Burden of Disease Analysis of Psoriatic Arthritis in Hungary

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AIM

• This study aimed to assess the direct non-medical, indirect and non-reimbursed health services costs of PsA in Hungary and to obtain an overview of patients' status, demographics, morbidity, and working capacity.

BACKGROUND

Psoriatic arthritis (PsA) is a chronic inflammatory arthritis associated with psoriasis. PsA is a very heterogeneous disease, characterized by asymmetrical peripheral (oligoarticular or polyarticular) joint inflammation and/or axial involvement (sacroiliitis, spondylitis).1

Psoriasis affects 1–2% of the population, with PsA being prevalent in 0.1% of this group. In Hungary, this corresponds to around 10,000–20,000 patients with PsA. The average prevalence of PsA is 0.07%.2

Like other autoimmune inflammatory diseases, the course of PsA involves the individual burden to patients and ties up many social resources. It leads to a decline in social engagement and the loss of work ability, generating significant indirect costs.

METHODS

Method of data collection

Between January and March 2014, a questionnaire survey was conducted among patients with PsA.

Questions addressed the disease burden of PsA, such as an axilla, reduced working capacity, disability, non-reimbursed health services, need for assistance to perform daily activities, as well as patient demographics and disease characteristics.

Questionnaires were transmitted to patients by the relevant patient organizations of PsA and were filed voluntarily and anonymously.

Responses were recorded on Medley (a portal developed by Healthcare Consulting Ltd.), and R statistical software and Microsoft Excel were used for data processing and evaluation.

The survey results are presented in aggregate form only.

Method of cost calculation

During the analysis the direct non-medical, indirect costs and the costs of non-reimbursed health services were determined. The determination of direct medical cost was not the subject of this study.

The direct non-medical costs included the cost of traveling (ambulance transport, other traveling costs and informal care help with self-care and traveling).

The indirect costs included lost wages due to disability and reduced working ability (sick leave, reduced working capacity and disability pension).

The unit costs of each examined cost type were derived (Figure 1) (oligoarticular or polyarticular) joint inflammation and/or associated with psoriasis.

Psoriatic arthritis (PsA) is a chronic inflammatory arthritis (Figure 2). The average prevalence of PsA is 0.07%.

Psoriasis affects 1–2% of the population, with PsA being prevalent in 10% of this group. In Hungary this corresponds to around 10,000–20,000 patients with PsA. The average prevalence of PsA is 0.07%.2

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RESULTS

Patient demographics and disease characteristics

149 patients completed the questionnaires, of which 57% were women. Mean age was 54 years (Standard Deviation (SD): 14 years) and average disease duration was 13 years (SD: 15 years).

At primary diagnosis of PsA, 79% of patients had a full-time job, 4% had a part-time job and only 1.5% received disability pension.

At time of survey, only 51% of patients worked full-time, 4.5% part-time and the proportion of disability pensioners increased to 8.5%.

Cost

Average annual total cost was calculated by summing the direct non-medical, indirect and non-reimbursed services costs.

Cost calculation results showed that the average annual total cost per PsA patient was 3,842€ (SD: 5,116€).

Within this average annual direct non-medical cost was approximately 1,275€ (2,486.4€; 141 patients) and average annual indirect cost per patient was approximately 2,567€.

Lost wages due to disability pension generated the highest average annual indirect cost per patient (2,734€; SD: 4,597€; 119 patients).

The distribution of different cost types, within direct non-medical and indirect costs is shown in Figure 2.

Subgroups

In the working-age population (31–62 years, 95 patients) the average annual direct non-medical cost was 4,843€, the average annual indirect cost was 4,597€.

In the 21–25 years: 6,724€; >26 years: 2,666€.

The average costs were higher in cases of longer disease duration with worsening of the condition (0–5 years: 2,640€; 6–10 years: 3,596€; 11–15 years: 4,321€; 16–20 years: 4,994€; 21–25 years: 6,174€; >25 years: 2,650€).

During the survey the concurrence of psoriasis in PsA patients was also examined. The respondents classified approximately 15% of patients as having psoriasis in addition to PsA.

During the average 17-year disease duration, one third of patients became disabled due to PsA. Generalizing the results, this means that 3.83% of the Hungarian population suffers from PsA.

Greater extent of skin symptoms (≤15% of body surface area affected) (BSA≤15%) 75% of patients.

No skin symptoms: 11% of patients.

Limited extent of skin symptoms (<15% of body surface area affected) (BSA<15) Without skin involvement.

With worsening of the condition (0–5 years: 2,640€; 6–10 years: 3,596€; 11–15 years: 4,321€; 16–20 years: 4,994€; 21–25 years: 6,174€; >25 years: 2,650€).

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The average costs were determined for these patient groups. The results showed that patients with greater extent of skin symptoms generated higher costs suggesting an increased burden of disease for these patients (Figure 3).

CONCLUSIONS

PsA is a progressive chronic disease which leads to continuous deterioration of health status and permanent disability.

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References


Figure 1. Distribution of patients by employment status at time of diagnosis and time of survey

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>At the time of diagnosis</th>
<th>At the time of survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time job</td>
<td>80%</td>
<td>64%</td>
</tr>
<tr>
<td>Part-time job</td>
<td>10%</td>
<td>18%</td>
</tr>
<tr>
<td>Pensioner</td>
<td>7%</td>
<td>12%</td>
</tr>
<tr>
<td>Student</td>
<td>3%</td>
<td>4%</td>
</tr>
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Figure 2. Distribution of different cost types

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<th>Cost Type</th>
<th>Average Cost (€)</th>
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Figure 3. Average costs by extent of skin involvement

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<th>Skin Involvement</th>
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<td>BSIA≥15</td>
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