

'Ward Workout' - Implementing Nurse-Led Exercise Programmes for Inpatients on Rehabilitation Wards for Older People

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Summary of project

This project implémented a nurse-led exercise programme in an attempt to contribute to healthy ageing beyond falls prevention alone. Specialist exercise training was undertaken by nursing staff and a newly recruited exercise assistant that enables older people to be assessed for strength and balance and appropriate exercises to be prescribed. Patients are selected for exercise by ward staff and physiotherapists and under the supervision of falls practitioners, the exercise assistant helps patients to incorporate supervised exercise into their rehabilitation programme. Each patient has a personal folder of individually prescribed exercises and a diary to record their exercise pattern. When patients are discharged from hospital, they have a plan for the continuation of exercise which is either home or community based.

Background

The National Service Framework for Older People (Department of Health, 2001), sets a standard for older people "who have fallen (to) receive effective treatment and rehabilitation and, with their carers, receive advice on prevention through a specialised falls service". King's College Hospital, the NHS Trust where this project was based, already had a multidisciplinary falls service in place, covering A&E, falls clinic and inpatient investigation and treatment. This service draws on the growing evidence base around interventions to prevent falls which points towards a need for a co-ordinated falls strategy involving multi-professional working and a multidimensional approach to falls management (Close and McMurdo, 2003).

Within multidisciplinary falls services, there is an emerging role for nurses to contribute to falls prevention strategies and lead aspects of falls services. Locally, nurses provide front-line falls risk assessment using the STRATIFY screening tools (Oliver et al., 1997) and provide individualised falls action plans. A nurse-led randomised controlled trial of hip protectors has been completed. Two specialist falls practitioners work closely with ward staff and support the multidisciplinary falls service.

The missing element of the local falls prevention work was the promotion of exercise for inpatients. Exercise programmes can increase mobility, strength and balance amongst older people, and reduce the incidence of falls, (Day et al., 2002) and are recognised by the National Service Framework for Older People (Department of Health, 2001, Standard 8) as a key health promotion activity. Research by Robertson et al (2001) has demonstrated a role for nurses in delivery of these programmes.

Aims of the project

The project aimed to:

- Implement nurse-led exercise programmes on four rehabilitation wards for older people at King's College Hospital
- Enhance the role of nurses in rehabilitation
- Complete the local portfolio of falls prevention strategies, in accordance with evidence based practice guidelines

Project design and implementation

The project broadly consisted of three phases, which are described below.

Phase 1 – Preparation: April 2004 – June 2004

Phase 1 consisted of preparation and training of staff, development of supporting literature and patient information and consolidation of support for the project. A project team was set up, consisting of the nurse consultant, matron, falls practitioners, practice development nurse and two identified link nurses. A multidisciplinary advisory group helped to steer the project and a user involvement group was also set up. The new post of exercise assistant was specified and advertised.

All the project team, including link nurses and exercise assistant, undertook a specialist training course for postural stability instructors which contained both theory and practice components. Once trained, the team devised and agreed local evidence based guidelines for development of individual and group exercise programmes.

Initial user involvement drew on an existing group of local older people, who have advised on a number of recent service improvements. The project was discussed with representatives of this group, and specific advice was sought on the design of the patient information leaflet and posters for wards.



The project communication strategy included meetings with multidisciplinary and management colleagues to introduce the project and raise its profile, and ward based meetings and publicity to announce the project preparation and purpose.

Phase 2 – Implementation: June 2004 – March 2005 Launch

A project launch event held was at King's during which information and exercise demonstrations were made available. The event was attended by clinical and management staff of King's, members of the user involvement group, representatives from FoNS and Pfizer Ltd and the nursing advisor for older people at the Department of Health. A feature in the Nursing Times and other publications followed.

