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SCHARFF, J. W.; WILLIAMS, Cicely D. With a Preface by Hon. G. A. de C. de MOUBRAY. [Condensed by Jean BIGGER.] Preventive Paediatrics: an Account of Health Work in Trengganu, Malaya. *Indian M. Gaz.* 1942, Sept. & Nov., v. 77, Nos. 9 & 11, 552-3; 689-96.

An introductory paragraph to this article states that, as printed, it is a condensed form of a report of a study which, in ordinary times, would have been issued as a Government publication. It certainly deserves to reach a wider circle of readers than that of any single medical journal, even so influential a one as the *Indian Medical Gazette*.

The writer of the Preface notes with regret that ever since the State came under British advice expenditure and effort have been concentrated on clinical medicine to the comparative neglect of the preventive side. Money spent on young children with a view to producing an A1 population is largely wasted if the health of others in the family is neglected so that reinfection is facilitated. In fact, three branches of medicine need to be intimately correlated if the best results are to be attained: (1) The hospital or short-term approach. (2) Preventive medicine, or middle-term approach. (3) Education, the long-term approach.

Dr. Williams, in Section I, gives a very clear and succinct, though condensed, account of the conditions in Trengganu, and the aims of the Health Programme are stated, namely: (a) To discover the causes of the large infant mortality and prevalent ill-health, (b) to deal with these conditions, (c) to do this as economically as possible, consistent with thoroughness. She describes the area of the State (5,050 square miles), the population (about 200,000, nine-tenths Malays), the industries, occupations, finance, vital statistics, nutrition, and the chief diseases. The last are: malnutrition and its

sequelae; helminthiasis, chiefly "round worm," which is said to infest 90 per cent. of the inhabitants [presumably *Ascaris* is meant, as other Nematodes are mentioned separately]; yaws, though less common than in former days, still remains one of the major health problems; malaria varies in seriousness in different areas, but the spleen-rate in school-children is under 4 per cent., and, though 3,503 deaths were ascribed to "malaria and unspecified fever" in 1940, only 76, or 2 per cent., could be certified as due to malaria. Tuberculosis, especially the pulmonary form, is a serious scourge.

Examination of medical reports showed that (1) Though 90 per cent. of the population is Malay, they make less than 30 per cent. of the admissions to hospital and most are cases of accident or chronic ulcer. (2) Relatively few of the women and children come to hospital for treatment. (3) The chief persons to take advantage of the Government Maternity Service are the Chinese, though they form but a small proportion of the female population.

For these reasons hospital returns would be very misleading as statistics of disease.

In Section II, the Scheme for Health Work, Dr. Scharff indicates the three most important aims, better feeding, malaria prevention, and infant welfare. Under the first the main problem was to prevail upon the people to use unpolished rice—not an easy matter, because the polished product keeps longer and is more profitable to the shopkeepers. The next point was to stimulate interest in home gardening and in general sanitation, the digging of bore-hole latrines and organizing sanitary squads. Under the second came the large-scale application of "naturalistic" methods. The third is dealt with in detail by Dr. Williams. She writes of the need for studying local conditions; for letting prevention and cure go hand in hand and be accompanied by unceasing explanation, encouragement and health teaching; for making allowances and, if well, for making use of

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parison, analyses of a portion of one silicotic obtained from a Mansfield miner. No details of morbid anatomy or of the histological condition of this lung, however, are given. The results of these analyses are not suitable for abstraction. The dust encountered showed particles of numerous different substances including limestone, kaolin, silica, quartz, feldspar, mica, sericite and rutile. These varied in size from less than 2 μ up to more than 50 μ .

S. Roodhouse Gloyne.

BÖHM, A. Untersuchungen an den Arbeitern einer Asbestfabrik. [Examination of Workers in an Asbestos Factory.] *Arch. f. Gewerbepath. u. Gewerbehyg.* 1942, Nov. 10, v. 11, No. 4, 433-52, 8 figs.

