Home-based physiotherapy rehabilitation: patient and care-giver perspective

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Introduction
Home-based physiotherapy rehabilitation has evolved as a viable alternative other than in-patient rehabilitation for patients. It is based on concepts which include early discharge of patient, followed by rehabilitation at patient’s home. This promotes patient empowerment and care-giver engagement in patient’s chronic disease management. To achieve better rehabilitation outcomes, it is important to understand from patients’ and care-givers’ perspectives on their problems at home upon discharge from hospital and evaluate the effectiveness of home-based physiotherapy rehabilitation in optimizing their physical function.

Objectives
1. To determine feedbacks from patients and their caregivers
2. To evaluate outcome oriented home-based rehabilitation

Methodology
Home-based physiotherapy program: 1. Patients’ and care-givers’ feedback A pre- and post-questionnaire was designed and disseminated to patient during community physiotherapist (CPT) home visit. It was used to collect information on pre- and post-training about their mobility upon discharge from hospital; the performance in activities of daily living (ADL); any caring burden to their care-givers; any emotional change after being discharged from hospital and any expectation from the recovery from their diseases. 2. Home-based physiotherapy rehabilitation and functional assessment Home-based physiotherapy program was tailor-made to the patient according to the problems identified from the patient’s feedback and physical assessment by CPT. Physiotherapy equipment, which may include pain relief electrical modalities, functional electrical muscle stimulator, strengthening and mobilizing equipment, was lent to patient. Exercise pamphlet and educational material were provided to patient according to their needs. Follow-up after one month was arranged to review the progress of patient. Pre and post physical assessment were taken to evaluate the progress of patients. The functional outcome measures included modified functional ambulatory categories (MFAC), Bergs’ Balance Scale...
Result
Thirty-three patients completed the questionnaires and the home-based training. All participants reflected that they had improvement in their functional mobility; better performance in ADL; improvement in self-care and decreased burden to their care-givers; improvement in emotional aspects and met their expectation in recovery after one month’s home-based rehabilitation training. The functional outcome also showed statistically significant difference in: 1. MFAC (pre/post), Z= - 4.89; T= 0.001. The median of MFAC (post) was 7, while the median of MFAC (pre) was 5; 2. BBS (pre/post), Z= - 4.55; T=0.001. The median of BBS (post) was 46, while the median of BBS (pre) was 40; 3. MRMI (pre/post), Z= - 4.81; T= 0.001. The median of MRMI (post) was 36, while the median of MRMI (pre) was 32; 4. TU&G (pre/post), Z= - 4.87; T= 0.001. The median of TU&G (post) was 16 sec., while the median of TU&G (pre) was 23 sec.; 5. 6MWT (pre/post), Z= - 4.20, T= 0.001. The median of 6MWT (post) was 103 m, while the median of 6MWT (pre) was 66 m. Conclusion: The results from the questionnaire reflected patients faced psycho-social and physical problems upon discharge from hospital. The ‘Home-based Physiotherapy Rehabilitation’ can provide tailor-made rehabilitation program to patients based on problem-oriented approach. By loaning appropriate rehabilitation equipment and providing care-giver education to facilitate home-based training, it not only improves physical function performance of patients but also enhances the psychological well-being and ADL performance. This program has aligned with, and the results reinforced the strategy of Hospital Authority to promote building up the partnership among health care worker, patient and care-giver to empower their disease management in community.