Staff training and development

The aim of staff training and development was to embed awareness of the benefits of exercise for healthy ageing within nurses' existing concepts of rehabilitation, and to increase their knowledge of the specific exercises used. It was intended that in this way they would gain sufficient understanding for them to follow through and encourage patients to carry out prescribed exercises. Given that the project was based on rehabilitation wards within an acute hospital setting, it was also important that the longer-term benefits of exercise were perceived, together with an awareness of how the available local community services could make the continuation of exercise programmes after discharge real and possible. The project team worked closely with the clinical unit's practice development nurse to deliver ward based teaching sessions.

Exercise programmes delivery

The Ward Workout exercise programme drew on the portfolio of exercises that were published by the OTAGO exercise programme (Campbell and Robertson, 2003) which uses exercises that have a good evidence base for improving strength and balance and reducing falls, and delivers these in the community, using home visits and incorporating walking programmes. For hospital use, the project team retained the exercise portfolio but modified how it was delivered, using one-to-one teaching and supervision on the ward, and excluded the walking programme.

Referral criteria for Ward Workout were developed and circulated to the nurses, doctors and therapists on the rehabilitation wards. Referrals were accepted from all sources. Patients were then assessed and selected using local criteria, which ensured that patients were appropriately placed on the programme. Functional assessment of the patient was done by the falls practitioner using a combination of physical outcome measures, self assessed measures and review of the medical notes.

Each patient was given a personalised exercise pack and diary to record their exercise activity and level. In a ward setting, the project team felt that it was important that the exercise prescription was clear to both the patients and ward staff, so that overactivity was not encouraged. The exercise assistant then visited the patient three times a week to teach and supervise the exercise programme, progressing the patient onto higher levels of intensity as appropriate.

The provision of a dedicated exercise assistant role ensured consistency in delivery of the exercises, something which would not have been feasible if the

ward nurses had been expected to take this entirely on themselves.

On discharge, patients were offered advice on the options for exercise in the community. These were:

- Individual exercises at home
- The OTAGO exercise programme (home based) with a community instructor
- · Group exercises at the day hospital
- Group exercises in a community class

Patient follow up

A questionnaire was given to patients on discharge to measure satisfaction with the programme. At four weeks post discharge a phone call was made to the patients to ascertain whether they have had any falls and whether they were continuing with exercises.

Phase 3 – Project evaluation: Every three months and March 2005

Project evaluation was designed to be a continuous and cyclical process, with regular meetings of the project group and reflection on progress and learning. The project design was that of an implementation study, in which the team accepted the evidence that individual, targeted exercise can reduce the risk of falls and promote healthy ageing. The focus of the evaluation was therefore on whether the intervention was feasible and sustainable in practice. For this reason, the rate of falls or health status of the patients was not the primary outcome measure. The team was interested in the benefits perceived by the patients and the rate of patient recruitment and participation, both throughout the project and post discharge. Patient satisfaction was evaluated via questionnaire. Staff satisfaction, knowledge and participation were explored through use of a staff questionnaire, review of participation in exercise programmes and the reflections of the project team.

Outcomes

Seventy-six patients were recruited to Ward Workout, of which four subsequently withdrew whilst in hospital. Fifty-three patients were female and twenty three were male.

Patient participation in exercise in hospital

Data showed that there was a good participation rate, with an average of 66% of exercise sessions completed as prescribed. This suggested that the programme was practically possible, within organisational constraints, acceptable to patients and easily integrated into their planned rehabilitation.

Patients' experience of the Ward Workout

The patient experience was an important aspect in the Ward Workout project as encouragement for on-going exercises after discharge was one of the aims. On discharge each patient filled out a satisfaction questionnaire to assess how he or she felt about the programme. Overall, satisfaction was quite high among the patients who participated, and a number of interesting themes emerged.

