Prescribing patient education to patients with Type 2 Diabetes: the effect on HbA1c and cholesterol

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Introduction

Patient education for those with chronic conditions is an important and effective part of patient care, however uptake of educational courses is low. In order to improve the availability of diabetes education for our patients, high quality, diabetes-specific educational and motivational videos funded by the Welsh Government were developed. The pilot study took place at seven pilot healthcare centres across Hywel Dda and Abertawe Bro Morgannwg Health Boards. Following consultations with patients with Type 2 Diabetes, Primary care staff prescribed patient specific videos   streamed directly to patients' electronic devices via an e-mail link. The 11 videos available, lasting approximately 5 minutes each, focussed on diet control, weight, foot care, medication and monitoring. We performed a three-month pilot service evaluation of prescribed films.

Methods

HbA1c and Cholesterol results before and after the film prescription (≥3 months later) were compared between the groups who watched the videos and those who did not. The overall watch rate was calculated as the percentage of the total films watched relative to the total number of films made available to all the patients. A paired t-test was used to compare differences in HbA1c and cholesterol during the three-month follow-up period

Scan the QR code to watch PocketMedic educational diabetes films

Results

	Mean Age	Mean initial HbA1c	Mean HbA1c post intervention	Mean change in HbA1c
Watchers	64	57	50	**-7 (P=0.0148)**
Non-watchers	66	59	61	+2

