E-Poster

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Is prosthesis Evaluation Checklist (PEC) Use Beneficial For Systematic Assessment of Lower Limb Prosthesis Satisfaction?

Topic: Prosthetics and Orthotics

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BACKGROUND

Prosthesis users' satisfaction is a primary goal in lower limb amputee care and defined as: the patient's subjective and emotional evaluation of the prosthesis influenced by prosthesis appearance, properties, fit, and use, as well as aspects of the residual limb. Nonetheless, more than 50% of prosthesis users are dissatisfied with their prosthesis.

During prosthesis evaluation, the certified prosthetist orthotist (CPO) takes inventory of issues causing prosthesis user's dissatisfaction. However, this evaluation is often performed unsystematically.

We developed a prosthesis evaluation checklist (PEC), containing known factors influencing prosthesis satisfaction. Aims of this study were to systematically assess prosthesis user's satisfaction using the PEC and evaluate its value during CPO consultation.

METHODS

82 adult trans-tibial prosthesis users and 19 CPOs participated. PEC use was implemented in the regular CPO consultation procedure and evaluated. An open text section was available to note issues of dissatisfaction not included in the PEC. The cross-sectional study was performed in multiple prosthesis care facilities in the Netherlands.

RESULTS

200 sets of PEC and evaluation forms were distributed. 82 (41%) completed forms were assessed. 52 prosthesis users mentioned 93 specific problems as reasons for CPO consultation prior to prosthesis assessment with the PEC. 30 (32%) problems concerned factors mentioned in the PEC. Other reasons for consultation ranged from routine control visits to prosthesis maintenance issues. In total 126 problems were reported, mostly regarding socket fit (33%), of which 16% concerned movement of the residual limb in the socket. 52% of prosthesis users mentioned residual limb problems, mainly concerning local pressure points on the skin. 30 prosthesis users mentioned no issues or problems prior to consultation. However, during assessment with the PEC, 15 (50%) of these users were dissatisfied with one or more factors.

PEC-use evaluation scores were significantly higher than neutral regarding the PEC in helping CPOs gather more information and clarifying issues related to prosthesis user dissatisfaction. PEC-use made prosthesis users feel more understood by CPOs and they rated the quality of consultations with a 7 or higher (range 0-10, mean 8.8 (±0.9)).

CONCLUSION

PEC-use is beneficial in systematically identifying issues of lower limb prostheses dissatisfaction and improves quality of CPO consultations. In future developments, on-line completion of the PEC will be available prior to consultation, making information accessible for the CPO in preparing for prosthesis evaluation and improving workflow efficiency.

Statement of Disclosures

None

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