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Short communication

The use of herbal medicinal products in the management of dyslipidemia: a survey on consumers' attitudes and practices

Božana Joković[1], Katarina Šavikin[2], Nina Dragićević[3], Jelena Živković[2*]

[1]*Apotekarska ustanova Janković, Svetog Save 2-6, 21101 Šid, Serbia*
[2]*Institute for Medicinal Plants Research "Dr Josif Pančić", Tadeuša Košćuška 1, 11000 Belgrade, Serbia*
[3]*Department of Pharmacy, Singidunum University, Danijelova 32, 11000, Belgrade, Serbia*

Introduction

Dyslipidemia is one of the most important modifiable risk factors for cardiovascular diseases and is characterized by elevated levels of LDL cholesterol and triglycerides and/or reduced HDL cholesterol levels (Jin et al., 2016). The prevalence of dyslipidemia has increased significantly due to unhealthy diet, sedentary lifestyle, obesity, and other metabolic disorders, making it a major global public health issue (Parhofer et al., 2019).

Disorders of lipid metabolism and lipoprotein transport contribute to the development of atherosclerosis and cardiovascular complications. Current treatment strategies include lifestyle modifications and pharmacological therapy, primarily statins, ezetimibe, and fibrates (Brautbar et al., 2011). However, adverse effects and limited patient adherence have increased interest in alternative therapeutic approaches.

In recent years, phytopreparations have gained attention as potential adjuncts in dyslipidemia management due to their hypolipidemic, antioxidant, and cardioprotective properties (Borghi et al., 2022). Therefore, our study aimed to evaluate the use of herbal medicinal products in dyslipidemia therapy and to assess consumers' attitudes toward their application.

Materials and methods

This study was designed as a prospective cross-sectional survey to evaluate the frequency of use, perceived efficacy, and safety of phytotherapy in the treatment of dyslipidemia. The research was conducted during March and April 2025 in the city of Novi Sad and included a total of 100 participants (25 - 75 years old).

Data were collected using an anonymous questionnaire designed to assess participants' attitudes, habits, and experiences regarding the use of herbal medicinal products for the management of dyslipidemia. Inclusion criteria included voluntary participation and the presence of any form of dyslipidemia. Participants who did not complete the questionnaire in full were excluded from the study to ensure the reliability and validity of the collected data.

The study instrument consisted of a structured questionnaire containing 16 questions. Five questions were related to demographic characteristics, while the remaining 11 questions focused on the use of phytopreparations in dyslipidemia therapy, including frequency of use, reasons for use, sources of information, and participants' subjective assessment of efficacy and safety.

*jzivkovic@mocbilja.rs

Results and discussion

Phytopreparations have emerged as a safe and effective option in the management of dyslipidemia. Compared with conventional lipid-lowering drugs, phytopreparations are generally associated with a lower risk of adverse effects, making them an attractive complementary therapeutic option.

The results of our survey demonstrated that the most common forms of dyslipidemia among participants were elevated triglyceride levels (61.7%) and elevated total cholesterol (49.5%). Mixed dyslipidemia was also frequently observed, particularly the combination of elevated total cholesterol and triglycerides, reported in 31 participants, while elevated LDL cholesterol combined with reduced HDL cholesterol was present in 19 participants.

Age-related differences in lipid disorders were also identified. Among middle-aged participants, the most common lipid abnormality was the combination of elevated LDL and reduced HDL cholesterol (46.2%). In late middle age, elevated total cholesterol combined with elevated triglycerides predominated (34.9%), whereas older participants most frequently presented with elevated total cholesterol (23.3%) and combined hypercholesterolemia and hypertriglyceridemia (27.9%).

Only 20% of participants reported using statins for dyslipidemia treatment, with the highest prevalence observed in the late middle-age group (25.6%). Statin use was more common among men compared to women (31.4% vs. 14.1%). In contrast, phytopreparations were used by 97% of respondents, with red yeast rice extract and artichoke being the most commonly used herbal products.

Respondents also reported the use of grapefruit (*Citrus paradisii*), garlic (*Allium sativum*), wild garlic (*Allium ursinum*), black cumin (*Nigella sativa*), green tea (*Camellia sinensis*), turmeric (*Curcuma longa*), and flaxseed (*Linum usitatissimum*).

Most participants evaluated phytopreparations as very effective or moderately effective in improving lipid parameters (59.6% and 26.3%, respectively). Adverse effects were reported by only 5.1% of participants, suggesting a favorable safety profile. The duration of phytotherapy use was most commonly between three and six months (48.5%), while long-term use exceeding six months was reported by 30.3% of respondents.

A majority of participants considered phytopreparations safe even without prior medical consultation (66.7%), although many emphasized that herbal therapy should be used as a complementary rather than replacement treatment for conventional medication. Recommendations for phytopreparation use were most frequently obtained from pharmacists (33.5%) and physicians (30.2%), whereas 34.2% of participants relied on independent sources such as the internet or advice from friends.

Conclusion

Overall, the findings indicate a high level of acceptance of phytotherapy among patients with dyslipidemia. The low frequency of reported adverse effects and the positive subjective evaluation of treatment efficacy support the potential role of phytopreparations as complementary agents in lipid disorder management. However, further clinical studies are needed to confirm their long-term efficacy and safety and to establish evidence-based recommendations for their use in dyslipidemia therapy.

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