Impact of Primary Prevention Strategies on Cardiovascular Risk: Initial Experience from ICH, Bray

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Background

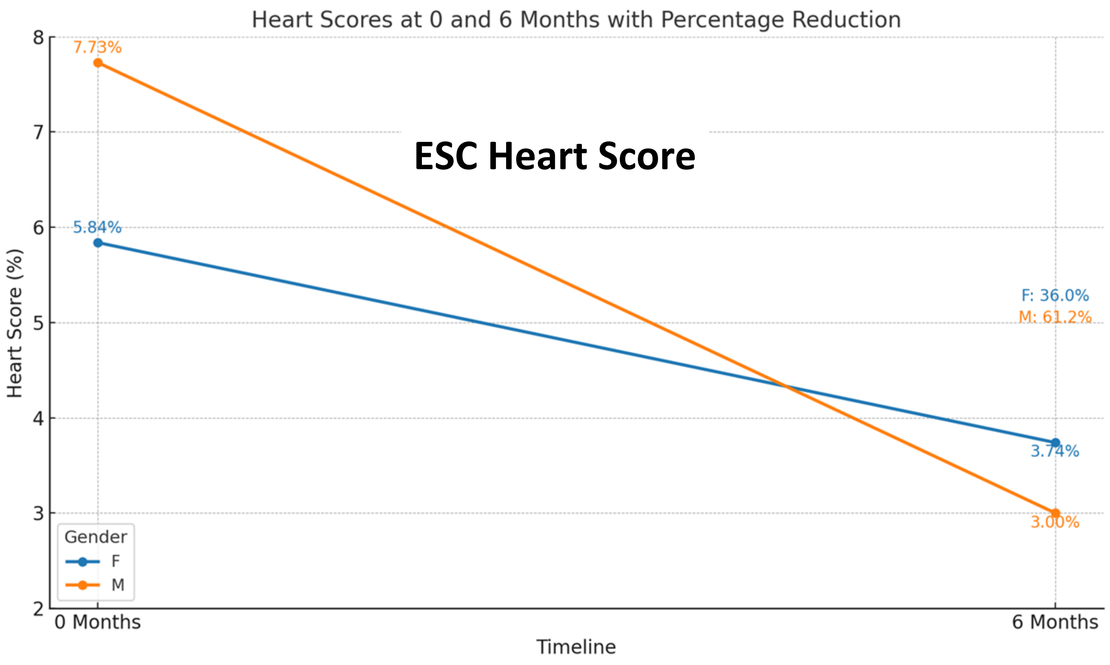
Cardiovascular disease is the leading cause of mortality in Europe, accounting for 37% of deaths and costing €210 billion annually. The WHO and Sláintecare advocate for integrated, need-based care to improve outcomes and reduces inequalities. In March 2024, the Integrated Care Cardiovascular Primary Prevention Clinic was established in ICH Bray to reduce cardiovascular risk through targeted interventions, with 69 patients seen to date.

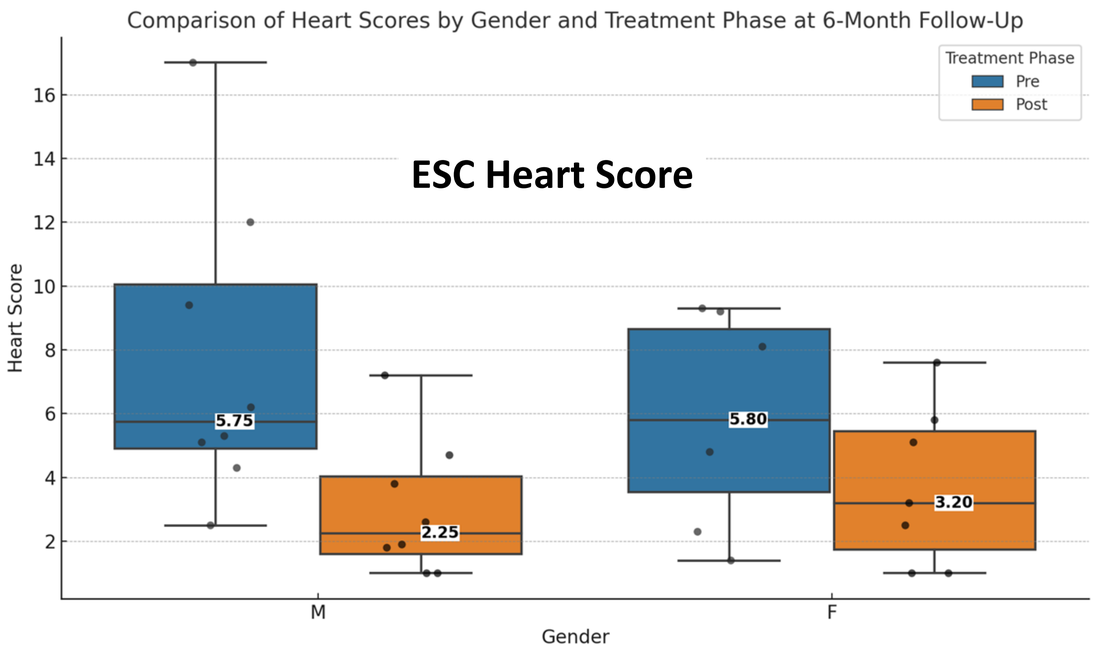
Objective

To examine the effectiveness of the Primary Prevention Clinic in reducing cardiovascular risk through lifestyle interventions and medical treatments among high and moderate-risk patients who have been referred by their general practitioner for further risk factor optimisation.

