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BACKGROUND AND OBJECTIVE

With a prevalence of 2-3%, psoriasis is one of the most frequent skin diseases worldwide. To define therapeutic benefit from the patient’s point of view, patient-relevant outcomes can be subjectively weighted and aggregated.

The patient benefit index (PBI; fig. 1), a questionnaire for the evaluation of the patient-reported therapeutic benefit, already integrates a weighting of its quality of life dimensions by patients using a 5-step Likert scale ranging from 0 ("not important at all") to 4 ("very important"). However, a Likert scale does not allow the relative assessment of different items. To close this gap, the analytic hierarchy process (AHP), which offers the elicitation of relative important scores, was used in the current survey.

METHODS I

For the presented comparison of methods to weight patient-relevant outcomes, patients ≥18 years at the beginning of a new therapy were included in the survey. Those patients completed both methods (Likert scales and AHP) in cross-section.

In the analytic hierarchy process, a multi-criteria decision problem is broken down into criteria and their subcriteria, which correspond with therapeutic outcomes. Those criteria will be structured into a hierarchy (fig. 2). Then, respondents are asked to evaluate in pairwise comparisons at each hierarchy level how many times more important one criterion or sub-criterion is to them as compared to another one. Judgements are provided on a 9-point valuation scale ranging from "equally important" (1) to "extremely more important" (9) (fig. 3).

For implementation of the survey, patient-relevant treatment needs (fig. 2) listed in the PBI were transferred to an AHP questionnaire (fig. 3).

RESULTS

Interim results of about 100 psoriasis patients (46.8 ± 14.4 years; 58% female) indicate that the AHP was feasible for the majority of enrolled patients (tab. 1). However, 45 of the patients did not meet the established threshold of 0.2 (≤ limit of acceptable transitivity according to Methods II). The comparison of 55 patients (consistency ratio <0.2) showed that patients rate the dimensions improvement in physical and in social functioning most important in both methods (AHP and Likert scale of PBI) followed by the improvement of psychological well-being. The rank order differ according to tab. 2.

CONCLUSION AND OUTLOOK

Unlike the PBI, AHP allows the identification of relative important scores. However, it can be noticed that nearly half of the patients provided inconsistent judgements at the criteria level of the presented AHP. This might rise from the following facts:

- Due to the number of treatment outcomes the patients must provide too many comparisons.
- Treatment outcomes in pairwise comparisons cannot be clearly distinguished.
- Patients did not understand the methodology of the AHP approach.

Qualitative interviews are planned to evaluate the actual reasons for observed inconsistencies. In this context, it should be noted that comparable studies show similar percentages of inconsistent judgements, which may contribute to understand the reasons.

Literature: