name may be determined upon to distinguish the disease in its uncomplicated form, and so put an end to the present confusion of identities.

I have to thank the late Colonel C. H. Begg, C.M.G., D.M.S., N.Z.E.F., and Lieut.-Colonel C. H. Newton, D.S.O., O.C. the New Zealand Stationary Hospital, for permission to publish these notes.

FEBRILE ACIDOSIS IN SCARLET FEVER IN CHILDREN.

BY

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ACETONURIA has been found by Harris in 84.8 per cent. of cases of scarlet fever in children.¹ I have examined daily the urine of seven consecutive cases with moderate attacks, estimating the acidity, the proportion of urea and ammonia-amido nitrogen, and testing for acetone and diacetic acid, with the following results:

1. Acidosis lasting from three to twelve days, reaching its maximum on the third to fifth day of disease.
2. Acetone and diacetic acid not always, though generally, present.
3. Urine not alkaline during administration of sodium bicarbonate gr. 10 to gr. 15 every four hours.
4. One return of acetone, increase in ammonia nitrogen from 1.7 per cent. to 6.3 per cent., and rise in acidity from 2 per cent. to 68 per cent. N/10 acid, after halving the dose of soda.
5. Nephritis developed later in the two patients who showed the most severe acidosis.

Clinically none of the cases suggested diphtheria, but routine nose and throat cultures, to discover carriers, gave two positive results from the nose. I consider the acidosis in these cases was due to scarlet fever, although it has been shown to occur in diphtheria.²

Finding acidosis at the start of my examinations I at once gave sodium bicarbonate. As this did good in moderate and severe cases I have made it routine for all, with satisfactory results. I ask that it shall be given for a week to ten days to all children who have scarlet fever, the dose being regulated by the reaction of the urine. Further, I am so convinced that acidosis is present in every other acute febrile complaint of children that I plead for the giving of soda to them pending the proof of this contention.

Methods.

$\text{NH}_3 + \text{NH}_2$ nitrogen = formalin (BRITISH MEDICAL JOURNAL, March 25th, 1909).

Urea = hypobromite.

Acetone = sodii nitroprusside } Depth of colour.

Diacetic acid = ferri perchlor. }

Acidity = N/10 NaOH with phenolphthalein indicator.
(Neutral potassium oxalate used if urine was high coloured.)

The two following cases had nephritis; one showed it associated with acidosis on the twelfth day, starvation doing harm; both suggest the possibility that acidosis aids in determining the complication, and that early administration of soda may reduce its incidence.

CASE I.

A boy, aged 7, was admitted on the fourth day of the disease, pale and listless; pulse 120, weak; temperature, 99.2°. His condition caused some anxiety. The culture from the throat was negative, that from the nose yielded the Hoffman bacillus.

Urine: Ammonia nitrogen rose to 13.9 per cent. on the fifth day, and fell gradually to 4 per cent. on the eleventh and twelfth days. Acetone and diacetic acid were never found. Nephritis developed on the twenty-fourth day and lasted until the thirty-fourth day. The urine on the twenty-fifth day contained a trace of albumin, and hyaline and granular casts; ammonia nitrogen 1.8 per cent.; no acetone or diacetic acid.

CASE II.

A girl, aged 6, was admitted on the tenth day of disease, peeling. Temperature 97.8°, pulse 116. She was given carbohydrate diet. On the eleventh day there was no albumin, but a trace was present on the twelfth day; the temperature was then 99°, pulse 120; she had vomited. By routine treatment she was given liquor ammonii acetatis and barley water only. On the thirteenth day the child was worse; pulse 130 to 140, irregular, weaker; she was still vomiting. The urine contained a trace of albumin, and hyaline and granular casts. Acetone and diacetic acid were present. Acidity = 100 per cent. N/10 acid; ammonia nitrogen 6 per cent.

