FAMILY-CENTERED OBSTETRICS: AN EVALUATION

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IN 1956, the new section of obstetrics at the Cleveland Clinic afforded an opportunity to initiate a plan of obstetric care which incorporated certain features of other programs, as well as several innovations not previously reported. Complete obstetric care, we believe, includes not only the skill and equipment necessary to insure the safety of mother and child, but also the psychologic support necessary to make childbirth a satisfying emotional experience. Since all pregnant women do not require identical care, we maintain flexibility in our approach, and adapt our program to fit the individual woman, rather than have all women adhere rigidly to a standard program. Our belief that husbands should be considered full partners with their wives throughout the birth experience gives rise to the name *family-centered obstetrics.*

The Program

The three principles upon which our program is based are: prenatal education of both parents, participation of the husband, and permissive policies.

Prenatal education. The soundness of the principle of prenatal parent education is well established. It is recognized throughout the United States as a most important part of prenatal care.[1-4] Classes are conducted for groups of pregnant women and their husbands in which we offer seven lectures that cover the following general topics: (1) Anatomy and physiology of pregnancy, (2) Growth and development of the fetus, (3) Physical and emotional changes of pregnancy, (4) Proper diet and exercise, (5) Labor and delivery, (6) Newborn baby and layette, (7) Postpartum period. Husbands are invited to attend all the lectures with their wives, for they have correspondingly similar apprehensions and misinformation concerning pregnancy, based largely on superstition and old wives' tales. Forty-five per cent of our patients and their husbands attended the classes in the year just past, and an additional number had attended previous classes.

Just as education is of proved benefit to parents psychologically, the ability to perform certain exercises, especially certain breathing technics, is of value to a woman in labor. After the lecture by a member of the professional staff, a registered nurse instructs the class in the breathing technics and other exercises.

On the third Sunday afternoon of each month, an informal open-house reception is held at the hospital, at which time prospective parents are shown the hospital facilities, including the labor, delivery, and postpartum rooms. Familiarity with these rooms helps to dispel the anxiety concerning hospital procedures. Nearly

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all of our patients remark that the prenatal hospital tour makes their coming to the hospital easier.

Participation of the husband. It is our guiding principle that husbands be active participants throughout the birth experience. Some of the papers[2,4] reviewed on this general subject mention recommended attendance of the husbands at one or several lectures; a few mention their attendance during labor, but none record extensive experience with the routine attendance of the husbands at the delivery itself.

In our program, class attendance is not a prerequisite to attendance during labor and delivery, and it seems to make little difference except in the husband's comprehension of sequential procedures and, to some extent, his ease in participating. The presence of the husband throughout labor and delivery has proved to be of benefit to all concerned. To the wife, it means that she is never alone, an extremely important psychologic aid to the woman in labor. She receives the emotional support of her husband's presence, the physical support of counterpressure over the sacrum if low backache is present, and the encouragement to use the previously practiced breathing technics. To the husband, it means being a helpful participant, giving him a sense of being included in a major life experience. It certainly relieves the tensions, doubts, and fears that were expressed in former days by pacing of the floor in the hospital lobby. For the nurses, it means relief from the necessity of constant attendance at the bedside of the patient, since at no time are their patients alone, and attention will be given to immediate needs. The husband's physical assistance is often of benefit to a nurse in moving the patient in bed or from the labor room to the delivery room.

To the obstetrician, it is not only representative of good public relations, but it means he has an ally in the labor room—not an antagonist in the lobby. A little more of the obstetrician's time may be required with each patient in labor, but this is thoroughly consistent with good obstetric practice.

