tingencies of reinforcement which prevail in the environment. Communication and discussion are behaviours encouraged by the climate of a social group. Where the purpose is to instruct, participation by members of the group should be encouraged; their understanding or knowledge being shaped in approximate steps to complete behaviour. The realization that facts are being mastered and that meaningful participation in discussion is possible, will in itself be reinforcement for individual interaction. The acquired positive attitudes and constructive behaviour will engender an optimistic but informed approach to labour.

The group situation can also be used as a platform to disseminate facts on child-rearing practices which conform to the cultural norms. Again, the contingencies in group interactions could initiate, modify or extinguish individual attitudes. Since the acquisition of complex social behaviour is longterm, complete regularization or conformity of child-rearing behaviour could not be achieved in the short time devoted to antenatal training. The guide-lines, however, could be established. What develops later would be determined by the mother's social milieu.

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Treatment Notes

Physiotherapy in Ante and Postnatal Field

By Mrs. P. UNIACKE

Physiotherapy in obstetrics has come very much to the fore in the past 20 years, especially in the antenatal field.

"Natural Childbirth". This is attained "when on the physical plane labour is physiological and unobstructed and on the mental plane the mother-to-be is unafraid".

This was the principal to be put into practice and, with the invaluable help of the late Helen Heardman's two books, *The Way to Natural Childbirth* and *Physiotherapy in Obstetrics and Gynaecology*, this has become quite simple.

The patients must naturally have their doctor's permission to attend classes and should start any time from 4½ to 5 months. The first time they attend they come 15 minutes early and we sit and have a quiet discussion about relaxation. It is important for them to realise why they are doing all the exercises. A small diagram of the contents of the pelvis is shown to them and then an explanation of the muscular movements of the uterus during the first stage of labour.

During an uterine contraction the parasympathetic innervates the longitudinal fibres of the uterus, which shorten, causing the uterus to contract and retract; the circular fibres, meanwhile, relaxing. If the woman starts to tense through fear, the sympathetic is called into protective action causing spasm of the lower segment and the longitudinal fibres now have to overcome the resistance of the circular ones. There is now warfare between the two opposing forces and true pain results.

All this is explained to the patient in simplified terms to bring her to the realisation that fear causes tension, tension causes the neck of the cervix to tighten, which causes pain which leads to more fear thus establishing a vicious circle. The patient is now ready to join the class.

The following equipment is used:

(*a*) Foam mats; three patients to a mat. These can be rolled up after use and easily stored.
(*b*) Small pillows for the head covered by small towels which are easily laundered.
(*c*) A gramophone. Patients perform the abdominal and leg exercises far better with music than without and it also adds interest for them.

Exercises are given in the following order:

(*a*) Abdominal and chest breathing.
(*b*) Pelvic rocking.
(*c*) Pelvic floor contractions. The importance of these exercises being stressed for control of the bladder before and after birth.
(*d*) Five abdominal exercises carried out to music.
(*e*) Pelvic floor stretching exercises.
(*f*) Breast exercises, importance being stressed that these exercises must be done by the patient after the birth of the child, from the first day. Apart from promoting the flow of milk it helps to control the swelling, lumps and discomfort as the breasts enlarge.
(*g*) Relaxation with controlled slow breathing.

Patients are taught to relax on each side. During the first stage of labour one side is usually more comfortable but both sides should be practised at classes as it is too early to tell which side will be used.

Three types of breathing are taught:

(*a*) Slow breathing. This is started low down in the diaphragm gradually coming up to intercostal with a count of 15 in and 15 out. Four to five counts of 15 last for 60 seconds which is roughly the length of one contraction. Some patients can probably breathe far slower but in a class it is better to take an average that can be managed by all. This must be practised at home every day.
(*b*) When the contractions are too strong for the patient to manage 15 count they can count 10.
(*c*) At the end of the first stage, deep breathing through the mouth to a count of 3.

This completes the first stage of labour.

If the patient wishes her husband to be present at the birth she is asked earlier on to teach her husband how to count. This has been found to be a great help.

SECOND STAGE OF LABOUR

Patients due in 6 to 7 weeks time come 20 minutes earlier than the rest of the class and start exercises for the second stage.

The bearing down sensation, i.e. the desire to empty the bowels, heralds the beginning of the second stage. The patient, on feeling this, is told to ring the bell and inform the midwife that she desires to push.

(*a*) Crook lying. With each contraction raise the legs, holding them under the knee with the knees apart. Take a deep breath in, lower the shoulders in against the bed and push with the rectum from the waist down, lowering the legs at the end of each contraction.
(*b*) As the head starts to descend the vagina the patient may experience a terrific splitting sensation. She must

be warned of this and told not to panic and she will realise that it is not painful, merely frightening.

(*c*) As the head is born the doctor will ask the patient to stop pushing so that he can control the birth and avoid tearing. There is only one way to stop and that is to pant quickly. The patient must be told this repeatedly so that she automatically starts to pant when told to stop pushing.

(*d*) After a short period of waiting one further expulsive effort will produce the placenta.

POSTNATAL EXERCISES

Having a busy private practice I endeavour to cut to a minimum postnatal visits and I have found that if I give each patient a printed list of exercises to perform during her 7 days in the nursing home, three visits are sufficient. I do not spend more than 10 minutes with each patient. This cuts the cost to the patient and saves time for me.