Methods

This case series evaluates 15 patients who completed 6-month follow-up. Total and LDL cholesterol, blood pressure, and heart score were measured at baseline and after 6 months. Outcomes were benchmarked against ESC/EAS Guidelines.



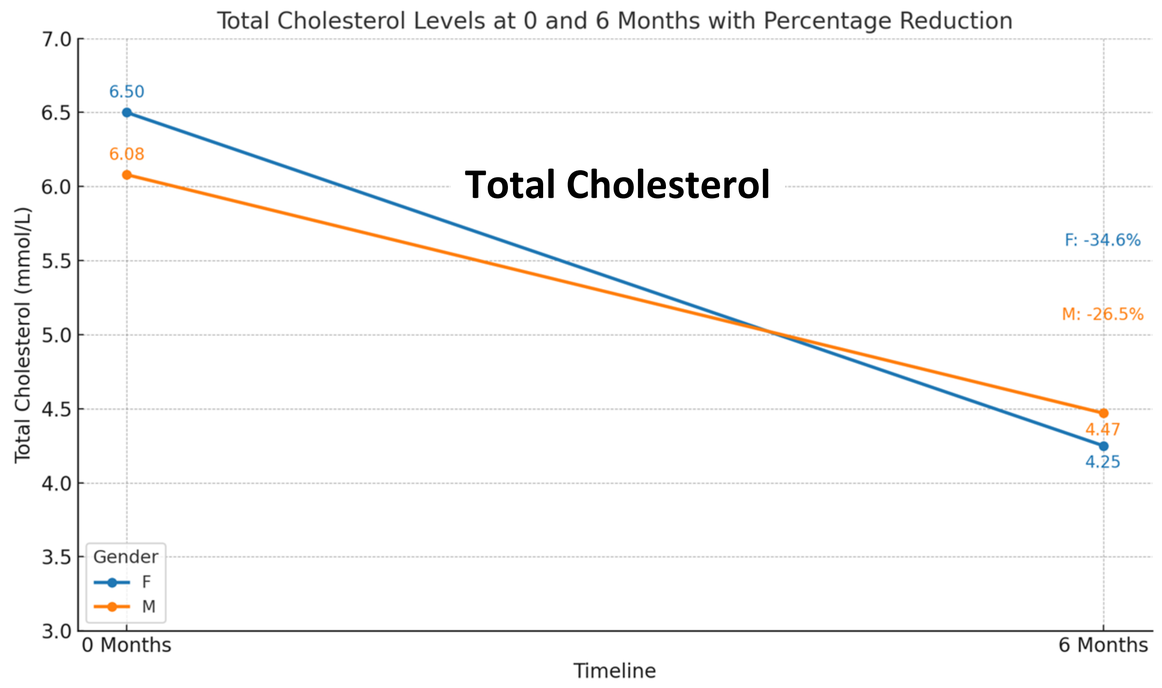


Conclusion

This clinic, with a structured and supported approach to risk factor optimisation, demonstrates significant potential in reducing cardiovascular risk through targeted interventions.