Treatment consisted of barley water, milk 1½ pints with half an ounce of sugar, and sodium bicarbonate gr. 15 every three hours. On the fourteenth day her condition was improved. Milk 3 pints with half an ounce of sugar, and sodium bicarbonate gr. 15 every four hours. She was still better on the fifteenth day: ammonia nitrogen 4.8 per cent.; acidity = 72 per cent. N/10 acid; acetone was present. Carbohydrate diet, soda continued. On the sixteenth day there was no albumin; ammonia nitrogen 2.4 per cent.; acidity = 40 per cent. N/10 acid; there was a trace of acetone. On the seventeenth day she was much improved and was taking food well. Ammonia nitrogen 2 per cent.; acidity = 8 per cent. N/10 acid; no acetone. Soda reduced to a dose every eight hours. She made an uninterrupted recovery.

I have had only two cases in adults (males aged 17 and 23). Both had increased ammonia-amido nitrogen, the younger giving 11.3 per cent. on the fourth day of illness, with acidity = 125 per cent. N/10 acid. Neither had acetone or diacetic acid. They benefited by soda, and I consider all moderate or severe adult cases should be given it.

REFERENCES.

- ¹ Harris, *Lancet*, 1910, vol. i, p. 1346. ² Peters, *BRITISH MEDICAL JOURNAL*, 1918, vol. i, p. 10.

NATIONAL MEDICAL TREATMENT.

BY

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In view of the fact that health matters, including the treatment of sick persons, occupy a prominent position in the social reforms contemplated by the new Government, it is desirable that the medical profession should either have some definite views as to what future action will prove acceptable to it, or be prepared to submit a scheme, approved by the majority, for the consideration of the general public.

The views of the profession, and those of the general public as represented by the law makers, on a subject which is peculiarly technical in character, and which is trammelled to a certain extent by tradition, are likely to be divergent, and the best opportunities for reconciliation are not afforded when a scheme, which represents in the main only the views of the latter section, has been prepared and submitted as part of a settled policy.

The subject is of so involved and intricate a character that it would be impossible for any single individual outside an interested Government department, to which all sources of information are available, to prepare a detailed scheme which would meet all difficulties, or which could be regarded as more than a basis for discussion.

Up to the present the chief efforts have been directed towards the elaboration of schemes which have advocated what is known as a whole time state medical service. To the generality of the profession such a scheme is not acceptable, but the difficulties associated with a part-time service have been such as have apparently rendered it difficult for those who favour such a service to formulate general principles which could be developed into a piece of efficient administrative machinery.

Alternatives.

If alterations or additions to the present method of state treatment—and the medical benefit under the Insurance Act may reasonably be included in such a term—are decided upon, one of three courses will probably be followed, namely: (a) Additional powers and responsibilities may be tacked on to the present panel system, or (b) a whole-time service may be created, or (c) a part-time service may be established based on experience gained in panel work.

The limitation of medical benefit to insured persons alone cannot continue. Another service has been added to the many competing classes of state treatment. The Insurance Act accepts no responsibility for the treatment of persons with physical defects at ages prior to the insurance age, but this would probably be met by inclusion of dependants. If such were included the intricate

problem of contribution or non-contribution would arise, not to mention the controversy as to whether they should receive the non-medical benefits.

The treatment of the uninsured and those requiring permanent medical treatment and maintenance, many of whom are now the responsibility of the Poor Law authority, would still remain a problem for solution. If insured persons and dependants were included in a state scheme of medical treatment, whether on a contributory basis or otherwise, the numbers remaining outside such a scheme would, comparatively speaking, be few. A reasonable estimate would be less than one-third and more than one-fourth of the total population. These various administrative difficulties would be of such magnitude that it would be necessary to consider whether it would not be sound policy to make the state service available for every member of the community who desired to use it. The question of contribution is likewise an important principle, and we think we might safely prophesy that present policy would be against charging weekly contributions to cover the cost of the medical treatment of dependants. The objections are obvious: only insured persons and their dependants would be provided with state treatment, and even for these there would be differential terms.

Universal Medical Treatment.