(*a*) Abdominal massage for about 4 minutes while enquiring how the patient is. This helps the retraction of the uterus, promotes peristalsis and gives a general feeling of well-being. In fact I think massage does far more than it is generally given credit for.

(*b*) Breast exercises.

(*c*) Abdominal-pelvic floor exercises. Twelve exercises in all, 4 new ones each visit.

CAESAREAN SECTION

(*a*) Exercises. As for a normal childbirth, though modified, starting with deep breathing exercises.

(*b*) Abdominal massage for flatulence is a great help. Light effleurage and finger kneading over the colon.

In conclusion I do feel very strongly that all this teaching of relaxation is only successful if one has the co-operation of the nursing staff involved.

I am fortunate, in that most of my patients attend the same nursing home and the maternity staff there are only too delighted to learn that a patient has attended classes. They encourage them to relax and breathe and find the patients far more co-operative and controlled than those who have their babies without any prior instruction.

GENERAL

MEDICAL NEWS REPORTING—CONFERENCE
4th-5th July, 1969

The main reason this Conference was held, is the dissatisfaction with Medical News Reporting in South Africa. This was an attempt to find a *modus vivendi* between the Medical Profession and the Mass Media. The tension between them was well illustrated by the exchange of words between Prof. C. Barnard and Mr. Piet Cillie of *Die Burger*.

Three foreign speakers were invited to look at the problems as they have occurred abroad and to discuss the measures taken to solve these problems:

Dr. C. G. Roland, a past Editor of the *Journal of the American Medical Association* and at present Head of the Section on Publications of the Mayo Clinic at Rochester, Minnesota, described the present-day scene in the U.S.A.

Dr. S. S. B. Gilder, previously associated with *British Medical Journal* and *Canadian Medical Journal* and at present Editor for *Documenta Geigy* and the *World Medical Journal*, described problems and their respective solutions in Canada, Scandinavia, France, Germany, Austria and Switzerland.

Mr. P. R. Bruce, associated with medical documentary work for the BBC television network, discussed problems that arose with some of the series he did and how these were solved.

Mr. P. Cillie, editor of *Die Burger* and Mr. R. M. de Villiers, editor of *The Star* pointed out some of the difficulties the news reporting staff meet with, whilst Prof. C. N. Barnard stated the feelings of some members of the medical profession on this matter.

It was agreed that the main obstacle was the lack of trained science writers in South Africa and that perhaps organised medicine should stimulate the training of these people.

It was also agreed that this meeting should be followed up by a series of meetings of a small committee consisting of representatives of medicine and the mass media in equal proportions with Dr. van Biljon, Editor of the *South African Medical Journal*, as convenor. It was also suggested that some liaison on a regional basis was established. N.P.

SOUTH AFRICAN MEDICAL CONGRESS
6th-12th July, 1969

A great number of speakers, both from South Africa and overseas, spoke on a variety of subjects. Of particular interest to Physiotherapists were the discussion sessions on intensive care, rheumatoid arthritis and orthopaedics and the local physiotherapists used every opportunity to benefit from these. Most lectures and discussions were either in the form of plenary or sub-plenary meetings, or confined to specific specialties.

The exhibits were divided into three categories:

Scientific, where the S.A.S.P. was also invited to participate. This was undertaken by the Northern Transvaal Branch.

Trades, where all firms dealing with medical instruments, drugs, equipment, etc., showed what they had to offer.

Hobbies, a fascinating exhibit of the wide range of activities and skills that doctors pursue in their free time.

A very full social programme was also arranged, both for delegates and their wives, during the week of the congress. N.P.

S.A.S.P. Post Graduate Course: Miss M. Rood.

Miss Margaret Rood is presently visiting this country and during August conducted a three week course in Johannesburg on Neuro-Muscular Techniques to a number of members of the Society from all over the Republic. Training Schools, Provincial Hospitals and Schools under the Department of Higher Education all sent representatives to take advantage of this unique opportunity of learning from an internationally recognised expert in the person of Miss Rood.

APPOINTMENTS BUREAU

The function of this bureau is primarily to assist physiotherapists from overseas in finding suitable posts in this country. At present, the bureau is seldom advised of vacancies or locums needed and so cannot put interested persons in direct contact with employers. The bureau thus falls short of its aims by not having the necessary information—in the form of vacant posts—required in order to direct another physiotherapist in any needed direction.

Your assistance in forwarding details of vacant posts to the appointments secretary or general secretary will be much appreciated. Please submit information, and who knows, the physiotherapist you have long been needing, might materialise. If enough vacancies are available, the service could certainly also be used by South African members.

WORLD CONFEDERATION OF PHYSICAL THERAPY
Forthcoming Congresses

1970 (*Physical Therapy*) 6th International Congress of World Confederation for Physical Therapy, The Rai Congress Centre, Amsterdam, Netherlands, April 26th-May 2nd, 1970.

7th International Congress of World Confederation of Physical Therapy, Canada, 1974.

(*Occupational Therapy*) 5th International Congress of World Federation of Occupational Therapists, Zurich, Switzerland, June 1st-6th, 1970.