From DAFNE to DAFNEplus: Applying a Nominal Group Technique to optimise a diabetes self-management programme using insights from behaviour change science

Kathryn Dennick
Stephanie Stanton-Fay, Paul Chadwick, Simon Heller, Lizzie Coates, Carla Gianfrancesco, Carolin Taylor & Susan Michie

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DAFNE (Dose Adjustment for Normal Eating)

- National structured education programme
  - Type 1 diabetes
  - Skills: flexible intensive insulin therapy (FIIT) - insulin is matched to food intake = more dietary freedom
  - Group sessions 5x1 day per week + ‘homework’

- Short-term: ↓HbA1c, ↑QoL, ↓admissions

- Long-term: no universal ↓HbA1c
Study aims

- Revise DAFNE programme to better support behaviour change & maintenance (during & beyond course)
  - Behaviour change wheel framework (BCW)

- Large multi-disciplinary team – stakeholder consensus is critical

- Sub-study - consensus process
  - BCW stage 3: ‘Identifying content & implementation options’
  
  (Michie et al, 2014)
Methodology

DAFNE educators (n = 6), clinical diabetologists (n = 6), behavioural scientists (n = 10) & DAFNE graduates (n = 8)

<table>
<thead>
<tr>
<th>Traditional NGT</th>
<th>Modified NGT</th>
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<tr>
<td>Face to face meeting</td>
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<tr>
<td>1: Participants privately generate issues</td>
<td>1: Participants generate suggestions</td>
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<tr>
<td>2: Chair records suggestions</td>
<td>2: Suggestions synthesised (thematically)</td>
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<td>3: Suggestions discussed/clarified</td>
<td>3: Synthesised suggestions discussed</td>
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<td>4: Participants privately rank-order or rate the alternatives</td>
<td>4: Suggestions synthesised &amp; refined re: specificity/meaning then reframed as recommendations for action (by behavioural expert)</td>
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<td>5: Group discusses their vote</td>
<td>5: Recommendations discussed &amp; refined further</td>
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<td>6: Participants vote again in private then discuss new vote until clear choice emerges</td>
<td>6: Recommendations circulated for a final round of refinement</td>
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Results

How to talk about behaviour change:
* Positively reframe influences on behaviour, threats & lapses
* Address motivation & factors influencing this
* Minimise the number of behaviour changes
* Reducing self-judgement through comparison

How to re-structure for behaviour change:
* Base structure on key behavioural targets
* Graded learning; build on ‘road map’
* Build in time for rehearsal of behaviours, & self-reflection, to establish habits/routines
* Personalise programme delivery, content & targets
* Strategies to promote understanding & retention (e.g. chunking, repeating & checking)

Principles & techniques for sustained behaviour change

* Shift focus to BCTs for sustained behaviour change (e.g. (realistic) goal setting/review; action planning; problem solving, rewards; cues; environmental restructuring; graded tasks) (& exploit group processes, i.e. modelling; credible source BCT)

Shift focus to acquisition & rehearsal of self-regulatory skills
Conclusions, learning points & next steps

- Existing methodology was successfully adapted

- Methodology can be used for consensus on interdisciplinary stakeholder perspectives

- Labour intensive & complex integration task

- Principles & techniques for sustained behaviour change will inform programme content, structure & delivery
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