As the prosperity of the state, moreover, depends upon the health of its citizens, it seems reasonable to expect the state to make the provision necessary for maintaining health by arranging that medical treatment shall be available for everybody, and that the costs of such service shall be a central charge. In either direct or indirect manner such central expenditure will be made up in varying proportions by the different members of the community according to their taxable value—the state will provide the machinery, the community will pay the costs, and both ought to profit.

The treatment now provided under the Insurance Acts is on this basis, since the contribution of the individual insured person is more than absorbed by benefits other than medical benefit, the costs of the latter being furnished by employers' contribution and state subsidies. The direct weekly contribution of a man is 4d. and of a woman 3d., and an allocation¹ of these amounts is as follows:

	Men.	Women.
Sickness benefit	2.39d.	1.74d.
Disablement	0.78d.	0.81d.
Administration (say)	0.83d.	0.45d.
Total	4.00d.	3.00d.

No balance is left out of the insured's direct contribution for sanatorium benefit, maternity benefit, medical benefit, or the costs of administration of these benefits. There is therefore no new principle involved in the suggestion that medical treatment should be a state charge without direct contribution, whilst the extension of the privilege to every member of the community seems desirable on grounds of general policy.

If such a principle be accepted it follows that the best medical treatment should be available for every individual unit of the community, to effect which all medical services should be co-ordinated. The question of control then arises, and we suggest that it should devolve upon the new Ministry of Health. This central authority might with advantage delegate the executive powers to local bodies created *ad hoc*, or as additions to the powers of those already existing. There appears to be no reason why the same local body which administers sickness, invalidity, and unemployment benefit should administer and have executive powers over the organization providing medical treatment.

Administration.

The administration of benefits paid for should be undertaken by the contributors or by their elected representatives. It is not likely that sickness and invalidity benefits will be extended to every member of the community, and the existing insurance organization, or some modification of it, might well continue to administer these. Medical benefit, if extended as suggested, would be paid for by the whole community, and therefore the administration should devolve upon the elected representatives of the community, aided by nominees of the employees—that is, the medical profession, elected by the profession, together with representatives of the insured persons. Such a proposal involves

the transference of the present medical provisions from the Insurance Commission to the control of the Ministry of Health, making local administration the responsibility of local authorities, and leaving the other functions of the Insurance Act to be still controlled by the Insurance Commissioners. As the Insurance Commission will probably also form part of the Ministry of Health, there would be no difficulty in arranging an organization which would co-ordinate medical work with sickness and invalidity benefits. Benefits would be valid on the basis of medical certificates, and the method of issuing the certificates would be settled by regulations issued by the Ministry of Health, which would have controlling power over each section.

The unit area for such a scheme requires careful consideration. It should be large enough to have the backing of a large rateable value to make the financial proposals acceptable, and to balance inequalities of social status. We suggest that in London the administrative county should represent the unit area to control, and in the provinces, the councils of counties and county boroughs.

When the Education Act was launched, fear was expressed lest private schools would go under in the resulting competition, but this has not happened. Similarly we think that, in the case of a medical service, private practice would still remain, notwithstanding the availability of free treatment. We consider that in any scheme of public service it should be possible for any practitioner, if he so desire, to undertake both classes of work.

Scheme.

We do not propose to consider the points for and against whole-time and part-time services, but would emphasize our opinion that the main advantage of the whole-time service would be that it would be administratively more flexible. This is more than counterbalanced by the advantage of a competitive part-time service in which the individuality of the practitioner becomes the important factor in his success.

In outlining a scheme we have considered what are the minimum essentials to be observed, and we submit the following:

A. As Affecting the Public.

1. The best possible medical treatment should be available for every member of the public, and should include consultations, surgical treatment, dental treatment, in-patient treatment where necessary, the advantage of all modern developments, the best midwifery service and efficient nursing.
2. The freest possible choice of medical attendant consistent with administrative efficiency.

