REVIEW OF REVIEWS

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"The twentieth century has seen more progress in disease control than all the remainder of recorded history," says Dr. Thurman B. Rice, of Indiana University, in an interesting article that appeared in a recent number of Hygeia.

"Three divisions of medical science," he states, "deserve credit for the decline in transmissible disease: epidemiology, immunology and sanitation."

Thanks to the agency of these three sciences, "the transmissible, or catching maladies, are definitely on the run. In civilized communities, such dire plagues as the black death, Asiatic cholera, typhus, leprosy, smallpox, yellow fever and similar terrifying specters of the past are now almost unknown.

"We in the security of the twentieth century, find it impossible to picture the horror of the days of uncontrolled epidemics when men and women died like flies in the first frosts of autumn, and their rotting bodies were left unburied in the streets because none could be found who would give them decent burial.

"Without the least boasting it can be asserted that all the important transmissible diseases can now be controlled in a country like our own, with the partial exception of influenza, pneumonia, infantile paralysis and epidemic cerebro-spinal meningitis.

"The death rate for typhoid fever is about one-fifth of the rate for the year 1900, and the tuberculosis death rates of the present bear out the same relation to the rates of 1850. The mortality rates of diphtheria, dysentery, malaria and many other diseases have fallen precipitously.

"The recent advances in the understanding of the elements of nutrition, is noteworthy. By the application of this knowledge the maladies known as scurvy, rickets, beriberi and pellagra have been put to flight. With the increased understanding of the glands of internal secretion it has been made possible to attack diseases that until rather recent times were surrounded with mystery; the conquest of diabetes is a shining example.

"The amazing wonders of modern surgery read more like the miracles of supermen than mere human accomplishments. The glo-

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rious success of scientific obstetrics in making the travail of motherhood safer and easier stirs us to the depths."

Cancer and diseases of the heart, the kidneys and blood vessels and the brain are among the diseases to be conquered yet. These maladies are increasing rapidly. Cancer, he says, should not cause the death of more than a fourth or a third of all those who have it. "The removal of several carloads of bad tonsils and teeth will surely save millions of hearts, kidneys and sets of blood vessels from injury and premature degeneration." The education of the public in the vital facts concerning the prevention of these diseases is essential to their final eradication.

Rice states that five great campaigns against diseases are being waged at present in the United States: 1, antityphoid; 2, anti-hookworm; 3, anti-tuberculosis; 4, anti-venereal, and 5, anti-malarial.

EDUCATION AND SEX

"Authorities are generally agreed," states *Hygeia*, "that by the end of the grammar school, children should be fully inculcated with a wholesome and respectful attitude toward sex. Many insist that, by the time the children are graduated from grammar school, they should be familiar with the correct habits essential to physical health. They should know the fundamentally simple facts about the sex organs and the processes of fertilization. They should know the respective importance of each of their parents to society.

"Certainly the child of high-school age should understand the part his sex plays in the development of his personality. By that time he should have formed a never-ceasing respect for girls and women, and should be totally free from sex-conciousness. His knowledge should make it possible for him to devote himself whole heartedly to his outdoor games and athletic activities. His knowledge, if it is well grounded, should teach him to have a sympathetic interest in his home and in its various relationships."

UNTOWARD RESULTS FROM VACCINATION

Public Health Reports for January brings an excellent set of questions and answers on small-pox vaccination. The following is the answer to the question: "What untoward results from vaccination are to be looked for?"

"With aseptic technique and a small insertion site which is kept dry and

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cool, the great majority of vaccinations go through their typical course and heal promptly if the crust is left undisturbed. The freest possible access of air currents and the natural friction of the clothing seem to promote firmness and rapid crust formation in the superficial skin layer of the vesicle. Particular care that all precautions are taken should be exercised in *primary* vaccinations, as surgeon Charles Armstrong has pointed out.

"Rarely, due possibly to skin bacteria which can not be removed by the preliminary cleansing, the vesicle will become purulent and extend beyond its normal diameter, which is not over three-eighths of an inch (10 millimeters) greater than that of the insertion site, the drying up of the vesicle and the fading of the areola being thereby delayed. Opening of the pustule and the temporary application of some strong antiseptic, such as mercury bichloride solution, should be practiced if this takes place. As soon as a fair-sized areola has formed, the maximum immunity against smallpox has been attained, and the use of an antiseptic will not diminish the vaccinal protection. In general, temporary moist dressings are to be preferred to powders or ointments. Occasionally the vesicle may soften or accidentally rupture, or the crust be knocked off, in which case also temporary dressings may be indicated, but the formation of a firm, unprotected crust should be favored as soon thereafter as possible. For some infants a roomy sleeve fastened to the neck and wrist may be useful to keep out the finger nails.

