

TRAINING IN NEONATOLOGY OF OBSTETRIC POSTGRADUATE STUDENTS: A SURVEY OF ATTITUDES AND PRACTICES

By

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SUMMARY

To determine the current status of attitudes and practices in regard to the training given in neonatology to postgraduate students in obstetrics we undertook a national survey. A questionnaire was mailed to the heads of obstetric and gynecology departments in 105 medical colleges. Responses were received from 47 institutions. The questionnaire was also filled in by 49 postgraduate students in obstetrics from nine medical colleges.

The majority of respondents felt that a separate posting in neonatology lasting at least one month is desirable. Most respondents felt that participation in neonatal intensive care is necessary.

The teaching of neonatology to obstetric students varies considerably among medical colleges. This calls for standardisation of neonatal training. The results of the survey also suggest that upgrading of staff and services of neonatal units is necessary.

Introduction

Neonatology remains a new science in our country. There are only a handful of trained neonatologists and only a few hospitals with well-equipped neonatal intensive care units. Prenatal and perinatal mortality remain extremely high. There is much evidence to indicate that mortality rates can be reduced if medical personnel were more efficiently trained as per WHO Guidelines (1977). Training in the science of neonatology is meagre both at the undergraduate and postgraduate levels, Bhargava *et al* (1982).

Some attention has been given to the undergraduate and postgraduate curriculum in pediatrics insofar as the teaching of neonatology is concerned. However scant consideration has been given to the teaching of neonatology for the postgraduate student in obstetrics. This situation prevails in spite of the fact that 90% of practising obstetricians still supervise the care of newborn infants, Bhargava *et al* (1982).

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Materials and Methods

In September 1986 a questionnaire with 31 items was mailed to 105 medical col-

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leges. Three copies were addressed to the head of the obstetrics department with the request that other department faculty fill in the other two forms. Replies were received from 37 medical colleges. In January 1987 a mini-questionnaire containing six questions were mailed to the non-respondents. Replies were received from 10 institutions. In all 67 proformas were returned from 47 medical colleges.

The 31 item questionnaire was also filled in by 49 obstetric postgraduate students from 9 medical colleges who attended the annual CME conducted by our Department of Obstetrics and Gynecology in December 1986.

An analysis of these 116 responses forms the basis of this study.

Results

A summary of the organisational aspects of neonatal teaching as presently practised is depicted in Table I. In 6 medical colleges no lectures in neonatology are given to obstetric residents.

Table II shows the duration of the neonatal posting for obstetric residents as presently practised compared to the desired duration of the posting. Faculty and postgraduate student responses are tabulated.

Newborn clinical duties as presently assigned is shown in Table III. The desired level of participation in newborn care is also tabulated showing the comparison of responses between faculty and postgraduate students.

TABLE I
Organisational Aspects of Neonatal Services and Teaching

	n	Pediatrician	Obstetrician	Both	No response	Yes	No
Who is in charge of neonatal services?	47	24	21	0	2	—	—
Who is in charge of neonatal teaching?	37	30	0	6	1	—	—
Who gives the lectures?	37	13	0	16	2*	—	—
Are perinatal conferences conducted?	37	—	—	—	5	18	14

*6 colleges said that lectures were not given.

TABLE II
Duration of Posting: Present Practices and Attitudes

Duration	At present n=47*	Should be	
		Faculty n=67	PG students n=49
1 week	1	0	0
2 weeks	7	11	12
1 month	14	25	21
2-3 months	3	21	16
% > 1 month	36%	69%	76%

* No response =22.

TABLE III
Newborn Clinical Duties: Present Practices and Attitudes

Clinical duties	At present n=47	Should be	
		Faculty n=67	PG student n=49
Basic	27	10	6
Intensive care	10	57	43
No response	10	0	0

TABLE IV
Attitudes: Organisational Aspects

	n	Pediatrician	Obstetrician	Both	No response	Yes	No
Who is primarily responsible for newborn care?	67	8	35	18	6	—	—
Which department should coordinate teaching?	67	17	36	12	2	—	—
Who should decide the syllabus?	67	10	19	34	4	—	—
Is an obstetrician enough for teaching?	57	—	—	—	34	3	20
Is a neonatologist necessary for teaching?	57	—	—	—	4	53	0

Table IV depicts attitudes of obstetric faculty in regard to certain organisational aspects of newborn care and teaching.

Discussion

It is apparent that the teaching of neonatology to obstetric postgraduate students varies considerably among medical colleges. Several institutions do not have a separate posting for newborn care. In those colleges where there is a separate posting, the duration varies from 1 week to 2 months. The range of clinical newborn care that the residents participate in also varies greatly. Some institutions apparently have an organised curriculum of lectures and perinatal conferences, while others have none.

There appears to be a consensus of attitudes on several issues. Most obstetricians

feel that pediatricians should supervise the care of newborns and also coordinate the teaching of neonatology. However, obstetric faculty should be involved in determining the content of the curriculum.

Both obstetric faculty and postgraduate students stress the need for the presence of a neonatologist. This tacit recognition of neonatology as a necessary subspecialty is revealing. Evidently specialised neonatal care and teaching is highly desired.

Most respondents felt that a separate posting in neonatology lasting at least one month is necessary. Very few wanted the teaching to be confined to basic care and procedures. The overwhelming majority of both faculty and postgraduate students indicated that participation in neonatal intensive care was desirable. In fact 17

faculty members and 16 residents wanted exchange transfusions to be taught.

The inescapable conclusion is that teachers of obstetrics are not satisfied with the status quo and would like training in neonatology to be upgraded. On all issues the views of postgraduate students appeared to coincide with that of their teachers.

The results of this survey suggest the following recommendations:

1. The teaching of neonatology to obstetric postgraduate students needs to be standardised.
2. The curriculum for the teaching of neonatology to obstetric postgraduate students should be jointly developed by obstetricians and pediatricians.
3. Upgrading of staff and services of neonatal units is necessary. Thus teaching of neonatology will also improve.
4. A network of tiered neonatal ser-

vices should be established, with every medical college having at least a Level II nursery.

The issues identified in this survey need to be addressed by forums such as the Indian Society of Perinatology. A perinatologist could perhaps play a major role in the teaching of obstetric residents. But it will be a while before perinatologists and neonatologists establish themselves in sufficient numbers. Till then obstetricians and pediatricians must assume the responsibility of developing strategies for the teaching of neonatal care to obstetric students.

References

1. WHO Regional Publications, South-East Asia Series No. 6. New Delhi, 1977.
2. Bhargava, S. K. and Kumari, S. (Ed.): National Neonatology Forum. Darpan Publishers, New Delhi, 1982.