Inevitably, certain questions arise in regard to the presence of a layman in the delivery room. In many states, including the State of Ohio, persons not associated with the medical profession are barred from the delivery room by public health regulations. However, the Ohio State Department of Health has granted us permission to carry on our program and to evaluate the results. When present, the husband is properly gowned, capped, masked, and is seated at the head of the delivery table. A mirror is placed so that husband and wife may watch the baby's birth if they so desire. Contrary to the fears of some obstetricians, the presence of a lay person has not increased morbidity figures. Our over-all postpartum morbidity has been 2.6 per cent in the last year, most of which was due to cases of urinary tract infection or to superficial thrombophlebitis. Only two cases of endometritis developed, despite our standard procedure of performing intrauterine exploration after delivery of the placenta.

We believe that the presence of husbands has not interfered with our conduct of deliveries. Emergency situations such as hemorrhage or unexpectedly difficult deliveries are dealt with just as they would be were the husband not present. It is important that all personnel remain calm and composed under such circumstances, and often an emergency is over before the parents realize that one existed. Since most deliveries are entirely normal, the process is explained to the parents as it proceeds, and many parents have remarked that it is like watching a delivery on television, or like the movie that they had previously seen in the prenatal class. Fainting is practically unheard of, having occurred only once in our experience, when the husband left his seat and then tried to leave the room. The occasional fetal abnormality is described to the parents together, and they are informed of the proper corrective procedure. Often, in such cases, a plastic surgeon has seen the baby before it leaves the delivery room. If ever the husband's support is desirable, it is when a baby is anomalous or stillborn.

Permissive policies. There are many situations in which the patient may share in decisions that are made in regard to the conduct of her care. We have pointed out that although prospective parents' classes are offered to all patients and their husbands, not all husbands are able to attend. All husbands are invited to be present during labor and delivery, and 87 per cent of them have chosen to be present at delivery. We think that many of the ones who do not attend realize that they are not good subjects to observe the delivery, and it becomes a matter of self-selection.

The decision as to when analgesia is needed is left to the patient in normally progressive labor. She is instructed that medication is available at her request when she feels she is unable to remain relaxed. Under this policy, 33 per cent of multipara required no medication before delivery. The average dosages of meperidine hydrochloride and promethazine hydrochloride in combination were: 100 mg. of meperidine and 50 mg. of promethazine for primipara, and 50 mg. of meperidine and 25 mg. of promethazine for multipara. Although it cannot be claimed that little or no medication is requested, these doses are not large. In the postpartum period, standard medications are left at the bedside, and are taken as needed or as directed on individually labeled bottles. This policy of bedside self-medication has been previously reported.[5]

Visiting hours are maintained, but the number of visitors is regulated by the patient herself, who receives a booklet of passes through which she can control who may visit at each visiting period. It has been our experience that, with the patient controlling the visiting, most women come to realize the importance of adequate rest, and they themselves restrict visitors to a greater extent than if we were to lay down hard-and-fast rules. We are not constantly asked about special permission for out-of-town relatives, nor do we require police action by our nursing staff. Rooming-in may be elected, and peripheral nurseries are provided for

those who are interested. We do not encourage rooming-in until the mother decides she is able and eager to have the baby with her. In practice this most often has been on the fourth or fifth day postpartum; a seven-day over-all stay is recommended for the average mother and baby.

Results and Comment

The evaluation of an obstetric program such as the one we have outlined must take into consideration objective statistical data that lend themselves to analysis, as well as subjective elements that do not. The data covering only the last year of five years of experience with these methods are presented.

Groups 1, 2, and 3. The patients are divided into three groups, based on whether or not prenatal classes were attended, and on whether or not husbands attended labor and delivery of their wives. Group 1 comprises husbands and wives who attended classes, and the husbands were present during labor and delivery. Group 2 comprises those husbands and wives who did not attend classes, but the husbands were in attendance during labor and delivery. Group 3 comprises those husbands and wives who did not attend classes, nor were the husbands present during labor and delivery. Patients in whom induction of labor was carried out, whether elective or medically indicated, are excluded, as are those who required cesarean section.