B. As Affecting the Doctor.

1. The service should be open, and appointments should be so arranged that the "slacker" may be eliminated, and ample opportunities may be afforded for the beginner.
2. There should be opportunity for the sternest competition.
3. Non-professional work should be limited to the minimum.
4. Adequate provision should exist for enabling the profession to take part in the control of its members.
5. The service should be such as will encourage doctors to continue to improve their knowledge, and be such also as will bring the general practitioner more closely into touch with those who practise in the specialists' ranks, thereby creating a better feeling of *esprit de corps*.
6. There should be satisfactory remuneration.
7. The work should be pensionable on a contributory basis.

C. As Affecting Local Authorities.

1. The public service should be so flexible and elastic that any future developments of state provision could be included in it.
2. The sickness rates and knowledge gained should be so recorded that they may be readily available for assisting local authorities to suggest improvements in the domain of preventive medicine.

We believe that a part-time service could be organized to meet these requirements; the first essential is that any public service should be on the basis of central clinics.

Clinics.

The work of a clinic would be somewhat on these lines: Clinics would be arranged in areas to serve varying numbers of the population, dependent on the social status of the inhabitants. One clinic might be required for 20,000 of the population, or one might even serve in some areas a population of 50,000. Each clinic would be fitted with consulting-rooms, waiting-rooms, and rooms for private examinations and for ordinary clinical methods. The residence of each doctor working at the clinic would

be connected therewith by means of a state telephone. His hours of attendance would be fixed. At the clinic would be nurses sufficient to assist at the consultations and to carry on the outside work. At this clinic also would be a clerk who would have charge of the docket of papers referring to any particular individual. Dispensing would be carried out at the clinic.

In larger areas would be a special clinic for other work and serving a series of clinics. This might be arranged either as a new institution, or at—as will be described later—one of the transformed Poor Law infirmaries, or at a general hospital. One or more of the ordinary clinics might also be at the infirmary or the general hospital for reasons which will also be recognized later.

Persons would be entitled to medical attendance by simple registration with the clerk at the clinic, and the guarantee of eligibility to the state provision—that is, alien or national—would be the production of the national registration card.

A set of circumstances such as the following would then arise:

A person has registered at the clinic. The clerk has notified the doctor some time previously that such a person is on his list for treatment. He now requires treatment. If unable to attend at the clinic, his representative calls there and requests the attendance of the doctor at the home of the patient. The clerk in charge now rings up the doctor and notifies the need of a visit. The clerk gives to the messenger a suitable form, which is handed to the doctor at his visit. No doctor would be permitted to charge private fees from any patient who had already intimated his desire to receive his services. The doctor continues to attend until such time as he thinks the patient is fit to attend the clinic; or the patient's condition may require a consultation at home with a specialist, for which arrangements will be made, or the patient may require an operation; this may be performed at home if slight, or at the special clinic if the case requires rather special attention, or at the infirmary if more severe; in this institution it may be performed either by the practitioner or by a more skilled surgeon; or the patient may be sent to a general hospital, and there receive his treatment at the hands of a member of the staff.

The same possibilities are available for medical work. If the patient requires simply a consultation, he attends personally at the clinic at the hour at which he knows the doctor of his choice will attend. It is not an administrative difficulty to arrange that the number of home attendances shall be recorded by the doctor and handed in to the clerk at the clinic. Suitable safeguards against irregularities ought not to be difficult to arrange. The clerk will then enter these visits on that particular doctor's account card, which is kept at the clinic, and also any consultations carried out by him at the clinic which should be credited to him. In this way the doctor's account is made up not by the doctor but by the clerical staff at the clinic.

One of the objections which will be raised to the above is, that the public will not accept this common centre. There will, however, be no compulsion for any member of the public to accept this treatment, except perhaps so far as offences under the Children Act may be concerned. If any members of the public refuse to avail themselves of the opportunities provided, they can still go to the doctor of their choice and pay for private treatment, but that choice would involve them not only in payment for the consultation, but in being called upon to pay for expert consultations, for operative work, or for in-patient treatment, if such should be necessary—in fact, for any of the ancillary provisions which would be available under the state system. It follows, therefore, that if a really adequate first-class system with all these advantages were provided, the sentimental objection to the common clinic would disappear with the increasing knowledge of the advantages which accrue to persons availing themselves of the facilities. These difficulties will be of major importance in the case of the present adult population. If the system develops on sound lines, the upgrowing population will, by association with school work, tuberculosis work, and in other ways, come to regard the new procedure as normal, essential, and desirable.