Patients were prescribed between 8-11 videos using web based ***PocketMedic.*** Across the seven healthcare centres 68 patients (30male, 38 female) were prescribed educational videos. 19 patients (28%) watched the films and 49 patients did not watch any of the films (non-watchers). There was no significant difference in age between the watchers and non-watchers (63.9 ±11.4 v 65.5 ±12.1 years, P=0.61). The mean change in cholesterol in the watchers group and the non-watchers group was -0.3 (P=0.037) and + 0.1 respectively. There was a reduction in the mean HbA1c in the watchers group of 7 mmol/mol (P=0.0148) and a mean increase of 2 mmol/mol in the non-watchers. A significant reduction in HbA1c post intervention between the watchers and non-watchers (P=0.001) was found. There was a significant correlation between the number of videos watched and the reduction in HbA1c (r=-0.58, P=0.01).
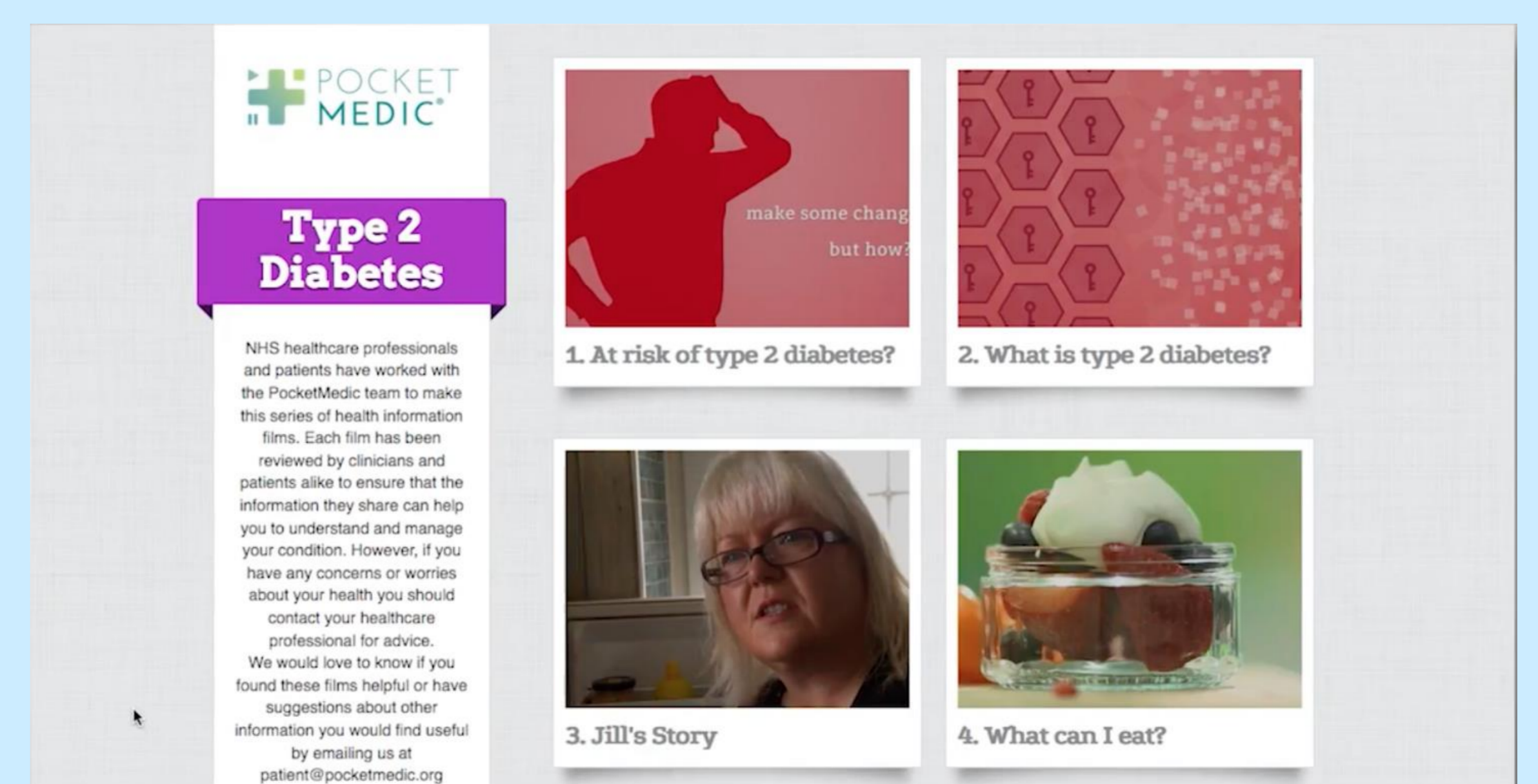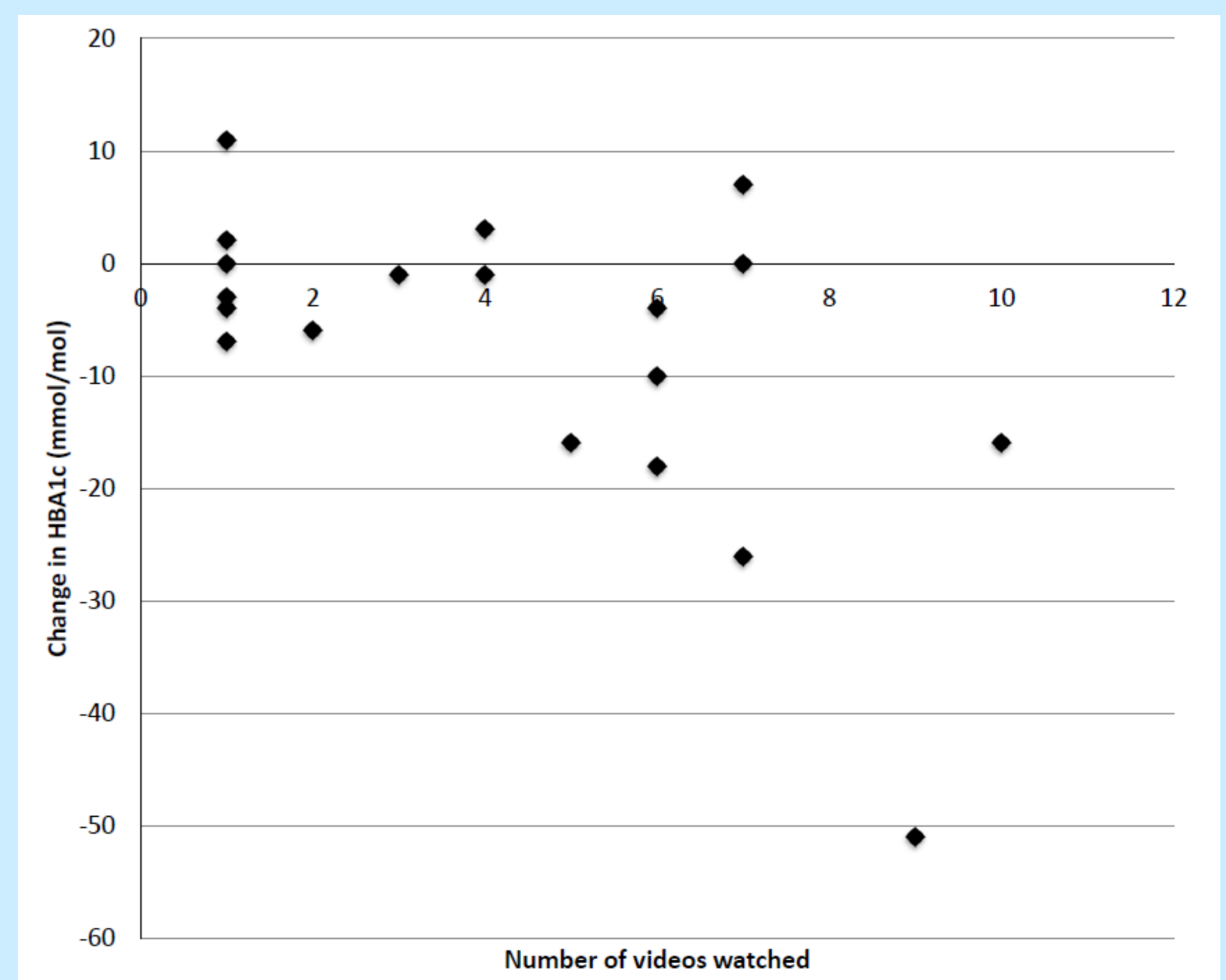
Conclusions

This 3 month pilot study showed 28% of patients, with a mean age of 68, watched at least one of the educational films. A significant reduction in HbA1c was seen in those who watched the prescribed videos with a mean follow up HbA1c of 49.8mmol/mol in the watchers compared to 60.5mmol/mol in non-watchers. There was also a correlation between the reduction in HbA1c and the number of videos watched. The use of media for educating patients not only provides access for those with poor health literacy but gives patients easy access to supported self-care.