. . . we have learned how to care for ourselves, the effective breastfeeding techniques, care of the umbilical cord and the eyelids; also that babies shouldn't be wrapped tightly or given a pacifier; that it is right to give only mother's milk for six months. (25-year-old high school graduate, delivered of her first child)

. . . baby in her mother's uterus is fed through the placenta. The baby's health depends on us they said . . . she told us about normal delivery. First, the baby arrives; and then, the placenta. (18-year-old literate at 37 weeks' gestation of her first pregnancy)

It is said that the first milk that comes should be discarded, but I've learned that it actually should be given. I was confused about that. I heard that it caused jaundice; but instead, it is very important milk for it kills the microbes. It should definitely be fed to the baby. (23-year-old primary school graduate at 40 weeks' gestation of her first pregnancy)

Pregnant and puerperal women appeared to encounter no personal difficulties in processing the information they had received.

I refused to eat before. Now I do eat more often, frequently drink water for my stomach burns

and avoid bending down low. (20-year-old primary school graduate at 36 weeks' gestation of her first pregnancy)

I almost do all that's been told . . . I breastfeed and when I leave home, I pump and store my own milk. We feed the baby with it, using a spoon. I did not stop breastfeeding . . . I wipe her using a soft cloth and wash her every day. (24-year-old high school graduate, puerperal period)

Some women complained that they had problems in developing certain health behaviours, due to interventions from the family members, especially elders.

My mother . . . she swaddled him in the first week so he wouldn't catch cold . . . I didn't argue. (24-year-old primary school graduate delivered of her first infant)

I don't take my iron supplements regularly. My previous pregnancy was terminated when I was 2.5–3 months. Our parents blamed it on the pills, so I quit; out of fear of getting poisoned. (21-year-old primary school graduate, delivered of her second infant)

The interviewees mentioned that they benefited from the service and the service providers' approach was positive and beyond their previous expectations.

I am very satisfied with the level of interest. Now I know how I will deliver, how I'll take care of my baby . . . I was really afraid of delivery but when it was explained I thought it wouldn't be as hard . . . I'm telling everyone to come to this hospital and get the education. (21-year-old primary school graduate at 27 weeks' gestation in her first pregnancy)

It was not like what I feared it would be; I was satisfied. There is an increasing amount of trust in the hospital and its services; at least in my neighbourhood. I've told many people. (23-year-old primary school graduate at 37 weeks' gestation in her first pregnancy)

I had heard bad things about SSK (*the Social Security Institution*) before. Like how edgy they could be or how they would shout and refuse to explain things ... I've liked the education I've had upon arriving here. (20-year-old primary school graduate at 36 weeks' gestation in her second pregnancy)

Health care professionals

The midwives/nurses, who implemented the programme upon completing the course, mentioned afterwards that they had felt competent in patient education with their newly acquired information. They also mentioned that they were able to communicate much more easily/effectively with puerperal women and their relatives and were able to deliver all the information regarding postnatal care in a brief, decipherable and systematic way.

We are very glad to have received this education ... It is better for us to inform patients from the aspect of answering their questions. In the past, nurses would explain whatever came into their minds at the moment ... it was haphazard, incomplete. We learned some good things in the education, now we are delivering planned, conscious education. (Nurse, postnatal service, 20 years in the profession)

The midwives/nurses stated that the material and brochures proved to be useful and easy to understand, attracted interest from women and contributed in the overall comprehensibility of the education.

First, we would pass out brochures, and ask women to read them. So they would get some preliminary information. They come clear with their questions. I, for myself, find great use in the clipboards in this room. I occasionally check them for subject headings. The patients really like the brochures we're giving them, too. One patient I discharged forgot her brochure and she came back for it. (Midwife, postnatal service, 16 years in the profession)

The participants confirmed that the patients who received education, in comparison to other patients, had higher level of information, were more actively

involved in the delivery and prepared to breastfeed their babies.

Some very nice improvements have happened in the last 1.5 years ... Patients are more knowledgeable; that is, they know how to push, learned how to breathe in through the nose and out through the mouth ... In the labour room, they look at the posters and do what they need to do; they ask us how their infant's heart sounds. From our viewpoint, this is good because now they know about the dangerous situations and inform us accordingly. (Doctor, delivery room, three years in the profession)

The systematic approach that has been utilised by the participants in their pregnant/puerperal classes was relatively new to them. It allowed the service provider much broader sharing of knowledge, as has been confirmed several times through their statements. Communication with the patients was much easier.

The former educations were largely on family planning. There was also the topic of mother's milk ... We've always provided information when the patients asked or as a necessity came up ... We gave them something, but it was far from complete. We have picked up a lot on many things through the classes. All is much orderly now. (Nurse, caesarean section, 26 years in the profession)

I think that the patients feel much better with someone who is exclusively in charge ... They feel special, whenever there's that somebody, who is there, because the patients are. They are well aware of the effort. (Midwife, caesarean section, 16 years in the profession)

I would rarely remember teaching breathing techniques, but I do a lot more often now. My other challenge was informing patients' relatives ... I've developed new behaviours after the communication classes which introduced me to a completely different attitude, regarding the way I did my job. (Midwife, delivery room, four years in the profession)

While the health care professionals valued and evaluated the sessions as beneficial they stated that they did not feel the support of the hospital administration.