The special or major clinics, which would serve larger areas and a reasonable number of the ordinary or minor clinics, should be the centres at which all special medical

work is carried out—for example, maternity and infant welfare work and the tuberculosis dispensary. There should also exist arrangements for special consultations as it is obvious that consultants could not attend every ordinary clinic. At these places should also be facilities to enable the general practitioner to perform such operations as are generally done in the out-patient department, and after the performance of which the patient is usually sent home. Dental work should also be performed here. The scope of special duties could easily be enlarged upon, but it is quite obvious that it would be simple to connect the minor clinic with the major clinic, and that it would prove a means whereby the practitioner would be able to take his rightful share in the various state treatment schemes which now exist and are conducted in a more or less haphazard manner, and without regard for the claims of individual members of the profession other than the few specially appointed.

These larger clinics might very well be located either at a general hospital or at a remodelled Poor Law infirmary.

Hospitals.

General hospitals will obviously be required to take part in any general scheme of state treatment, and some reorganization will be necessary. If every patient were entitled to treatment by a general practitioner a large amount of present out-patient work would be taken from the general hospitals. This would leave the staff more time. It might result in the out-patient department being principally a department in which consultation work is carried out—that is, where patients sent by practitioners from the minor clinics would appear with a form setting out the reasons for their attendance. These patients would be examined by a member of the hospital staff, who would report to the practitioner his opinion both as to diagnosis and treatment. If it is a sound assumption that different members of the staff would, under the proposed system, have time available, they should be so organized as to constitute a rota for home consultations in areas defined. There should also be attached to such an institution one or more minor clinics, and if possible the major clinic. At a teaching school the patients attending these clinics could be used by permission—and we do not think it would be difficult to obtain this permission—for the instruction of medical students in minor ailments. The beds would be available for treatment of accidents and urgent cases and of those patients who require the services of an expert physician or surgeon, and, in addition, it may be possible to reserve a few beds for the treatment of patients by practitioners, particularly those cases in which the practitioner considers that home circumstances are not such as to give the patient the best chance of cure. For all this work the state would pay, but it does not necessarily follow that the controlling body—subject always, of course, to state supervision—need be very much altered.

The control of Poor Law infirmaries should be taken from the Poor Law authority and administered under the scheme. The organization would be something similar to that of the present general hospitals, but as a rule they should be administered by the local authority, and it is in such institutions that the main number of beds available for the treatment of patients by the patient's own doctor should be located.

The question of treatment and maintenance of permanently bedridden cases has to be decided, but it appears that the charge for maintenance of such persons might in some instances be one on the funds of insured persons; in others the state would pay. It is not easy to solve this question, and the alternative, and probably the better way, is to establish special institutions for the indigent infirm under the control of the state medical treatment organization.

Consultation and Bacteriology.

As regards the latest developments in bacteriology and medical science, it is obviously impossible that each separate clinic could be self-contained. A minor clinic simply needs equipment on the lines of a surgery of a modern progressive practitioner, but other work—for example, x-ray work, special blood and bacteriological work—should be done either at a major clinic or in a special pathological laboratory set up for the purpose. The essential feature is that the facilities provided by such a place should be available for any practitioner either for

the examination of a patient or a pathological product, and that a report should be furnished to him direct.

Consultants would generally be the men who were already attached to the various hospitals. A basis of payment should be arranged, certainly in the case of home consultations. Probably there would develop a method of payment of the staffs for hospital work, but this appears rather to come within the question of hospital administration and it would become a matter of agreement as to what amount the Government paid hospitals for expert work of this character.

