Patient empowerment, eating behaviours and illness control: pre-post outcomes from DWELL delivery in UK and France

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Title
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Abstract
Diabetes self-management programmes can improve clinical and healthy lifestyle outcomes. Research has demonstrated that improved engagement with type 2 diabetes (T2D) care is associated with greater empowerment beliefs and a perceived internal control over their illness. As part of the DWELL evaluation study, an interim subset of 139 participants in the UK and 53 participants in France were assessed pre- and post-intervention on measures of weight, BMI, waist circumference and glycated haemoglobin (HbA1c), as well as self-efficacy beliefs (DES-SF), healthy eating behaviours (DEBQ) and perceptions of illness (IPQ-R).

Pre-post comparisons in both countries demonstrated statistically significant decreases in weight (UK: $Z = 6.71$, $p<.001$, FR: $Z = 3.33$, $p<.05$), BMI (UK: $Z = 6.70$, $p<.001$, FR: $Z = 3.21$, $p<.05$), waist circumference (UK: $Z = 6.71$, $p<.001$, FR: $Z = 3.24$, $p<.05$) ,and HbA1c (UK: $Z = 6.29$, $p<.001$, FR: $Z = 4.18$, $p <.001$). Importantly, participation in the DWELL programme was associated with increased self-efficacy beliefs (UK: $Z = 5.63$, $p<.001$, FR: $Z = 5.54$, $p<.001$), greater perceived personal control over their diabetes (UK: $Z = 3.17$, $p<.05$, FR: $Z = 2.20$, $p<.05$), reduced negative feelings about their illness (UK: $Z = 3.01$, $p <.05$, FR: $Z = 2.19$, $p<.05$) and decreased eating in response to external food cues (UK: $Z = 3.79$, $p<.001$, FR: $Z = 2.34$, $p<.05$). In the UK, participants also reported an increased optimism for treatment control of their diabetes ($Z = 3.06$, $p <.05$) and for their long-term prognosis ($Z = 1.99$, $p<.05$).

These preliminary findings support the efficacy of the DWELL programme in improving diabetes-related biomedical outcomes, as well as improvements in patient empowerment, healthy eating habits and increased perceived illness control. Further analysis, available at a later date, will

include a larger sample of participants, including longitudinal data with follow-ups six- and 12-months post participation in the DWELL programme.