There are 513 deliveries in the series. Of these, 231 couples (45 per cent) attended classes, but 450 (87 per cent) of the husbands chose to be present during labor and delivery. An analysis of the data in regard to analgesia, anesthesia, and length of labor is presented in *Tables 1, 2,* and *3.*

Table 1.—*Medication during labor*

Medication*	Number of Patients		
	Group 1	Group 2	Group 3
	Primipara (164)		
None	18	2	0
Single dose	45	17	6
Repeated doses	54	19	3
Total	117	38	9
	Multipara (349)		
None	54	51	15
Single dose	49	111	31
Repeated doses	11	19	8
Total	114	181	54

*Meperidine hydrochloride (dose, from 50 to 100 mg.), may be combined with promethazine hydrochloride (dose from 25 to 50 mg.).

Analgesia. Patients are instructed upon admission to the hospital that medication will not be given unless they request it, and their criterion should be their ability to relax during and between contractions. The initial medication is meperidine hydrochloride in from 50 to 100 mg. doses, frequently in combination with promethazine hydrochloride in from 25 to 50 mg. doses.

The most striking fact shown in *Table 1* is that 54 (47 per cent) of 114 of the multipara in group 1 (attended classes, plus participation of the husband) requested no medication before delivery; whereas, 51 (only 28 per cent) of 181 in group 2 (attended classes, but the husbands were not present at delivery) received no medication before delivery.

We cannot substantiate the results of other obstetricians who have found that prenatal classes and orientation in natural childbirth and breathing technics have shortened labor and lessened the need for analgesia.[6] There is no significant difference in our groups, although it should be noted that average doses of drugs are relatively small *(Table 2).* The average durations of labor in primipara and multipara are close to those of other published statistics.

Table 2.—*Average total dosage of medication and average duration of labor*

	Group	Number of patients	Average dose of meperidine, mg.	Average dose of promethazine, mg.	Average duration of labor, hr.
Primipara					
	1	117	102	34	11.2
	2	38	112	44	10.4
	3	9	83	39	11.1
	Total	164			
Multipara					
	1	114	40	17	6.1
	2	181	55	25	6.5
	3	54	61	20	5.6
	Total	349			

Anesthesia. Conduction anesthesia is used in the vast majority of patients whether they are primipara or multipara, and regardless of whether or not they attended class or their husbands participate *(Table 3).*

Comment

It would appear from analysis of the foregoing data that our efforts have not been rewarded with remarkable alterations in the course and conduct of parturition. However, it is our belief that it is not of primary importance that we demon-

Table 3.—*Anesthesia during delivery*

Type of anesthesia	Number of patients			Over-all percentage
	Group 1	Group 2	Group 3	
	(	Primipara	)	
None or local only	6	2	0	5
Spinal or caudal	105	37	10	95
General	0	0	0	0
Total	111	39	10	
	(	Multipara	)	
None or local only	31	21	12	18.2
Spinal or caudal	84	153	44	79.6
General	0	5	3	2.2
Total	115	179	59	

trate shorter time of labor or a greater incidence of spontaneous deliveries. The more important object is the development of a healthy attitude in the parents toward the child, toward each other, and toward future childbearing. We have not been able to evaluate this objectively, but we believe that from the enthusiastic response of those who participate, we are justified in continuing our efforts along the lines currently followed. We further believe that the molding of closer family units through such a program will contribute to their psychologic well-being and thus to stronger communities in general.

Summary and Conclusions

1. A program of obstetric care based on the principles of prenatal parent education, husband participation, and permissive policies is described.

2. No remarkable effect on length of labor, amount of analgesia, or type of anesthesia is demonstrable in the three groups of patients classified on the basis of degree of participation in the program.

3. Participation of husbands during labor and delivery is entirely feasible, is consistent with good obstetric practice, and offers important advantages to all concerned.

4. No attempt has been made to measure the immediate and remote psychologic advantages to the family unit, but the enthusiasm of patients assures us that continuation of the program is justified.

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