In places unprovided with a hospital, a small institution suitable for the needs of the district would have to be established, and in rural districts the organization would require modification, but it seems to us not impossible to fit in the essentials. Central clinics in the more sparsely populated districts would have to be replaced by the doctor's surgery, and some system of control of accounts would be necessary as these would be kept by the practitioner, who would be paid, of course, for his services. The consultation work in these cases might be undertaken, as suggested by the President of the Local Government Board, by travelling clinics. The special operative work and special in-patient treatment would have to be arranged for at the nearest general hospital and the expenses of the patient to and from would also be provided.

Finance.

Is such a scheme as the above prohibitive on the account of expense? We must admit that our sources of information are extremely limited, and we submit with all reserve as a basis for consideration the following considerations:

Assume practitioners' payments to be on the basis of work done, the objections to this method on the score of book-keeping are removed by the fact that at the clinic there ought to be kept a record of any particular doctor's work. A consultation could be regarded as a unit of payment, and other work, such as home, urgent, and night visits would be represented by multiples of this unit. As it is essential to prevent excessive visiting, the unit per visit should closely approximate the unit value of the consultation. Perhaps more consideration might lead to the adoption of a case value system for cases of patients treated at home.

We have not considered the question of remuneration, but assuming that, prior to the war, 7s. 6d. might have been held to be adequate to cover the medical risk of every person registered we should have this situation:—

As a varying number of the population would not avail themselves of treatment, it is clear that a smaller sum per head of the total population would represent the equivalent of the medical risk of registered persons. In any area of administration, therefore, it follows that there would be in that area a practitioners' fund equal to the total population multiplied by the agreed capitation fee, and this we estimate would be about ten million pounds. That fund would then be paid out to the practitioners in proportion to the number of units which had accrued to each during any prescribed period—monthly, quarterly, or otherwise. If sufficiently large unit areas were arranged, inequalities in social status would be smoothed out, and the effects of sudden increases or decreases in populations minimized. If London, for example, were made a single area, practitioners in a district like Hampstead would take fewer units out of the London pool than would a practitioner, say, in Stepney, and similarly the aggregate income of the Hampstead practitioner would require to be made up more by private practice than would be the case in Stepney.

It will be seen, therefore, that, although it is not a direct capitation payment for each patient, the fund is to be made up on a capitation basis, and the allocation results in the man who does the most work receiving the most money. This fact, together with the increased freedom in the choice of doctor, would result in competition being keen and in the practitioner putting forth his utmost endeavours both to retain his old patients and to obtain new ones. There will be very little necessity to limit the practitioners' list. The patients would themselves object to or accept the circumstances associated with any particular doctor, and the practitioner would discover his physical limitations, with the result that a reasonable balance would automatically be discovered.

Burdett's Hospitals shows that in London and the provinces 27,906 hospital beds were provided at a total annual cost of ordinary and extraordinary expenditure of

£2,855,236. Sir A. Newsholme in his last report estimates that there are at least 45,000 beds provided in voluntary hospitals. The total cost, therefore, might be estimated at about £4,500,000.

In addition to the above there are available:

For small-pox	...	...	...	39,000
For tuberculosis	...	...	...	10,000
For insane and in asylum	...	...	...	109,000
For the feeble-minded	...	...	...	12,000
Provided by Poor Law authorities...	...	...	...	94,000
				264,000

A grand total of 309,000. Of these beds, 264,000 are already paid for by the community, and therefore the transference of those to a new authority would not involve the public in additional expense; and apparently, if the Government took over the voluntary hospital administration in its entirety, the cost would approximately be as stated above, excluding capital expenditure.

Assuming the population of England and Wales to be 36,500,000, a charge of 13s. a head would realize £23,725,000. From this deduct the total cost of hospitals (excluding capital), £4,500,000, and the Practitioners' Fund of, say, £10,000,000; there is available, without taking into account the saving on tuberculosis, maternity and child-welfare treatment, and the outdoor medical service of the Poor Law, a sum of between nine and ten millions for all the remaining work. Without further analysis this does not seem to us an impracticable proposition.

Pensions.

