DARWIN: FAIRLY GOOD FOR A MEDICAL SCHOOL DROPOUT

Dear Sir,

In a recent commentary in this journal on "Stamps in Medicine" concerning Charles Darwin [1809-1882] (probably history's most famous naturalist), Drs Tan and Luu⁽¹⁾ provided an excellent discussion on the contribution made by this scientist. It also raised many of the issues surrounding his concepts and findings especially with his birth's bicentennial (February 12, 1809) quickly approaching us. As correctly stated in this commentary, Darwin was a medical school dropout. However, his contribution to medicine was one of excellence. The theories he gave us are unquestionably still controversial, as indicated in the commentary that even today, regulatory bodies are attempting to ban his teachings, at least as they are called evolution.

It is sad that some want to forbid its teaching in high school and possibly college, but place it at one of the principles of modern medicine. Darwin's concept of natural selection is not based or expounded on teachings of religion, but rather observations of science. How such changes occur and its molecular biology continues to be explained with most still remaining a mystery. Like all areas of science, natural selection requires generation of a hypothesis and testing. In science, there are no ideas, theories or concepts that are above question or challenge, and this makes the idea of natural selection so interesting.

The change in bacterial resistance or mutation to a new "form" of influenza and the understanding of these events are related to Darwin and his theme of evolution and natural selection. His concepts are central for control, understanding and treatment of disease. So maybe Darwin did not really drop out of medicine, maybe he just moved it in a new direction. For these ideas, we must thank Darwin for his elegant presentation, along with Alfred Russell Wallace.

Medicine is rapidly changing, but the concept initiated by Darwin appears to be solid. His ideas will be known as long as medicine and science exist and he is clearly one of the greatest scientists that ever lived. The idea of natural selection will probably impact medicine as long as medicine exists. Maybe it would be worthwhile for all students to get at least a lecture on Darwin, after all he did fairly well for a dropout.

We should thank Drs Tan and Luu for the brilliant commentary on Darwin and his relationship to medicine. What should also be mentioned that is related to Darwin but not commonly realised is the ongoing saga of our environment. Environmental problems and destruction of natural resources will likely be the next big issue in medicine. Today most consider this field, Environmental Medicine, to be auxiliary and not mentioned to any degree in the main stream journals. If Darwin was alive today, he would probably be one of the great leaders in Environmental Medicine and a vocal advocate of population control, conservation and prevention of the loss of habitat. All of these subjects, which are generally distant to medicine, will some day be integral.

The commentary by Drs Tan and Luu can be said to be at the heart of medicine, even though the initial concept of natural selection can be said to belong to another field of study, basic biology, and comes from a different time, place and location. It does demonstrate how integrally medicine is related to most other areas of science. Much more will be written on Darwin and his concepts, especially as he becomes better recognised for his contribution to medicine, and as medicine changes from being observational to a molecular basis.

Yours sincerely,

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REFERENCE

1. Tan SY, Luu VT. Charles Darwin (1809-1882): history's most famous naturalist. Singapore Med J 2005; 46:320-1.