

## Poster journal

### Personalized medicine: 'Hope for better tomorrow'

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#### Commentary:

"If it were not for the great variability among individuals, medicine might as well be a science and not an art." *Sir William Osler*

In humans, 99.9% of genetic bases are similar while only the remaining 0.1% make a person unique. These variations can be harmless, harmful, or latent<sup>1,2</sup>. Personalized or customized medicine is a developing area in which physicians apply diagnostic tests to identify particular biological markers, environmental factors that aid in describing which all medical/ dental modalities will work best for each patient according to his or her genetic makeup<sup>1,3</sup>. It also includes fighting the diseases with your immune cells. You can't get more personalized than that!<sup>4-6</sup>. It aims to reduce the burden of disease, focuses on prevention, diminishes the duration and severity of illness, reduces side effects of unnecessary drugs, health care costs, and what not? Although personalized medicine in the medical field is rapidly growing and becoming more common, in dentistry it is in a primitive stage. It would be beneficial as an oral medicine practitioner to determine the appropriate drug to the appropriate patient for the appropriate disease at the appropriate time with the appropriate dosage<sup>2,4,6,7</sup>. In the last two decades, there have been many advances in genetics, proteomics, metabolomics, molecular biology, and molecular medicine. Personalized medicine uses these advances along with clinical profiles as well as other relevant data to customize the health care services. Personalized medicine is sometimes also labeled as stratified medicine, as patients are stratified based on available information, and then therapy is customized according to the characteristics of each stratum<sup>3</sup>. To discriminate from stratified medicine, personalized medicine is more about the individual rather than strata. Personalized Medicine provides a structural and functional model for efficient health care services; which is preventive, well-coordinated, and proven<sup>1</sup>. In next decade, everyone will be having their detailed information and nobody will have to suffer through trial -and-error care<sup>5,6,8</sup>. Personalized medicine approach should have potent clinical benefit, means layer by layer distribution of information should be feasible and should lead to better clinical practice. A critical element of the success of personalized dentistry is awareness of public and acceptance of personal genome sequencing along with its risks and benefits<sup>2-4</sup>.

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