

## TRANSFORMING COMMUNITY-BASED URINARY CONTINENCE PROMOTION: THE BOWEL MOVEMENT

### Hypothesis / aims of study

Community-based continence promotion effectively improved urinary incontinence symptoms in older women aged  $\geq 60$  in the United Kingdom (UK) (1). Engaging stakeholders is a proven practice in adult health behaviour change program development (2). We performed progressive stakeholder-engaged adaptations to the UK program to improve both urinary and bowel incontinence in United States (US) women. The aim of this study was to identify preferences regarding program content, pacing, and format among (a) US women with incontinence; and (b) community partner stakeholders.

### Study design, materials and methods

**Study Design:** To determine whether community-based continence promotion aligned with community needs and priorities, we conducted two hour-long sessions in a local senior centre and collected verbal and written feedback from attendees and the senior centre director. Based on positive input, we then proceeded with formal adaptation and pilot-testing of the adapted program in partnership with our Community-Academic Aging Research Network. We assembled a Stakeholder Advisory Board including content experts and community and patient representatives. We conducted pilot programs in five communities and collected qualitative and quantitative feedback from program participants and community partner coordinators and facilitators, using rapid cycle analysis to inform further program adaptation.

**Materials:** Feedback regarding program content, pacing, and format were collected from two target samples: women with incontinence, and community partners who will ultimately implement this program. During the initial needs assessment, verbal feedback and written evaluation surveys were collected from community members and a single senior centre director. Data collected from program participants during formal pilot-testing included: post-program written evaluation surveys; free text comments on symptom questionnaires three months after program completion; and transcripts from focus groups within one week after the program in each community. Data collected from community partners included transcripts, notes, and communications with coordinators and program facilitators before, during, and after pilot programs, as well as notes from annual Stakeholder Advisory Board meetings.

**Methods:** Rapid cycle analysis was performed of qualitative and quantitative data sources immediately following each pilot program by two researchers to identify implications for improving program content, pacing, and format. Modifications were made to program script, activities, and materials following the first two pilot programs in the fall of 2015, again after the second two pilot programs in the spring of 2016, and finally after the last pilot program in the summer of 2016. Feedback was elicited from the Stakeholder Advisory Board regarding modifications made to content, pacing, and format at annual meetings to ensure continued stakeholder input and engagement during this process.

### Results

**Sample Description:** Data were collected from nine community partners (program coordinators and facilitators) and 55 women with incontinence in five communities. These communities represented both rural and urban settings, with populations ranging from 1,460 to 27,154. Three of the five communities had higher median ages and lower median household incomes than the state medians; the other two communities had lower median ages and higher median incomes than the state. Mean age of pilot-test program participants was 73 years (SD 8.6, range 57–93) and all lived in their own homes. The sample was predominantly white (54/55, 98%); 80% were retired, 56% lived alone, and 87% perceived themselves to be in good health. Rates of bladder and bowel incontinence at baseline were 53/55 (96.4%) and 24/55 (43.6%).

**Content modifications:** The original urinary continence promotion program consisted of a continence expert using a script and PowerPoint slides to deliver a single 60-minute session based on constructivist learning principles and self-management theory; women attending the session also received a packet of written materials (1). Prior to pilot-testing, the original content was supplemented with information about bowel continence promotion with input from urogynaecology, geriatrics, dietetics, and pelvic floor physical and occupational therapy. Information about normal and abnormal bladder function was supplemented with similar information about bowel function; fluid management was supplemented with information about fibre management to optimize stool consistency; and pelvic floor muscle exercises specific to defecatory dysfunction were included. Based on requests from women who attended the sessions in the needs assessment prior to formal pilot-testing, information was added about medical resources if symptoms should persist after the program. During pilot-testing, the information about fibre required the most modification. Participants and program facilitators in the first two programs (fall 2015) requested more information about soluble and insoluble fibre along with lists of fibre content in various food sources. Participants in the spring 2016 programs appreciated the lists but both participants and facilitators found the distinction between soluble and insoluble fibre confusing. Ultimately the fibre section was simplified to make a total fibre intake recommendation alone, completely removing specific recommendations about soluble and insoluble fibre.

**Modifications to pacing:** Participants in our initial needs assessment suggested that one hour was not long enough for the information covered, and requested at least one more session to discuss whether the self-management strategies shared during the program worked, as well as more interactive opportunities for discussion. Our adult education and health behaviour change experts suggested a minimum of three sessions, incorporating action planning and coping planning as described in the Health Action Process Approach (3). In the fall 2015 pilot programs, participants attended three sessions, each lasting 90 minutes, over a month-long period, with two weeks between each session. Both participants and facilitators reported that sessions felt rushed, as older adults prefer to take more time to absorb information. The length of each session was extended to 2 hours, with the same number and spacing of sessions, and the number of case-based scenarios decreased to allow for a slower pace. All program

materials were provided up front, so that participants could read ahead to prepare before sessions if they wished. This modified pacing was much more manageable for communities in the spring and summer 2016 pilot programs.

**Format modifications:** The original program was delivered via PowerPoint slides by a continence expert, but one of our goals was to widely disseminate the adapted program in communities without a continence expert, so the modified program was delivered by a trained facilitator from each community. Our Advisory Board suggested avoiding PowerPoint slides because equipment was not available at all senior centres, so graphic posters replaced slides, with the trained facilitator reading a script prepared by the team of continence experts. Delivery of the medical information about normal and abnormal bladder and bowel function was challenging for our facilitator in the fall 2015 pilot program, and participants found the posters difficult to follow. Our Stakeholder Advisory Board suggested a video of a continence expert explaining this medical information, which replaced the posters for that portion of the script in the spring and summer 2016 pilot programs, and was confirmed to be better for both participants and facilitators. At the suggestion of our adult education and health behaviour change experts, interactive small group activities were introduced. Participants liked these activities: role playing and case-based problem-solving scenarios to model action and coping planning, but most did not like breaking into small groups and the facilitators found it difficult to make sure everyone was learning. Thus, the problem-based scenario learning was done as a large group in the summer 2016 pilot program, and was liked by both participants and the facilitator.

#### Interpretation of results

Rapid-cycle analysis of qualitative and quantitative data informed significant modifications to content, pacing, and format of an evidence-based urinary continence promotion program, over a brief two-year period, to improve both urinary and bowel continence in US women.

#### Concluding message

Successful community-based programming requires engaging not just program participants, but also program facilitators and the agencies that will host these programs. The adapted urinary and bowel continence promotion program described above is now being tested in a type 1 hybrid effectiveness-implementation randomized, controlled trial in six diverse communities in a US state.

#### References

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#### Disclosures

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