Increasing Community Pharmacy Involvement in the Prevention of Cardiovascular Disease

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Key Findings:

Blood pressure control: Significant decreases in both diastolic and systolic blood pressure (BP) were observed in both groups. The intervention was associated with a significantly greater reduction in mean systolic BP in comparison to usual care (p=0.022). The mean reduction in BP in the Pharmacist Care Group (PCG) was 10 mmHg. Subgroup analysis of participants who were nonadherent at baseline showed a decrease in systolic BP in the PCG group of the order of 13 mmHg, which was significantly greater than the drop in the Usual Care Group (UCG) (p=0.01). PCG participants whose BP was above target at baseline showed a decrease in systolic BP of the order of 16 mmHg, which was significantly greater than the drop in the UCG (p=0.01). PCG participants nonadherent at baseline and above target BP showed a decrease in systolic BP in the order of 20 mmHg, which was significantly greater than in the UCG (p=0.003). The literature indicates that this degree of change in systolic BP could be associated with reduced cardiovascular risk if it were able to be sustained.

Adherence: The proportion of participants judged to be adherent by the Morisky score increased in both groups from baseline to six months, but there was no significant difference in adherence rates between the groups. In both groups, some individuals achieved improved adherence and others became nonadherent over the course of the trial. Similarly, while significant improvements in adherence occurred in the PCG on a number of measures of adherence, no significant differences between the groups were demonstrated. It cannot be concluded that the intervention resulted in improved adherence in comparison to usual care. Subgroup analysis of participants nonadherent at baseline showed a significant improvement for the PCG over the UCG in the TABS adherence score (p=0.046). Subgroup analysis of participants nonadherent and above target BP at baseline showed a significant improvement for the PCG over the UCG in the MedsIndex score (p=0.046).

Cost-effectiveness: The intervention was evaluated as highly cost-effective.

Willingness to pay: Consumers indicated that, on average, they would be willing to pay $20 per month for the intervention, if provided as a community pharmacy service.

Implementation: The intervention was successfully implemented in the community pharmacy setting. Stakeholders were largely satisfied with the service. To implement the service:
- Pharmacists require appropriate and accredited training to deliver the service;
- Pharmacies will be expected to have the space to conduct private consultations;
- Pharmacists require appropriate remuneration to provide the service;
- MedeMineCVD is a useful tool to identify potential participants and to assist pharmacists with administrative tasks; however it may need to be altered to be suitable for service provision rather than research and preferably be integrated into the dispensing software.

Considering the highly effective reduction in systolic BP in subgroup analyses, screening for eligibility using Morisky scale and/or control of blood pressure relative to target, after identification by MedeMineCVD, may be useful strategies with which to better target potential recipients of the service. However, these need to be tested in large RCTs before wider implementation through community pharmacies.

The amount of data collection should be reduced in implementation to streamline delivery. For implementation of the service, pharmacists should record a patient’s BP, adherence issues, risk factors and pharmacist plan of management. Demographic information, quality of life and business case questions should be removed.

Conclusion: The HAPPY trial was effective in reducing systolic BP and has potential to reduce risk of CVD by helping patients achieve their target BP. For potential future implementation of the HAPPY service, the main emphasis should be on reduction of BP rather than just improving medication adherence.