## Letter to the Editor

## Cardiovascular Disease: Management of High Risk Patients in the Health Centre of Vyronas

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## To the Editor:

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Considerable attention has been focused recently on promoting evidence-based practice and on the potential of guidelines to inform and support appropriate care and changes in clinical behaviour. Guidelines have been drawn up for the prevention of cardiovascular disease, based mainly on the screening and management of patients with arterial hypertension and lipid disorders. Despite many interventions that have been proved to reduce cardiovascular risk, audits of practice consistently reveal suboptimal control of cardiovascular risk factors and underuse of appropriate pharmacological agents (i.e. antiplatelet agents,  $\beta$ -blockers, and lipid lowering drugs) in patients with high cardiovascular risk.

Cardiovascular disease is already the major cause of illness and death in western countries. The size of this epidemic is likely to increase; populations are ageing and advances in treatment have led to an increasing number of survivors of major cardiovascular events. Disease management programmes are increasingly advocated as a means of improving the management and outcomes of patients with cardiovascular disease. Disease management has been defined as "a combination of patient education, provider use of practice guidelines, appropriate consultation, and supplies of drugs and ancillary services." Although the specific elements of these programs vary

across different settings and disease states, there is great enthusiasm for cardiovascular disease management programs that use multidisciplinary teams and specialised clinics dedicated to the prevention of cardiovascular disease by modifying risk factors.

General practitioners have been encouraged to detect and target patients with high cardiovascular risk for secondary prevention. Strong evidence exists to support this strategy; reductions in cardiovascular events and mortality can be achieved by taking aspirin, control of blood pressure, lowering lipid concentrations, exercise, healthy diets, and stopping smoking. It was in these aspects of health that this population scored most poorly at baseline compared with a general population and where, therefore, improvement might be most welcome. The lowest baseline and greatest benefit were in role limitations attributed to physical problems, and the size of this effect would be expected to be clinically and socially relevant.

Moving in that direction, the medical staff of the Health Centre of Vyronas conducted a research program in order to estimate and evaluate: a) the knowledge of patients with high cardiovascular risk, as regards their disease status and risk factors; b) the effectiveness of our intervention on the improvement of this knowledge; and c) the eventual impact on the patient's conformity to the physicians' recommendations and on cardiovascular risk reduction. The material of our study consisted of patients with known or newly diagnosed cardiovascular disease, who were examined by our medical staff at the health centre in the period from September 2004 to September 2005. Patients visited the health centre mainly for clinical examination/ prescription reasons. Initially, every participant had a 75minute interview (by his personal physician), in order to evaluate his level of knowledge of general and individual cardiovascular risk factors. Additionally, a simple and concise booklet was provided, containing valuable information on cardiovascular risk and modifiable risk factors. During the first interview, apart from a complete medical record, all personal socioeconomic, cultural, educational and occupational data were recorded, for each patient individually, on a specially designed health card. Further interviews and follow-up of patients were scheduled at regular monthly time intervals and the level of conformity to their physicians' recommendations as well as to their own objectives were also recorded. The McNemar statistic was used.

After 12 months of follow up the first preliminary results showed a significant improvement, not only

at the level of patient knowledge of major cardiovascular risk factors (from 60 to 100%, p<0.001), but also in the willingness of patients to be well-informed about their possible treatment options (from 58% to 94%, p<0.001). A significant improvement in the level of estimation of total personal cardiovascular risk was also observed (from 67% to 98%, p<0.001).

The results of our experimental programme for promoting the management of high cardiovascular risk patients in a primary health care centre showed that simple, coordinated, but repeated and intensive intervention, in patients at high risk for cardiovascular disease, may lead to an improvement of the patients' knowledge of major cardiovascular risk factors and to a consequent increase in the patients' adherence to their physicians' recommendations and treatment options. Although the optimal mix of interventions, their frequency, duration, and their cost effectiveness are still unclear, the intervention of the general practitioner in reducing the burden of cardiovascular disease in high risk populations is critical and remains an affordable and convenient option.