- General Benefits patients who participated generally thought the exercises were good and had some general effects, such as breaking up the day in hospital, and being quite exhilarating
- Physical benefits a number of patients reported physical benefits from the exercises like decreased stiffness, release in tension, improved mobility, decreased pain and swelling, an increase in energy and appetite

- Psychological benefits there were also some psychological benefits reported by doing the exercises or the way they were provided. These included increased confidence and motivation and the ability to succeed
- Financial it was interesting to note that some patients were even thinking of the financial benefits satisfaction was high because it was free
- The exercise session a number of positive comments were made on the exercises and the way they were delivered, such as having someone supervising the session to correct any mistakes or to be available in case a fall occurred. The patients also liked the weights used in the resistance (strength) training component

Patient participation after discharge

Half of the seventy-two patients who completed Ward Workout went on to some form of home based or community exercise programme on discharge. The type of programme depended on patient choice and the recommendation of the falls practitioner and exercise assistant. The majority of patients (30) opted for home based exercises rather than group exercise in a community setting.

Thirty patients were followed up by a phone call approximately four weeks after discharge from hospital, to ask whether they were continuing with the exercise programme. Twenty three of these patients were continuing with their exercises.

Staff Involvement in the project

The role of the nurses emerged as important but indirect. They offered support, encouraging the patients and following through the principles into patient education, falls prevention and general rehabilitation. Ward nurses also had a role in the identification of appropriate patients and were very keen to help motivate patients to take part in the programme.

A survey was carried out at the end of the project to assess staff involvement, and their rating of the importance of exercise, both for the patient and as part of the nurses' role in rehabilitation. Fifty questionnaires were distributed across the multidisciplinary ward team, of which twelve were returned. Seven nurses and five physiotherapists completed or partially completed the questionnaire. The majority of respondents thought that exercise was important or very important for the older person; that nurse's involvement in promoting the benefits of exercise was important or very important and that the nurse's role in rehabilitation was important or very important.

Discussion

Practice development and staff training

Staff training and development was an integral part of the project, although formal teaching sessions were initially difficult to set up due to the wards being busy. Eventually, at least five nurses attended each session. Their interest was evident but some apprehension was also observed. This related to nurses believing that they did not have time to do these exercises with patients and that physiotherapists do exercises with patients. Following discussions during these sessions, it emerged that nurses do recognise their role in the rehabilitation of patients and although there might be time constraints, provision of some exercise could be incorporated in patients' daily routine e.g. doing some stretches when they are having a wash in the moming.

To broaden the context of evidence-based interventions

for prevention of falls in older people, the exercise approach is now being taught within wider falls education programmes within the Trust. E-learning has also provided an opportunity for the project team to diversify the teaching and learning methods that are available to develop staff knowledge of healthy ageing, exercise and falls prevention. A module on falls prevention and management that incorporated sections on exercise was developed by the team and is proving to be popular with hospital staff.

Professional roles and boundaries

The project team were aware of both the overlaps and the territorial barriers that can exist between professional roles within the rehabilitation team. For example, prior to commencing the project, the promotion and provision of exercise was widely perceived by both nurses and therapists as the conventional province of physiotherapy. This led to some initial scepticism from therapists that nurses could successfully adapt their role and do so safely and competently. For this reason, the achievement of a qualification in exercise instruction endorsed nurses' credibility within the multidisciplinary team and resolved any initial reservations that were expressed by colleagues.

Eventually, multidisciplinary colleagues did fully recognise the credibility of the intervention, and it became easier to suggest that the project exercise assistant and specialist falls nurse could prescribe and teach exercises with the patient rather than this needing to be controlled by the physiotherapists. A breakthrough was achieved when therapy and medical colleagues also made referrals for suitable patients.

At the outset of the project, it was hoped that the link nurses who qualified as postural stability instructors would be able to follow through and encourage patients to carry out prescribed exercises, as well as identifying patients for the programme. In practice, this did not happen due to organisational change and staff movement within the hospital. With the loss of the link nurses from the rehabilitation wards within a few months of the project start, nursing involvement had to focus on the remaining ward staff engaging in an integrated and more indirect approach.

