several oestrogens and progestogens in different doses on factor IX levels during the puerperium.—We are, etc.,

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Comprehensive Care

SIR,—While partially agreeing with the *cri de cœur* of nurses Isabella F. McBride and Helen C. Sunter (18 May, p. 432), I would draw their attention to their own words, especially "fulfil the role for which they are trained."

This is the real difficulty today, and one of the reasons that they are unhappy. They are fulfilling the role for which their grandmothers trained, and so too in some respects is the health visitor. If they are going to gain a satisfactory and worth-while career then it is time that the training of these ladies was planned for this century and not the last. Their future lies with general practice, and as general-practice nurses these girls need training. The general-practitioner nurse will need to be a combined health-visitor/nurse who assists the doctor in the surgery, by visiting, and in all activities which will complement his work. They will supervise the S.E.N. who works on the district, and work in close co-operation with the midwives. Health visiting would be done where the need lay, and there would be no statutory regulations preventing the fulfilment of this arrangement. The nurse would be allowed to do as much as her doctor found her capable of doing, and he should be the arbiter of what she does. General practice demands an elastic approach from its helpers, without any job demarcation or defined limits.

Training of this type should be started. Equally, I wonder whether the Nursing Council, Ministry of Health, and even the general practitioners themselves would be ready to change their functions so radically. Regretfully, I doubt it. But this is the future and the next logical step to be taken in community medicine. Then they would be a close team of nurse and doctor, combining to provide good medicine, and as such never needing to complain about their misused skills, nor their feeling that they are not able to fulfil themselves in their job.—I am, etc.,

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Peritoneal Lavage in Peritonitis

SIR,—I was interested to read the preliminary communication on peritoneal lavage in peritonitis by Dr. D. T. Caridis and Mr. N. A. Matheson (27 April, p. 219).

It might be of interest to record a personal technique over the past 16 years in cases of general peritonitis found at laparotomy. Before the abdomen is closed I insert a Jacques catheter No. 10 with added holes into the pelvis through a stab incision, cutting the catheter an inch or so from the skin surface and closing it with a spigot. Over the

next 48 hours for adults 1 g. of streptomycin 6-hourly is instilled through this catheter; in children 0.25 g. 6-hourly for the same period.

It would be impossible to carry out any sort of controlled experiment, but over the years the results have always been encouraging.—I am, etc.,

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Duration of Sleep

SIR,—Dr. G. S. Tune's investigation (4 May, p. 269) adds considerably to our knowledge of the personal opinion with regard to the amount of sleep taken, but may not provide evidence of the actual quantity either taken or required. Laird¹ questioned 509 men of distinction in art, government, invention, literature, and science from 25 to 85 years of age. No man reported less than 5 or more than 10 hours' sleep as a usual occurrence, but a night of less sleep than usual was stated by 59% to give rise to ill-effects, several informants noticing that these ill-effects were noticed two or three days after the reduced sleep and not on the day following. The effects were described as being less mentally active, drowsiness, lack of "pep," initiative, or strength, shakiness, tiredness, creative ability on the wane, reduced clear-headedness, eye trouble, and irritability. In another inquiry the same worker² found that many of 297 persons of both sexes, from 15 to 91 years of age, under normal conditions, with a mean daily sleep of 8 hr. 23 min., had insufficient sleep. Of the total number, only 51.5% reported feeling well rested on awakening. Of the others, 40.5% felt slightly tired on rising, 8.2% found movement an effort, 15.3% complained of muscle stiffness, and 19.3% felt lazy. Of the total series, 78% remained in bed for a few minutes after waking, 27% found difficulty in waking, and 35% that being awakened was necessary.

In an investigation³ carried out in the Bristol Royal Infirmary, Bristol General Hospital, and Farleigh Hospital, results showed that the physically ill patients slept more hours in hospital than they reported as having slept at home, and that of 11 physically healthy males watched over 20 nights each and in bed for 70 hours weekly, 72.7% were found to sleep over 63 hours, the range being from 54.6 to 68.5. The investigations in the two general hospitals were performed in medical wards to avoid anxiety related to operative procedures. None of the patients watched were receiving analgesics or sedatives. A sleep chart was devised⁴ for half-hourly recording by a nurse with instructions to the patients to open the eyes, raise a hand, or move the head upon the approach of a nurse, and to the nurse to approach the bed and make a very slight sound, such as rustling the apron. A method mentioned by Oswald⁵ of dropping a small pebble from a height of 3 ft. (0.9 m.) on to a gong might waken a sleeper. In each of nine divisions of medical diagnosis the mean amount of sleep in hospital, where opportunity existed for increased sleep, was greater than that at home as reported by the patients.

In the light of Laird's investigations and of those found in Bristol, the hours of sleep reported by Dr. Tune may not be the maximum number desired or even sufficient to

avoid irritability, inefficiency, and slackness in ordinary life. Inefficiency may be due to microsleeps consequent upon long-continued sleep restriction. These occur during forced wakefulness of many hours in which long reaction-times and inability to sustain an effort of attention are also found.—I am, etc.,

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Abdominal Decompression During Pregnancy

SIR,—With reference to your leader (11 May, p. 317) I would like to make the following comments:

(1) The physiological changes brought about by using the Heyns abdominal decompression suit have been experimentally investigated. Heyns and I¹ have shown the effect of the decompression suit on the intra-abdominal pressure, intrauterine pressure, chorionic space pressure, intra-aortic and intracardiac pressures, central venous pressure, lung-function tests, placental blood volume, renal blood flow and urine output, blood flow to the head, arms, and legs, acid-base balance, foetal heart rates, and toxæmia of pregnancy treated with decompression.

(2) "The Effect of Maternal Antenatal Decompression Treatment on Infant Mental Development," the article from which you quoted, by R. Liddicoat,² has been refuted by Roberts.³

(3) Matthews and Loeffler,⁴ while finding no significant differences in the acid-base oxygen saturation values in the foetal blood after decompression treatment, as compared with a control series of women who did not have the treatment, nevertheless found a slight rise in the mean pH and a fall in the PCO₂ and base deficit values following decompression, as compared with bed rest. Mild decompression, not exceeding 50 mm. Hg, achieved changes in the right direction, although the differences in normal labour, with stable foetal acid-base balance, are not significant. Our article¹ showed the same thing in a series of normal labours. I am sure that if these two authors repeated the tests on a series of foetal distress cases in labour they would find similar results to ours, when the foetus is definitely acidotic before the treatment.

(4) Heyns's work has been extensively attacked, but often erroneously. No one has yet shown convincing evidence to disprove what Heyns has claimed. This evidence is long overdue from his critics.—I am, etc.,

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