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Is Physical Education Related to Preventive Medicine?

More Fundamental Than It Appears on the Surface, the Two Widely Separated Viewpoints of the Question May Both Be Close to the Actual Solution

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Some MONTHS ago there appeared in The NATION'S HEALTH a discussion of the question of the relationship of departments of student health and of physical education. It was very interesting to follow the discussion of this question and to note that for the most part the attitude of the various writers from the different institutions reflected an opinion calculated to defend the particular situation that obtained at their college or school. I noted that physicians, interested in applying the most recent scientific advances in preventive medicine in order to improve the health conditions of the students, were in favor of having the departments separated. Those interested primarily in physical education thought for the most part that the two activities should be combined. But no one attempted to analyze the various activities ordinarily embraced by these two departments.

This whole question is more fundamental than appears on the surface, for generally in departments we combine related subjects and the question might be phrased with much more definiteness, "What is the relationship between health and exercise?" This is a point on which the laity, for the most part, is not well informed, and as above stated there are divergent views where we should expect to find the truth.

A Similar Situation

It is not well to approach a controversial matter without recalling similar instances in the past where neither extreme view has prevailed in the light of subsequent knowledge. We may recall great discussion like that which raged between Pasteur and Liebig about 1860 as to whether fermentation was a chemical or a biological process. Diametrically opposed as their views seemed then, the discovery of the enzyme showed each to be partly right and each partly wrong-"The truth is in the well,"-though as in this particular case, the truth is usually much nearer one extreme view than the other. So it undoubtedly is in the present instance, but we should most carefully analyze the problem from the vantage ground of our present-day science that we may the better arrive at a true evaluation and interpretation of the facts.

What They Have in Common

Let us see what these subjects (preventive medicine and physical education) have in common, as shown by the activities of their departments, or let us revert to a consideration of the title of this article. There are, apparently, nine general activities embraced by these two departments in most of our colleges: (1) The activity of a group interested in finding out the status of the student as revealed by physical examination; (2) the "follow-up" work based on these physical examinations for the correction of such physical defects as may be remediable; (3) the treatment of minor illnesses and the giving of medical advice to the members of the student body; (4) the institution of preventive measures as vaccinations, quarantine, sanitary inspections, the detection of typhoid and diphtheria carriers, and the like; (5) the prescribing and carrying out of special activities in an attempt to correct that part of the physical defects that may be thought to be remedial through special exercises; (6) the teaching of hygiene; (7) the supervision of physical exercises and the teaching of games to that part of the student body that may be considered as in normal physical condition; (8) the turning out of varsity teams to represent the institution in intercollegiate athletic sports; and (9) the institution of proper treatment for athletic injuries.

I presume that no one will seriously question the statement that the first four of these subjects cannot be handled by anyone except one who is trained in medicine. The fifth division must, of course, rest on the medical diagnosis and the institution of exercises for the correction of physical defects can hardly be made without a complete evaluation of the physical condition of the student. It is quite conceivable that one neither capable of making nor of interpreting all the physical findings of a given student might prescribe an exercise for the correction of a certain apparent defect that it would be physically impossible for the student to pursue without injury to himself; therefore, it is apparent that medical diagnosis and medical direction are absolutely essential for the proper conduct of corrective exercises. The supervision of the actual exercise (once the physical condition is evaluated) and the time actually spent with the students to see that they perform the exercises is not a task for man with a medical training-it is a routine which can be directed by a layman and, as a matter of fact, it would probably be much better to have this carried out by some one interested in and trained in physical exercises. It goes without saying that there should be the most complete cooperation between the physician and the man in charge of the corrective exercises in all such cases.

A Controversial Position

The teaching of hygiene-the last born and most highly scientific branch of the medical sciences-is in a controversial position. A glance at the contents of some of the courses as given explains the reason-it is variously interpreted by different individuals-and many of the interpretations would be ludicrous if the seriousness of the situation could be forgotten. Many of such courses are taught by persons with no appreciation of the material in the field. Some ride hobbies, others feel that hygiene is principally diet or anatomy or physiology or exercise. When we substitute for hygiene its synonym "preventive medicine," it is at once apparent that this subject demands a medical training and special experience for its proper presentation.

The only subjects in the training of persons in physical education that at