DISCUSSION

A study conducted at three large public hospitals in Istanbul⁷ showed that health care workers found it impossible to provide information and counselling to women while attending their patients. Similar complaints have been reported from other sites in Turkey⁸. Statements, related to patients' poor educational backgrounds were also made by health care professionals at the beginning of our project. However, the short term education/counselling programme we implemented succeeded in promoting positive health behaviour among patients and in gaining the support of health workers for it.

Education/counselling and positive communication increase patients' satisfaction. A study which evaluated the quality of antenatal care in Istanbul⁶ and in Turkey Health Seeking Behaviour Research⁸ showed that the service receivers' satisfaction was increased by the close interest shown to them. The level of satisfaction throughout public hospitals, however, was very low due to the great number of patients, crowded settings and the health care personnel's negative attitude. Prior research revealed that the quality of communication with health care workers, respect and friendliness, the possibility to ask questions without getting depreciated and to receive information, and protection of their privacy are of great importance to pregnant and puerperal women and their families^{4,9}. Also in Ghana in 2005¹⁰, the most important variable affecting client satisfaction appeared to be the attitude of the health care personnel. Service providers in Turkey do not assume their responsibility with regard to the provision of education and counselling satisfactorily^{7,8}. In our study, the pregnant women were pleased with the education programme in which they had participated. They stated that they were shown respect and given enough time, and were able to ask questions and get answers for things they were worried about.

In Turkey, 54% of pregnant women present at least four times for antenatal care¹¹. A previous study in Turkey showed that the utilisation of health services and frequency of antenatal visits were insufficient;

patients were uninformed about pregnancy and delivery¹².

Our project succeeded in reaching the indicators of changes in pregnant and puerperal women's knowledge and behaviour we had predicted. Thus short term education and counselling *are* effective in developing positive health behaviours in pregnant and early puerperal women of whatever educational level. Also in FGDs most participants were informed how to care for themselves.

Other studies^{1,4,6,13} demonstrated that the knowledge and problem solving capacities of pregnant women and mothers who were given planned education and counselling significantly improved. Mothers who received education experienced an improvement in quality of life and were better prepared for motherhood. FGDs showed that the programme had given strong support to the women and that they had felt dignified.

Still other authors showed that adequately informed women managed their delivery better¹⁴, had less fear of childbirth and experienced positive feelings². Pregnant women who attended childbirth preparation classes have lower levels of anxiety and perception of pain³. The common thought shared by health care professionals and pregnant/puerperal women who participated in the FGDs was that the women who have received antenatal education had less fear of childbirth and were more successful in managing their labour and delivery, compared to those who did not.

According to baby friendly hospital policies, the newborn should be fed within half an hour of birth. In Turkey, only 54% are breastfed in the first hour¹¹. Mothers need to be counselled on effective techniques to maintain breastfeeding; when given antenatal education and postnatal support on the subject they are more successful in feeding their infants with only mother's milk for the first six months¹⁵. Having received practical education about mother's milk and breastfeeding technique during the antenatal period and being given one-to-one counselling during this project increased the frequency of early breastfeeding and the adoption of correct techniques.

Despite the service providers' heavy workload at the hospital and their refusal to accept information and education/counselling services as their responsibility which caused an initial disbelief in the education programme, their attitude changed over time, when

they witnessed the positive effects of education on women, as well as on themselves. These feelings were clearly expressed by the health care workers during the FGDs. They also confirmed that the in-service training they had received had been very useful.

The education programme in this project took into consideration the hospital's status and general procedures as well as the intense patient traffic and demand. The reasons behind the success of this short term education programme were that the education was planned, methodically correct, systematic, need-directed and was supported with materials, brochures and modules that complemented each other. In spite of the completion of direct support from TFHPF in October 2006 and of structural and administrative changes in the hospital, the safe motherhood education programme in the antenatal clinic and on the postnatal ward, which was started four years ago¹⁶, continues as before. The education/counselling programme responding to the applicants' needs, combined with administrative determination and support led to the successful assimilation and institutionalisation of the project.

Project experiences

Correct timing and compatibility with institutional needs enhanced the project's success and sustainability. Another determining factor in the achievement was found to be the strong coordination within project team members. Positive behavioural changes observed in the pregnant/puerperal women who received training also appeared to increase confidence and loyalty of the medical staff towards the project.

The quantitative inefficiency of the midwives/nurses who took on training and consultancy tasks and

re-assignments within the hospital caused difficulties regarding the project sustainability; as re-training and re-orientation of each new member of staff became compulsory. Administrative changes affecting the institution during the project and its incorporation into the Ministry of Health, despite its being structurally affiliated to the Social Security Institution, caused a general concern amongst the personnel and diminished their commitment to work.

A positive case regarding the sustainability is that the 'Safe Motherhood Training Room' was preserved 'as is' and a qualified nurse was assigned to remain on duty by the hospital management, after the project was completed.

Not only the safe motherhood education/counselling modules were included in continuous (in-service) training programmes provided by the institution; but also the tested programme was adopted by the Istanbul Provincial Directorate of Health, to be implemented in other maternity hospitals.

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