Adolescent Group Based Rehabilitation Class - A Service Development Review

Sarah Mitchell Physiotherapist - NHS Fife – sarah.mitchell21@nhs.net
Pierette Melville Highly Specialist Physiotherapist Children and Young People’s Physiotherapy Service, NHS Fife - pmelville@nhs.net

POURPOSE
The promotion of physical activity for children and young people is essential to address the decline of physical activity levels as children progress through adolescence. The Scottish Government reported a significantly higher proportion of children aged 5-7 (77%) meeting the physical activity recommendations compared to 13-15 year olds (48%) when school based exercise was excluded. Teenagers specifically report lack of motivation and low self-efficacy as barriers to the adoption of physical activity and frequent pain in children and young people may negatively impact physical activity levels. To directly address these trends and perceptions of exercise, NHS Fife C&YP Physiotherapy Service developed a group-based rehabilitation class for adolescents to achieve patient-centered goals and educate these adolescents about life-long exercise. This project aimed to improve pain scores, attitudes to adopting regular exercise and provide an environment for social interaction and to develop self-efficacy.

METHODOLOGY
C&YP Physiotherapy Service developed a group-based rehabilitation intervention for secondary school pupils comprising of 6 one-hour sessions once a week. The class was run by a rotational Physiotherapist and one Therapy Instructor. Prior to the initial block, a referral pathway was developed with clear inclusion criteria for referral. Each class comprised of a cardiovascular warm up, strengthening, balance and proprioception exercises to tackle each child’s symptoms. Each class focused on enjoyment, teamwork and participation, with clear explanations to promote education during the patient journey. The classes aimed to promote self-resilience, self-management and self-efficacy for patients in the community to reduce their reliance on NHS services and provide a transition to local authority-based exercise programmes.

RESULTS
The rehabilitation group was launched in November 2017 and over a 12 month period 47 young people completed the 6-week block. Demographic data of group participants was not collected by the service. Of the 47 participants who completed the block, only 26 young people fully completed outcome measures both pre and post intervention. The MSK-HQ Health Questionnaire was used to assess change and has been validated for use in adults. Visual analogue scales (VAS) (scores 0-10) were used to measure pain and functional levels and an end of block feedback form was completed.

Of the data collected, 78.2% of participants reported that their level of pain had reduced, with an average 3.2 point change using the VAS. Similarly, the MSK-HQ scores of 61.5% of young people had improved on completion of the rehabilitation class.

The majority (97.1%) felt stronger after the 6-week block and 91.2% reported they would start attending the gym or increase their physical activity after the rehabilitation class. On completion of the group, participants were encouraged to attend local-authority exercise groups and were given information about local ‘teen gyms’.

Class satisfaction was good, with 76.4% of participants rating the class as excellent or very good at making them work hard. The class received positive feedback with participants citing the social aspect of class as beneficial. Feedback included “getting to know more people while exercising”, “really fun” and “making friends”.

The group approach reduced the need for 1:1 intervention and supported political drivers from specialist to targeted and eventually universal input.

Pathway for MSK Rehabilitation Class

<table>
<thead>
<tr>
<th>Referral Criteria</th>
<th>Initial assessment by Physiotherapist</th>
<th>Home exercise programme</th>
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<tbody>
<tr>
<td>Muscle strength above grade 3</td>
<td>Refer to Rehab class (in external form)</td>
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<tr>
<td>Minimal loss of movement in any joint</td>
<td>Attend Rehab class Class Physio completes feedback form</td>
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<tr>
<td>No active joint inflammation</td>
<td>Patient completes self-evaluation form</td>
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<tr>
<td>Reduced physical activity and function</td>
<td>Patient must be proficient with a basic exercise programme</td>
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<tr>
<td>Patient must be secondary school age</td>
<td>Patient must be able to attend all weekly classes</td>
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| Review by Physiotherapist, if required | Discharge and signpost to leisure facilities |

AIMS
The key driver behind this project was to create and foster an environment to encourage children and young people to be included, increase self-efficacy and provide a fun, social environment for exercise.

LONG TERM OUTCOMES
The rehabilitation group provided a safe environment to allow young people to be active, support self-management of their condition and streamline the transition to community based exercise. Future audits should explore the uptake of local-authority exercise opportunities and should include demographic data to conduct statistical analyses. On the back of this success of the rehabilitation class, a second group will be started with a CBT component for young people with chronic pain and fatigue.

References