A State Medical Service will be much improved in every respect by pensions on a contributory basis. The permanent scheme might be on the lines of existing schemes, in which varying contributions, based on salary, are annually deducted from officers' emoluments. The percentage amount would depend upon the age of the practitioner at the time he entered the service, and would vary between 2 and 3½ per cent.

The age for compulsory retirement should be 65, and the optional age 60, provided forty years' service are recorded. Professional men differ from the clerical staff in the important respect that there is a possibility of a clerk arriving at the forty years' provision at least five years earlier than is possible for a doctor, since a clerk may enter a pensionable service at the age of 16, but no doctor before the age of 21. It follows, therefore, that the clerk may retire at 16 + 40 = 56, but no doctor before 21 + 40 = 61. Seeing that the professional training is just as important as the preliminary clerical training, the doctor should either have five years added to his period of service, or the voluntary period should be reduced to thirty-five years, with a proviso that the retiring age should still remain at 60. In the case of incapacity the age of retirement would be that at which permanent incapacity is reported.

The amount of pension is computed in sixtieths, so that forty years' service represents two-thirds. In order to encourage men to retire before they markedly decline in ability or vigour, the basis of calculation should be the average of the last five years' receipts from the state. This would impel a man to relinquish state practice before the decline was so pronounced as materially to reduce his average.

The chief difficulty at the commencement of the scheme would be in respect of those approaching the age limit. The state, by setting up a free service, would materially diminish the value of the vested interest which these older practitioners have created for themselves. Without state competition the practice would have a transferable value. In the altered circumstances this would be diminished, and doctors should be discouraged from regarding their state patients as transferable to a successor.

If this principle be accepted, then some compensation is due from the state, and this should take the form of pensions to those who are compulsorily retired and who during the last few years have been engaged in panel work. It would not be an expensive matter to pay pensions to those already 65 years of age, basing the amount on the last five years' returns from panel work, and as regards men of between 50 and 65 increased contributions would help to remedy the fact of their having only a few years' service to their credit. Such treatment

of men who would be so affected would be an act of simple justice, and would do much to remove the opposition which would be aroused from practitioners who would otherwise have reason to contemplate the future with grave concern.

The pensionable character of the service could be used to ensure that practitioners kept up to date in their knowledge. It is obvious that if the state pays, the state will establish some sort of supervision over the work done. Mere supervision, however, will not prove adequate; a man should keep pace with modern progress. Post-graduate courses should be available, and attendance of men should be encouraged. Up to the age of 50, or even later, men might attend such courses. In fact, a definite syllabus indicating a course of instruction might well be laid down by the authorities and the reward for attendance be an addition to the number of years' service, in the aggregate, not to exceed a number, say five to ten, but these additions should not justify a man retiring before 60 except on medical certificate. They would simply assist in increasing his pension when he had decided to retire.

There are many points in the above outline which have not been touched upon, particularly the question of control, but in view of the suggestion that local authorities should administer, and of the present policy decided by the Government that advisory councils shall be a feature in future medical administration, we think it inadvisable to enlarge upon the subject further than to suggest that a local medical advisory committee, representative of practitioners in the area and elected by them, should administer the scheme jointly with the approved committee of the local authority. This composite committee would be vested with the necessary powers and would work under regulations issued by the Ministry of Health. It is probable that minor disciplinary powers would be exercised by that committee, leaving matters of serious importance to be dealt with by the central body. In any scheme it should be arranged that purely medical matters should be dealt with by medical men.

NOTE.—Although we both are officially associated with the London Panel Committee, we desire, in order to avoid misunderstanding, to state that the above represents our personal views, and in no way those of the committee.

REFERENCE.

¹ Comyns Carr, Garnett and Taylor: *National Insurance*, p. 112.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

TREATMENT OF INFLUENZA BY LARGE DOSES OF SALICIN.