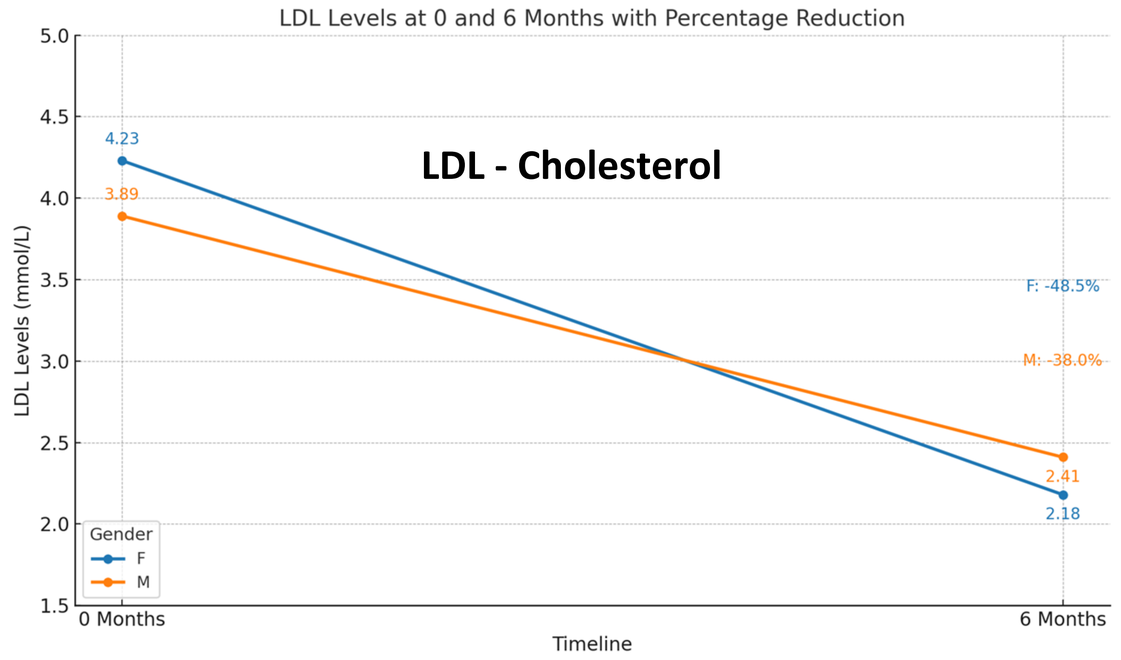
Recommendations

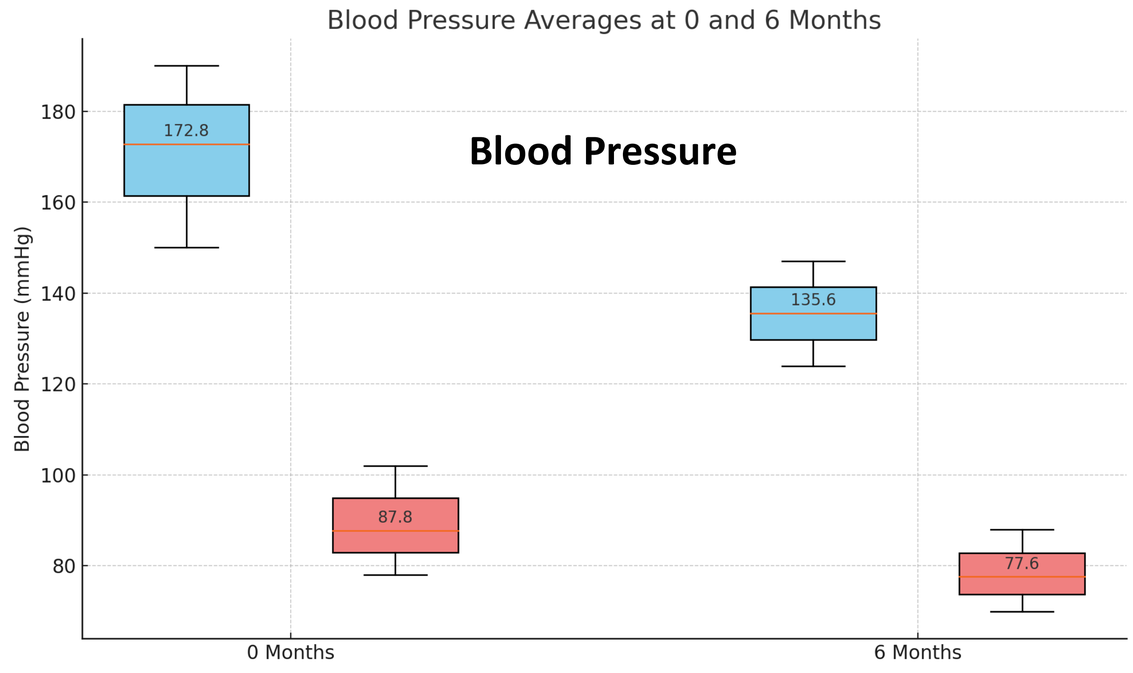
- Expand the service to include dietician and psychology support to ensure a multidisciplinary approach to primary prevention
- Assess outcomes based on a larger population for a more comprehensive insights.
- If feasible, may apply PPC in other hubs to extend its benefits and impact on cardiovascular health



Key Findings

- **Demographics:** 8 male, 7 female patients, average BMI of 28.3 for males and 27.4 for females, categorised as overweight
- **Cholesterol:** Total Cholesterol decreased by 35% (females) and 27% (males). LDL levels reduced by 49% (females) and 38% (males), achieving guideline targets (<2.6 mmol/L).
- **ESC Heart Score:** Significant improvements for both males and females
- Blood Pressure: Systolic BP decreased by 37% and Diastolic BP decreased by 32%, bringing average levels below the threshold for hypertension (140/90 mmHg)





Reference:
ESC/EAS Dyslipidaemia Guidelines (2019)
ESC/ESH Hypertension Guidelines (2018)