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ATLANTA, GA.

A FOLLOW-UP STUDY OF 525 ADOLESCENT NEGRO STUDENTS  
IN RESPECT TO PHYSICAL EXAMINATIONS, SKIN  
TESTING AND WASSERMAN EXAMINATIONS

BY

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## OBJECT OF THE STUDY

We wonder if there are latent infections which lie smoldering in the bosom of this coming generation? If there are, these will likely be fanned later by the winds of economic instability, resultant psychic stress, poor environment and unwholesome habits into a conflagration of disease. From an economic point of view, it is estimated that the income of 80 percent of the Negro group is less than \$20.00 per week.

The object of this study is to ascertain the relative value of a physical examination of adolescent Negro children enrolled in the Public Schools of Atlanta <sup>in regard to</sup> and their future health. We also have in mind particularly two great social diseases, tuberculosis and syphilis.

Tuberculosis takes many lives every year in the Negro race, much more so than in Whites. In the South it is estimated that there are four deaths to every white death from this disease. In Fulton County during the year of 1932 the death rate of Negroes dying from Tuberculosis was 183.8 per 100,000 persons.

A combined estimate of reports on specimens of blood from Negro patients examined by the Wasserman method for syphilis, from the Georgia State Board of Health, Rosewald Study of Syphilis in the South Among Negroes, and the laboratory of Hubbard Hospital, Nashville, Tennessee, yielded an average of 27.6 per cent positive cases on 112,981 patients. Specimens of blood from whites yielded 12.8 per cent positive cases on 134,334 patients examined by the Georgia State Board of Health. From these figures apparently Negroes in this section of the country have slightly greater than twice the amount of syphilis than exists among Whites.

There is still much that can be done by way of providing beds and clinics, for the treatment of Negro patients who have tuberculosis. But from a preventive point of view, if there are present deadly disease germs in the bodies of adolescent Negro students, is it not within the scope of medical science to diagnose their presence and to check their ravages or to make suggestions to modify their course at an early stage?

## HOW STUDY WAS CONDUCTED

A senior high school was selected which enrolls approximately 2000 students. The 11th and 12th grades were chosen to begin the study. It is our plan to make examinations of the entire student body, starting with the higher age group and eventually taking only the freshman classes as they enter. Duplicate records have been made and a copy will be placed on file with the school department of records for future inspection.

The following agencies have contributed aid. The A.T.A. loaned the services of three nurses and three social workers. This agency agreed to make X-Ray pictures for the students at cost. They have also furnished secretarial and stenographic service for assembling and cataloging the records. The Works Progress Administration, through its nursing staff, loaned one nurse and the City Board of Health allowed the use of one full-time nurse, whose work in the school will be continued.

The service of mimeographing forms and mailing reports to the homes of over 500 students was provided through the courtesy of the Medical Department of the Atlanta Life Insurance Company. Purified protein derivative used in the school testing was donated by Phipps Institute and was prepared by Dr. George Klugh, of Atlanta. Blood Wasserman

examinations were made by the Georgia State Board of Health. Lantern slides were prepared by the Visual Education Department of the Board of Education. Some funds for x-ray pictures were raised by Principal C. L. Harper and by the Battle Hill Citizens' Committee. Physical examinations, preliminary lectures, and write-ups in the school paper, were done by the writer, who initiated and assumed general supervision under the authority of Dr. Kennedy of the City Health Department.

254 follow-up visits were made by nurses of the Atlanta Tuberculosis Association; 300 visits were made by the school nurse, working for the City Health Department and the Works Progress Administration nurse spent 44 one-half working days on the project.

In a simultaneous educational program carried on in the school by Miss Gertrude Nabritt, during which a prize essay contest "On What Negroes Should Know About Tuberculosis," more than 3000 students were reached.

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#### PHYSICAL EXAMINATION

Questions on the physical examination sheet made inquiry of symptoms which might indicate tuberculosis, such as loss of weight, cough, raising sputum, shortness of breath, pleurisy and spitting of blood.

Temperature, pulse and sputum examination were made upon special indications. The lungs and heart were auscultated in a routine manner and the blood pressure taken with a Baumanometer. The weight and height were recorded and impairments or deformities made note of.

One hundred and two miscellaneous complaints were elicited in line with the above questions. One student having symptoms of a valvular heart disease was discovered and advised to refrain from strenuous exercise.

The blood pressure was considered high when the systolic pressure reading was 140 or above, in students under 20 years of age.

Eight cases of high blood pressure were found but none of these had a positive Wasserman test.

Blood pressure was considered low when the diastolic reading was 60 or below with a commensurate low systolic reading, or when the pulse pressure was 20 m. ms of mercury or less.

Eighteen cases of low blood pressure were found, the x-ray revealed one moderately advanced case of pulmonary tuberculosis among these and only 2 or 11% of the low blood pressure group were seriously underweight. Low blood pressure is probably more significant when connected with other pathological findings.

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#### BLOOD WASSERMAN EXAMINATIONS

Blood was drawn from 410 students, 239 girls and 171 boys. The total number found positive was 16 or 3.90 per cent - total number negative 392 or 95.60 per cent - total number anti-complimentary 2 or .48 per cent. See Table No. I.

Maculo-papular rashes were observed on the face, shoulders and backs of four students, two girls and two boys. No sores or open lesions were discovered. One girl complained of eye symptoms. No congenital stimata were observed. The ages of these students having a positive blood Wasserman varied from 17 to 28. It is quite possible that their lues, if present, were acquired.

The positive cases were advised to take treatment, either at the Venereal Disease Clinic or from private physicians. To date 12 have reported and received 50 injections of neo-arsphonamine intravenously.