Summer Meeting, 28 June-1 July 2010, Nutrition and health: cell to community

A systematic review of weight management interventions in the community pharmacy setting

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The extent to which community pharmacists can contribute to the management of obesity is $unknown^{(1)}$. The development of local weight management services should be evidence based; therefore, a systematic review of the literature was undertaken to evaluate the effectiveness and cost effectiveness of weight management interventions in the community pharmacy setting.

Studies considered eligible for the review were those incorporating interventions specifically designed to produce weight loss and/or prevent weight gain in the community pharmacy setting. Studies involving service users of any age were included unless they had an eating disorder or were pregnant. All study designs, reported in any language, were considered for inclusion; to be reviewed on a hierarchy of evidence.

Electronic databases were searched from 1999 to 2009: Medline, Embase, CINAHL, DARE, International Pharmaceutical Abstracts, Cochrane Controlled Trials Register, Health Management Information Consortium, Health Information Resources and Pharmline. Online and hand-searching of key journals and conference abstracts were undertaken for the same period and online searching of The Pharmaceutical Journal undertaken for the period 2005–9. Reference lists of reports and articles, weight management and community pharmacy books and reports were searched. Experts in the field, companies manufacturing weight management products and head offices of the main pharmacy chains were contacted for details of any relevant published or unpublished studies. A request for information notice was posted in the Pharmaceutical Journal for details of any study (published or unpublished) exploring weight management within community pharmacy.

To date, 10 studies have been identified, which have been conducted in various countries: four in USA, three in UK and one each in Switzerland, Spain and Denmark. Two studies had a control group, with one randomly allocating participants to a meal replacement or reduced energy diet and the other non-randomly comparing community pharmacist follow-up of a weight loss drug with no community pharmacist follow-up. The remaining eight were uncontrolled intervention studies (including five pilot studies). One compared three different types of counselling after a screening programme, and the remaining seven offered some form of dietary advice and follow-up either on an individual basis or in groups. Seven of the 10 studies reported advice to increase physical activity as part of the intervention.

The two studies with control groups reported no statistically significant change in weight between the groups. Four uncontrolled intervention studies reported statistically significant results for weight loss. The long-term weight loss in two of these ranged from 1.8 to 4 kg in 1 year. One abstract of an uncontrolled intervention study had no weight loss data at the time of publication.

This review shows that weight management interventions in the community pharmacy setting appear to show promise, but a few studies using robust designs have been reported despite claims that this is an ideal setting for such programmes.

This research was funded as part of a Clinical Research Fellowship funded by the Chief Scientist Office (CSO) of the Scottish Government Health Directorates within the Health Services Research Unit (core funded by CSO).

1. Blenkinsopp A, Anderson C & Armstrong M (2008) Community pharmacy's contribution to improving the public's health: the case of weight management. Int J Pharm Pract 16, 123–125.