THE appended table shows the duration of 335 cases of influenza which have come under observation since October 29th, 1918, and also the number of hours from the estimated commencement of the illness (fever, etc.) within which treatment was commenced. Every one of the cases has been treated with doses of salicin, gr. xx, every hour for twelve hours, followed by gr. xx every two hours for the next twelve hours. The table shows fairly clearly that the earlier the patient can be got fully under the influence of the drug the shorter the period of fever and the more rapid the recovery. Every case which has been observed and treated since October 29th is included in the table. There was not one single complication in any one of them, and every one has recovered perfectly. The ages of the patients ranged from 77 to 7 years. In the case of young persons under 16 years of age the dose was reduced and given in the proportion of 1 grain per year an hour (that is, a child of 10 had gr. x every hour). But the best and quickest recovery of all these cases occurred in a child of 14 who, on maternal diagnosis, had ten doses of gr. xx before being seen. No bad effects whatever followed the administration of these large doses of the drug in any instance. About thirty individuals had more or less buzzing in the head, three had a red punctiform rash, and a larger number sudamina. Both the rash and the buzzing subsided at once as the drug was left off.

Every one of the patients was in a position to take proper care of himself or herself, and was kept strictly warm in bed until the temperature had been normal for at least twenty-four hours. Several old cases of valvular heart

Table showing Number of Hours after the first Symptom when Salicin was begun, and the Day on which the Temperature returned to Normal.

Hours.	Day on which Temperature returned to Normal.						Total Cases.
	2nd.	3rd.	4th.	5th.	6th.	7th.	
2 ...	11	6	4	3	1	0	15
4 ...	8	13	26	17	7	3	74
6 ...	18	29	38	17	10	5	117
8 ...	3	7	10	9	6	3	38
10 ...	1	4	8	3	1	2	19
12 ...	0	3	4	6	7	4	24
14 ...	1	1	3	7	3	4	19
16 ...	0	0	2	4	6	1	13
18 ...	1	0	0	3	0	2	6
Total ...	43	63	95	69	41	24	335

mischievous are included in the series. They recovered as quickly as any others, and suffered no inconvenience. As a rule those cases which commenced with very high fever (103.5° to 105°) seemed most amenable to the remedy, and came to an end more quickly than those which began with a more moderate temperature. There is no doubt whatever, as the bacteriologists have shown, that this November and February epidemic is quite different from the one which invaded us last July. Clinically the symptoms are more severe, and therapeutically the salicin treatment has not quite the same result. In all epidemics from that of 1889 up to and including that of July last practically every case treated with salicin, as set forth above, came to an end, without complication, in forty-eight hours at the latest. Since November the cases are not cut so short, but though symptoms persist in some instances for five, six, or seven days, yet every form of complication is avoided, and recovery is rapid, and with no bad after-effects. The only case out of the 335 which was at all troublesome was one of the "gastric" variety, in which diarrhoea and vomiting were persistent, and which ran for the full seven days. It is perhaps as well to point out that these cases follow in unbroken series upwards of 2,300 treated by the writer in the above-mentioned manner since 1889, every one of which has ended in complete recovery with no complication, and without a single death. The first series of 250 of these was published in the *Lancet* in 1891. The late Dr. T. J. MacLagan had the same results from the same treatment. He published his results at the time.

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THE WET PACK IN INFLUENZA.

THERE seems to be great variety of opinion as to the treatment of influenza. The general recommendations are: Rest in bed, good nursing, antipyretics, and heart stimulants. The only safe and reliable antipyretic is cold water, but I have not seen its use suggested. The cold wet sheet pack is at once a powerful and sure antipyretic and a valuable heart tonic.

Some years ago, during an epidemic of influenza, I adopted this treatment, and had the satisfaction of seeing all the patients recover with remarkable rapidity.

All that is required is a sheet wrung out of cold water, and two or three blankets. The Brand bath is another method of reducing temperature, but with the volume of water in this method the rapidity of elimination is apt to overcome the vigour of the patient. I prefer the wet sheet pack; it is more easily applied, and its action can be graduated in intensity according to the quantity of water used.

The duration of each pack should not exceed thirty to forty minutes, or until the sheet feels nearly as warm as the surface of the body. It may be repeated immediately once, or even twice if necessary. Before applying the wet sheet the face and neck should be bathed with cold water, and a wet cloth applied to the forehead.

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