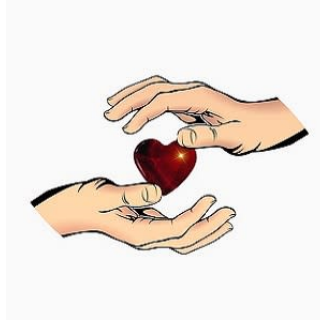


---

## Precision in healthy living medicine for CVD prevention and treatment



---

Leading a healthy lifestyle is key to both preventing and treating a host of chronic diseases, including cardiovascular disease (CVD). The incidence and prevalence of CVD is at the forefront of conditions that require significant attention and a paradigm shift in treatment, according to an article published in the journal *Current Problems in Cardiology*.

Ideally, the article says, preventing CVD from ever being diagnosed should be the primary goal, which can only be achieved through the practice of healthy living medicine (HLM). HLM is an emerging concept that recognises the importance of: (1) Moving more and sitting less; (2) Consuming a healthy diet at the appropriate caloric load; (3) Maintaining a healthy body weight; and (4) Not smoking.

Traditionally, HLM, particularly when practised in the context of physical activity and diet, is commonly viewed as an all-or-none and one-size-fits-all paradigm. As an example, there has been a dichotomous perception to physical activity messaging, where achieving anything less than 150 minutes of moderate-intensity physical activity per day is not beneficial. The same holds true for the all-or-none perception of 5 servings of fruits and vegetables per day; anything less is not beneficial. While these are certainly desirable targets, healthy living practices at levels below current guidelines portend significant health benefits.

"Moreover, it is critical that the population at large recognises that any type of movement/physical activity is beneficial, both recreational and nonrecreational. In this context, there seems to be a greater degree of flexibility in delivering HLM, allowing for a more individualised approach that has the potential to improve long-term adherence. In other words, the alignment of precision medicine and HLM is warranted," the article notes.

Precision medicine is defined as "an emerging approach for disease treatment and prevention that takes into account individual variability in genes, environment, and lifestyle for each person." Much of the focus in precision medicine has been directed towards genomics and only recently has the influence of environment and lifestyle been considered.

In the context of precision in HLM, the article says, inadequate adherence and persistence will remain an important challenge. Simply informing patients that they should adopt a particular exercise regimen based on their individual profile and why this can be beneficial is typically ineffective at eliciting successful long-term behaviour change. More sophisticated theory-based health behaviour change efforts have been met with greater success. For example, the Diabetes Prevention Programme, which used a variety of well-established behaviour change strategies derived from the social sciences to promote exercise and healthy diet, was associated with a decreased risk of prediabetes progressing to diabetes for several years.

The use of web-based and mobile health (mHealth; interactive voice response calls, short message service or text messaging, and smartphone applications) platforms continue to expand, providing great opportunities to further refine the delivery of HLM. Current evidence suggests the use of technology has the potential to improve healthy lifestyle patterns such as increasing physical activity and consuming a healthier diet.

With respect to healthcare provider adherence with precision medicine prescriptions for HL, there is also a potential for clinical inertia, commonly defined as the failure to initiate or intensify therapy, or a failure to follow clinical practice guidelines. Reasons include the added complexity of synthesising all of the information inherent in not prescribing a one-size-fits-all approach, as well as the difficulty in communicating individualised courses of treatment to patients.

"Combined, both patient and provider challenges in successfully implementing precision in HLM into routine care highlight the need for the use of evidence-based health behaviour change interventions to be integral to the process," the article notes. "Future work is needed to establish what constitutes competently delivered health behaviour change interventions in precision medicine to improve patient health outcomes."

Source: [Current Problems in Cardiology](#)

Image Credit: Pixabay

Published on : Wed, 31 Oct 2018