Personalized medicine

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Although personalized medicine is a term used in science and medicine that holds significant promise of improved treatment, it may set up unrealistic expectations in patients, states an editorial in *CMAJ* (*Canadian Medical Association Journal*).

The mapping of the human genome was a major scientific milestone that has opened the door to new approaches to understand and treat disease. Cancer and cardiovascular disease are two areas in which genomics are showing promise for treatment advances, although challenges remain.

"Despite a few successes, patients would be foolhardy to expect anything more than a small number of additional tailored interventions," write Dr. George Browman, University of British Columbia and member of *CMAJ*'s editorial board, and Dr. Paul Hébert, Editor-in-Chief, *CMAJ*, with the editorial advisory team. "They should not expect the cures for all common diseases."

The authors write that a simple, targeted solution is unrealistic because of the complex interplay between genes, proteins, cell metabolism and environmental influences. Also, there is a significant time lag in getting new therapies into practice.

"For the public at large, the term 'personalized medicine' does not spark images of abstract science and technology," they state. "The image it creates is just the opposite: most people would conceive personalized medicine to be what's commonly called patient-centred or person-centred care — a more humane, empathetic approach to care focused on

individuals and shaped by their needs and circumstances, rather than cell-level scientific manipulations."

The authors call for increased focus and awareness on the person as a whole and how biology, environment and needs interact.

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