PILOT TESTING OF AN EDUCATIONAL NEEDS ASSESSMENT QUESTIONNAIRE FOR CARDIAC REHABILITATION PATIENTS IN CANADA

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BACKGROUND
The effective provision of appropriate health information is important for individuals living with chronic conditions such as coronary heart disease. Increased patient satisfaction, reduced levels of psychological distress and enhanced perception of control are all variables associated with effective health information provision. Effective communication is also associated with better patient adherence to treatment.

Although there has been considerable focus upon the content of health information provision, there is less available information about cardiac patients' preference for how they would like this delivered to them (e.g. written, video, during consultation), by whom and what point during their recovery.

In the cardiac rehabilitation field, it is observed that some patients understand little of what has happened to them or how to manage their lives in the aftermath of their treatments, and many say that they would want and need more information than they usually receive in the course of these programs. In order to plan and to carry on an effective educational intervention it is very important to have precise information about what the patient knows regarding cardiac disease and secondary prevention, and also identify what are their educational needs.

Good patient education involves assessing needs, setting goals and objectives, implementing teaching plan, and evaluating outcomes. The identification of information needs is considered the first step to improve knowledge that ultimately improves health outcomes. There is no tool in the literature that addresses needs assessment to cardiac rehabilitation patients.

METHODS
After an extensive literature search, 61 educational items were collected and reviewed by a Canadian Committee of Experts (n=10). Items were rated on a 5-point Likert-type scale that ranges from 1 = really not important to 5 = very important. High scores indicate high educational needs of each topic identified by the subjects. The items were put together as an Educational Needs Assessment Questionnaire and pilot tested in 34 coronary patients (15 female, 65±8 years old) that completed the 6-month cardiac rehabilitation program. Preliminary psychometric testing was performed. Clinical data were extracted from medical charts and patients completed a sociodemographic survey.

TARGET POPULATION/INTERVENTION
Cardiovascular rehabilitation involves an individualized program of assessment, physical activity, education, lifestyle behaviors and psychosocial support. The Toronto Rehab program is delivered by an interprofessional health team, which work with each patient to personalize activities to their needs and abilities. Patients visit once a week for a 30 minute education session and up to an hour’s exercise. Upon completion of the 6 month program, patients graduate to join the cardiac rehab alumni program, Heart Health for Life.

OBJECTIVE
The aim of this study was to pilot testing a new educational needs assessment questionnaire in coronary patients at cardiac rehabilitation programs. This is part of a study focusing on the aspect of patient preference as a subset of existing knowledge deficits in a needs assessment.

RESULTS

<table>
<thead>
<tr>
<th>PARTICIPANTS CHARACTERISTICS</th>
<th>Total n = 46</th>
<th>Mean = 6.08</th>
<th>Std Dev</th>
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<tbody>
<tr>
<td>Men (%)</td>
<td>19 (41.3)</td>
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<tr>
<td>Age (years)</td>
<td>68.6 ± 11.5</td>
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<tr>
<td>Gender (%)</td>
<td>52.2%</td>
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<tr>
<td>Education Level (%)</td>
<td>3.96 ± 1.28</td>
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<tr>
<td>Family Income (%)</td>
<td>2.9 ± 0.9</td>
<td></td>
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<tr>
<td>Disease History (%)</td>
<td>3.9 ± 1.55</td>
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<td></td>
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<tr>
<td>Ethnicity (%)</td>
<td>3.9 ± 1.28</td>
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ITEMS/AREAS

| MEAN | STD | AREAS WITH THE LOWEST SCORES |
| 1.27 | 0.30 | What are the treatments available to my condition?  
| 1.08 | 0.23 | What are the tests used to diagnosis my heart condition?  
| 1.07 | 0.23 | What do I need to do for in hospital smoking prospective?  

| MEAN | STD | AREAS WITH THE HIGHEST SCORES |
| 4.00 | 0.12 | What is the importance of each topic to improve your knowledge about coronary artery disease?  
| 4.00 | 0.12 | What are the tests used to diagnosis my heart condition?  
| 4.00 | 0.12 | What is the importance of each topic to improve your knowledge about coronary artery disease?  

THE SCALE
Rate the importance of each topic to increase your knowledge about coronary artery disease

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<tr>
<th>Area</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
</table>
| 4.00 | 0.12 | Area 1 - Self-care information  
| 4.00 | 0.12 | Area 1 - Self-care information  
| 4.00 | 0.12 | Area 1 - Self-care information  

IMPLICATIONS FOR POLICY, DELIVERY OR PRACTICE
Cardiovascular Disease is the leading cause of morbidity and mortality worldwide. Cardiovascular rehabilitation (CR) programs have been shown to reduce mortality, improve functional capacity, improve quality of life, and decrease the incidence of rehospitalization for cardiac complications and overall medical costs. Education is an important component to CR and may contribute to patient adherence to this treatment.

To our knowledge, there is no educational needs assessment tool in the literature to address which information is relevant to CR patients, as well as how they prefer that information to be delivered can be an useful first step to tailor design educational programs, an important part of CR. The main implication of this research is to identify patients’information needs that can be useful to address and develop an educational curriculum for cardiac rehabilitation programs. The factors or characteristics that influence patients’ information needs in cardiac rehabilitation programs can also be useful to design educational programs tailored to specific groups. Before implementing patient education programs it is prudent to evaluate what patients want to know. The availability of a relevant valid information needs assessment tool is an essential factor to tailor the educational component of CR programs.

In addition, this new tool would also be useful in clinical practice to identify both patients who want to know about CVD in general as well as specific areas or to provide educational opportunities to meet a patient’s specific need within this world of knowledge. Information derived from these studies may help the CR team plan and guide educational classes.

Conclusion: The identification of educational needs is an important component to improve patient education and health outcomes in cardiac rehabilitation. The nature of the needs identified suggest cardiac patients have higher expectations of outpatient care, and that different strategies would be required to promote education in this setting.

EXTRA FINDINGS
Patients were asked to identify their preferences for educational delivery formats.

Question: “How would you prefer this information to be delivered? You can mark as many options as you want.”

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