Successful communication is a prerequisite for a trusting doctor–patient relationship (1). In the paternalistic model, which corresponds to the traditional view of the doctor–patient relationship—and which has remained unchallenged for centuries—the doctor makes decisions without taking the patient’s interests into account (2). In contrast, the service model assumes that the patient already knows their goals and only needs information from the doctor in order to make their own decisions. In the 1970s, the concept of the partnership model or shared decision-making was mentioned for the first time in one of the initial works (3). However, the term did not systematically establish itself in the specialist literature until the mid-to-late 1990s (1). The present study examines the extent to which patient preferences in the doctor–patient relationship have changed from 1996/1997 to 2018. This period includes a drastic change in the use of information technology in our society. Has a paradigm shift occurred with respect to patient preference for symmetrically shared decision-making (for example, “When I visit a doctor, I want him/her to discuss all medical measures with me.”) and psychological support?

Methods

Samples

A chronologically older sample from 1996/1997 comprises 350 subjects (Table), with a median age of 50 years. Of the study participants, 199 were female and 142 [40.6%] were male, and 9 [2.8%] did not state their sex. At the time of the survey, the test persons were receiving general medical treatment. This data set was collected as part of the working group of the Center for General Scientific Further Education (ZAWiW, Zentrum für allgemeine wissenschaftliche Weiterbildung) (4).

The current sub-sample (2018) comprises 324 patients (median, 52 years old; 167 women and 157 men [48.5%]); the questionnaires were distributed in medical practices. Patients with severe cognitive impairment and under age patients were excluded from the study in both samples.

Design to record patient expectations

The instrument of the present study is part of the study design on the doctor–patient relationship that was developed as part of the doctor-patient relationship working group (4). The present version of the instrument for the operationalization of patient expectations consists of four categories (“desire for a symmetrical doctor-patient relationship”, “uncertainty about doctors and fear of treatment”, “psychological support”, and “desire for a formal doctor-patient relationship”) and comprises a total of 19 questions, scaled 0–4. The questionnaire begins in a general and abstract way: “When I visit a doctor, I would like to. . . ”. The complete questionnaire (including quality criteria) can be requested from Prof. Vladimir Hrabal.

### TABLE

<table>
<thead>
<tr>
<th>Sample</th>
<th>N</th>
<th>Category: S</th>
<th>Category: U</th>
<th>Category: PS</th>
<th>Category: FR</th>
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<tbody>
<tr>
<td>1996–1997</td>
<td>350</td>
<td>Mean: 2.625</td>
<td>Mean: 2.297</td>
<td>1.967</td>
<td>3.095</td>
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<tr>
<td></td>
<td></td>
<td>Median (Q25; Q75): 2.6 (2.2; 3.2)</td>
<td>Median (Q25; Q75): 2.2 (1.9; 2.8)</td>
<td>2.0 (1.4; 2.4)</td>
<td>3.25 (2.75; 3.75)</td>
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<td>Rank: 469.80</td>
<td>241.88</td>
<td>452.84</td>
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<tr>
<td></td>
<td></td>
<td>Location deviation: 0.663</td>
<td>Location deviation: 0.649</td>
<td>0.698</td>
<td>0.779</td>
</tr>
<tr>
<td>2018</td>
<td>324</td>
<td>Mean: 3.137</td>
<td>Mean: 0.871</td>
<td>2.791</td>
<td>1.635</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Median (Q25; Q75): 3.2 (2.8; 3.6)</td>
<td>Median (Q25; Q75): 0.8 (0.4; 1.2)</td>
<td>2.8 (2.2; 3.4)</td>
<td>1.75 (1.0; 2.25)</td>
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<td>Rank: 180.98</td>
<td>425.07</td>
<td>200.65</td>
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<tr>
<td></td>
<td></td>
<td>Location deviation: 0.668</td>
<td>Location deviation: 0.646</td>
<td>0.850</td>
<td>0.930</td>
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<tr>
<td></td>
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<td>p: 0.001</td>
<td>p: 0.001</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>r*: 0.372</td>
<td>r*: 0.749</td>
<td>0.477</td>
<td>0.653</td>
</tr>
</tbody>
</table>

*Effect size r (0–1): r = 0.1 ≤ r < 0.3 low effect; r = 0.3 ≤ r < 0.5 medium effect; r ≥ 0.5 large effect. G25, quartile 25; G75, quartile 75.

Statistical analysis
The following calculation was carried out using SPSS 25 (IBM, USA). A non-parametric distribution of the sample was determined. A U test was calculated for the comparison between 1996/1997 and 2018, and the effect size “r” was determined ($r = z \div \sqrt{n}$), as recommended for non-parametric tests.

In addition, the influence of socio-demographic data (including practice affiliation, age, sex, education, and marital status) on the configuration of the year-on-year comparison was examined. The p-values (Table) were unaffected after a Bonferroni correction ($p \times 4$) was applied.

Results
The Table shows the results of the comparison of the items and categories of the two samples. There was a significant increase in the scores obtained in 2018 as compared to that for 1996/1997 for the categories “desire for a symmetrical doctor–patient relationship” ($r = 0.372$; medium effect size) and “psychological support” ($r = 0.477$; medium effect size). In contrast, there was a significant decrease in the category scores for the categories “uncertainty about doctors and fear of treatment” ($r = 0.749$; large effect size) and “desire for a formal doctor–patient relationship” ($r = 0.653$; large effect size).

The socio-demographic data definitely had no influence on the direction of the effects with respect to the year comparisons of 1996/1997 vs. 2018.

Discussion
A comparison of patient preferences in the doctor—patient relationship over the last 20+ years very clearly shows that the patients rate the category “desire for a symmetrical doctor–patient relationship” as much less relevant, and that the uncertainty towards doctors and the fear of treatment have significantly decreased. Furthermore, this study reveals a significant increase in the patient’s desire for a symmetrical doctor–patient relationship, with shared decision-making and simultaneous psychological support; taking this into account is likely to be decisive for daily practices. Indeed, over the past two decades, there has been a clear change towards a doctor–patient relationship based on a partnership—also from the point of view of the doctors (5).

In addition, the essential area of the information society has been added: patients can obtain more information about their illness, especially via the internet (5), which could have led to a significantly increased self-confidence of the patient in the doctor–patient relationship; this could also explain the observed increase in the need for psychological support.

In our opinion, the simultaneous patient preferences for symmetry of the relationship along with psychological support increases the demands on doctors. This may increase the risk of being overwhelmed, which should be investigated in further studies.

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Conflict of Interest Statement
The authors declare that no conflict of interest exists.

References

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