"Accessory vesicles around the vaccination site may in some cases be caused by too vigorous cleansing of the skin prior to vaccination. The virus may also be transferred to scratches or other skin lesions, giving rise to distant vesicles.

"True generalized vaccinia practically never occurs. Eruptions at about the time of the maximum reaction or later are not at all infrequent. The earlier eruptions are likely to be morbilliform, some simulating the skin lesions of measles very closely. The later eruptions are more like erythema multiform. These incidental eruptions are not troublesome after their diagnosis is understood, and they disappear promptly without treatment.

"The four most common failures in vaccination, from virus of insufficient potency, are a total lack of any reaction, a sluggish, imperfect reaction not conforming to any of the three types described in the answer to question 7, an early reaction similar to a reaction of immunity in those who should give a vaccinoid, and the spurious reaction variously known as the keloidal, the mulberry of Scheult, or the paravaccine of Pirquet. This last is a reddish or purplish papule looking somewhat like granulation tissue, rather slow in appearance and often persistent; it gradually disappears without treatment.

"To guard against complications use aseptic technique, insertion sites not more than one-eighth of an inch (3 millimeters) in diameter, keep the arm dry and cool, and (in first vaccinations) inspect after nine to fourteen days.

"To guard against failures use fresh vaccine that has been kept very cold, and in case of doubt as to potency, vaccinate at more than one site, keeping each site of the minimum size."

HEALTH EDUCATION FOR SCHOOL TEACHERS

The February number of *The Nation's Health* is devoted especially to health education in schools. Among the many interesting

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articles on this subject there is one by Mary I. Bell, of the Bureau of Child Welfare, State Board of Health of Virginia, on the health education required for school teachers in that state.

In 1918 the Virginia Legislature ratified an act "requiring that all teachers in the state should, by September 1925, have a course including preventive medicine, physical inspection, health instruction and physical training, to prepare them for health work in the schools by giving them a practical knowledge of the causes, the correction and the prevention of hindrances to the best mental and physical development of children.

"The responsibility for carrying out the provisions of this law," states Miss Bell, "was placed upon the State Board of Health and the State Board of Education. The money appropriated for the purpose was put into the hands of the State Board of Health.

"A special course of study was formulated by the State Board of Education and the State Board of Health jointly and made one of the requirements for certification in all the teacher-training institutions of the state, and for the renewal of certificates of teachers already in service. To meet the needs of the teachers who could not attend such schools or colleges, a correspondence course was offered by the State Board of Health.

"This special course of study comprises the following subjects: Physical defects and their control; communicable diseases and their control; the school plant; personal hygiene; the teacher's health; and first aid.

"The feature that makes this course differ from those ordinarily given, is the practice demanded by the actual inspection of children for possible defects in vision, hearing, teeth, throat, weight, and in making reports of conditions found. Instructors are asked to impress upon their students that the inspection required of teachers does not at all mean medical examination, but only an intelligent inspection of their pupils in order to detect obvious physical defects and visible symptoms of disease, so as to inform parents of the existence of such hindrances to school work, and to recommend immediate medical attention.

"This intensive educational program has now been carried on for more than six years, and most of the teachers of the state have completed its requirements. Teachers make the annual physical inspections of their pupils required by the State Board of Education and report findings to parents and to the school authorities. The public health nurses employed by thirty-three counties in the

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state have materially assisted their county teachers in this inspection and in following it up in the homes by inducing parents to have defects corrected. Last year about ninety per cent of the school children were inspected."

A MODERN LULLABY

Health News, of New York, quotes the following modern lullaby from The Kalends, Waverly Press, Baltimore, Md.:

> Rock-a-bye, baby, upon the bough, You get your milk from a certified cow! Before your eugenic young parents were wed They had decided how you should be fed. Hush-a-bye, baby, on the tree-top, If grandmother trots you, you tell her to stop, Shun the trot-horse that your grandmother rides— It will work harm to your little insides. Mamma's scientific—she knows all the laws— She kisses her darling through carbolized gauze. Rock-a-bye, baby; don't wriggle and squirm; Nothing is near you that looks like a germ.

