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The Social Participation Development for Individuals with Unilateral and Bilateral Lower Extremity Amputation

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The Social Participation Development for Individuals with Unilateral and Bilateral Lower Extremity Amputation

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BACKGROUND

An amputation results in various post-surgical physical, psychological, and social difficulties that can inhibit participation & limit LE strength, coordination, and mobilization (Lombard et al., 2019). The impact on social participation involves physical limitations, mobility challenges, social isolation, emotional impact, self-esteem/body image, dependency, and developing coping strategies (De-Rosende et al., 2017; Pedras et al., 2018).

PROBLEM

A lower-extremity amputation drastically impacts functional mobility, ADLs/IADLs, quality of life, mental and emotional roles, social functioning, and work/family lives.

PURPOSE

The purpose is to develop an OT-focused program for individuals with unilateral or bilateral lower extremity amputations to provide them with the skills to maintain or increase their social participation.

Outcome Objectives:

- Conduct a needs assessment with lower limb amputees through written/verbal surveys and interviews.
- Develop a program manual that will include residual limb education, exercises, pain management, and energy conservation skills for amputees.
- Implement the program by utilizing interested participants and creating group sessions.
- Analyze data through pre- and post-program surveys to evaluate program & show improvements in social participation.

METHODS

- 12 invited
- 9 respondents to Needs Assessment survey
- 6 respondents to Program Evaluation survey

Recruitment: Gathered participants through the Steps 4 Love non-profit support group.

Needs Assessment: Participants provided quantitative and qualitative responses to 10 questions regarding their experiences as a lower limb amputee. Questionnaire incorporated styles such as Likert scale, multiple choice, and long answers.

Development: The development of this program was performed through assessments, curriculums, psychosocial support, group sessions, and skill training.

Implementation: The implementation plan involved organizing each topic into modules, delivered over six weeks. Each weekly session, lasted between 30 minutes and an hour, to introduce participants to 1-3 new topics.

Program Topics:

- Program Background | Vision & Mission
- Frame of Reference
- Pain Management | Phantom Limb Pain
- Residual Limb Management
- Prosthetic Management
- Exercises for Amputees
- Energy Conservation Skills
- Psychosocial Support



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PROGRAM

General Program Goals:

1. Inform amputees on how to adapt their lifestyles to make it easier to participate socially and perform everyday tasks within their homes and communities.
2. Educate participants on healthy lifestyle interventions to improve functional performance.
3. Develop coping strategies in the recovery process to reduce the number of mental health disturbances after an amputation.
4. Significantly restore confidence, improve social participation, benefit an amputee's mental health, improve physical health.
5. Promote occupational performance for those with lower extremity limb loss.

Theoretical Frameworks:

1. The Person Environment Occupation Model (PEO)
2. The Rehabilitative Frame of Reference

Interventions:

- Education on pain management techniques
- Residual limb care training & Figure 8 wrapping techniques
- Mindfulness techniques
- Tips on how to manage a prosthesis
- Mental Health awareness and resources to seek help
- Breathing strategies to conserve energy during tasks
- Exercise training routines

CONCLUSION / FUTURE DIRECTION

This project has created a program manual for bilateral and unilateral lower extremity amputees to advance their social participation and help with community integration. The program manual is hoped to serve as a valuable resource for healthcare professionals, amputees, and their caregivers to foster positive outcomes that promote social participation and empower the amputee community.

Future studies could examine the effectiveness of implementing similar projects on a larger scale in different settings and populations, such as upper extremity amputees. The future of client-centered rehabilitation stands to benefit from the insights gained through this development of evidence-based interventions and programs for amputee populations.

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