Leadership and team work

The project intended to challenge nurses' perception of the scope of their role in rehabilitation and extend their professional boundary. For this reason, strong leadership was essential to inject the initial momentum and vision into the project, convince both nurses and other professional groups of the potential for success and to cement inter-professional links and communication. The leadership of the consultant nurse and matron and their conviction that the project could succeed helped the project team to focus on where the project was going, and what their role was in implementing it.

As the project implementation phase got underway, the benefit of thorough planning and preparation became apparent. This meant that the team were confident and prepared to deal with any objections and barriers raised by multi-disciplinary colleagues. The team also faced practical challenges as the rehabilitation wards moved hospital sites, as part of a Trust-wide consolidation of facilities. Consequently there was some institutionally generated anxiety amongst the staff concerning the logistics of moving frail older people from one site to another. This organisational change alone, including the re-allocation of the link nurses to non-project wards, could have terminated the project without the ongoing



vision of the project leaders and the full involvement of the team in problem-solving and planning.

The postural stability instructor training that the team undertook proved to be intensive and challenging, but this had the effect of enhancing a sense of involvement and mutual support amongst the team. It fostered a sense that the team believed the patients were receiving very beneficial nurse led therapy; the team members wanted the project to work because the benefits could be observed on a direct and practical level. Within the project team it was clear that there was a leader but that the team respected each other's opinions, roles and contributions to the project.

Sustaining practice development

The experience of undertaking this project has enabled the team to reflect on approaches to other practice development initiatives, and how these may be implemented effectively and in a sustained way. A key learning point has been that a team has to be sure about what they are aiming to achieve, have a clear plan and be open to discussion and feedback with some close monitoring to make it happen. The ability to analyse issues and adapt without losing sight of the goal is crucial, particularly when major structural changes to the organisation occur which are beyond the control of the project team.

Conclusions

The Ward Workout approach has proved to be both feasible and sustainable. It has undergone a successful transition from the status of being a project to being a core component of the rehabilitation service at King's. The factors which were key to success may be summarised broadly as:

- Clinical leadership provided by a project team led by the nurse consultant and modern matron for older people and supported by the specialist falls practitioners. Team ownership, support and participation all increased the likelihood of success within a complex and changing environment due to high motivation and attention to the project
- Resources external funding enabled the project team
 to undertake training and to meet all equipment,
 publicity and documentation costs. The core roles of
 falls practitioner and exercise assistant were properly
 funded by the acute Trust, with a commitment to
 recurring funding for the exercise assistant once the
 project had been shown to be effective
- Support the Developing Practice for Healthy Ageing Programme supported by FoNS and Pfizer provided excellent constructive support throughout the project, and the management and staff at King's were consistently supportive of the innovation and it's attendant risks and potential
- Patient involvement older patients and their representatives were involved throughout the project. They contributed to preliminary focus group work, helped us design patient information leaflets and posters, and provided feedback and suggestions on the programme and related education and training initiatives, including the e-learning programme into which the team had been able to opportunistically extend the training

References

Campbell, A. J. and Robertson, M. C. (2003) Otago Exercise Programme to Prevent Falls in Older Adults. University of Otago. Close, J.C.T. and McCurdo, M.E.T. (2003) Falls and bone health services for older people. Age and Ageing. Vol. 32. pp 494-496. Day, L. et al., (2002) Randomised factorial trial of falls prevention among older people living in their own homes. British Medical Journal. Vol. 325. pp 238.

Department of Health (2001) National Service Framework for Older People. London: Department of Health.

Oliver, D. et al. (1997) Development and evaluation of evidence based risk assessment tool (STRATIFY) to predict which elderly inpatients will fall: case-control and cohort studies. *British Medical Journal*. Vol. 315. pp 1049-1053.

Robertson, M. C. et al. (2001) Effectiveness and economic evaluation of a nurse delivered home exercise programme to prevent falls. *British Medical Journal*. Vol. 322. pp 697.

Further reading

A copy of the original report can be downloaded from the FoNS website:

www.fons.org/healthy_ageing/projects/exercise.asp

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