This is a record of clinical and radiological observations made in an asbestos factory during the years 1936-1937 and the year 1940. The factory handled raw asbestos and manufactured a variety of asbestos products. It employed up to 500 workers. Of 132 persons examined, 29 per cent. showed radiological evidence of asbestosis. Correlating these findings with exposure, it is stated that there were in workers with less than three years of exposure 5 per cent. of cases, in those with 3-5 years of exposure 12 per cent., in 5-10 years 56 per cent., and in over 10 years 79 per cent. Five cases of pulmonary tuberculosis were noted. The clinical histories of these are recorded.

S. Roodhouse Gloyne.

WELZ, A. Weitere Beobachtungen ueber den Berufskrebs der Asbestarbeiter. [Further Observations on Occupational Carcinoma in Asbestos Workers.] *Arch. f. Gewerbepath. u. Gewerbehyg.* 1942, Nov. 10, v. 11, No. 4, 536-50, 6 figs. [14 refs.]

This article is a record of two cases of asbestosis complicated by cancer of the lung. The first patient was aged 43, with an exposure of 11 years in an asbestos factory; death was due to squamous cell carcinoma. The second worker had had 30 years' experience in asbestos work and showed at autopsy an atypical epithelial cell new growth.

The author suggests there is a causal relationship between asbestosis and carcinoma.

S. Roodhouse Gloyne.

GORALEWSKI, G. Weitere Erfahrungen zum Krankheitsbild der Aluminiumlunge. [Further Knowledge on the Clinical Picture of the Aluminium Lung.] *Deut. Tuberkulose-Blatt.* 1943, Jan., v. 17, No. 1, 3-10, 5 figs.

This article is based upon data collected by the author from the examination of some 700 workers exposed to aluminium dust in German

war industries. The examinations were primarily radiological and clinical but included also 125 vital capacity and sputum tests, and 100 blood counts. The chief complaints recorded in the personal medical histories of these workers were dry cough with stitch-like pains in breathing, dyspnoea, falling appetite and dragging gnawing pains in the abdomen. There were no pathognomonic findings on clinical examination. The blood counts exhibited a relative lymphocytosis and eosinophil cells were somewhat increased up to 5-10 per cent. Total leucocyte counts tended to be low, whilst red cell counts produced no significant changes. Blood sedimentation tests were also normal. Vital capacity tests showed a reduction in capacity. Four cases of spontaneous pneumothorax were noted, one of them fatal.

Radiologically the earliest sign consisted of focal shadows in the apical regions with, later, an increase (often one-sided) of the normal bronchial markings in the upper and middle thirds of the lung, giving a reticular appearance. There was also sometimes an increase in these markings in the lower lobes suggesting increased drainage to the hilum glands. Retraction of the diaphragm and distortion of the heart shadow were found. At a later stage the focal shadows tended to increase and become confluent [unfortunately the radiograms reproduced have been much reduced in size and do not bring out all the finer points mentioned].

One case came to autopsy. On microscopical examination the connective tissue elements of the lung showed coarse, branching hyaline collagenous fibres enclosing phagocytes containing fine and coarsely granular particles which differed from carbon particles by their jagged outlines. In parts of the lung these hyaline collagenous fibres were also found surrounding the walls of the alveoli, which contained phagocytes. These changes were most marked in the right upper lobe. [No illustrations are given.] The regional lymph glands exhibited a few of these dust cells lying chiefly in small groups. It is suggested that these histological changes result from a colloidal reaction between the aluminium dust particles and the tissue fluids.

S. Roodhouse Gloyne.

GARDNER, L. U. & DELAHANT, A. B. Action of finely Divided Magnesium upon the Lungs. *Amer. J. Pub. Health.* 1943, Feb., v. 33, No. 2, 153-6, 3 figs.

Small particles of magnesium embedded in living tissues dissolve with the evolution of hydrogen and the production of "gas tumours", due to an irritating alkaline hydroxide. When the metal has dissolved, the resulting inflammation subsides and healing ensues. Experiments