

fracture when physical testing was not possible. The PRWE was more responsive than the DASH, and these two were more responsive than the SF-36, which is a generic quality of life instrument. The PRWE is a specific wrist questionnaire and the DASH is an upper limb questionnaire. Another analysis came to similar conclusions [17]. In our study, the specific IOF instrument was more responsive than the generic EQ-5D and the Qualeffo-41, which is a specific vertebral fracture questionnaire.

Strengths of our study include the design of our questionnaire after focus group interviews, the comparison with a generic instrument generating utility values and the longitudinal multicenter design. A limitation of our study is that the follow-up time points were not always strictly adhered at. However, when restricting the analysis to the subjects whose follow-up was within a strict time frame (e.g., 5–7 weeks for the 6-week time point), this did not change the results. Another weakness of our study is the fact that we did not compare our questionnaire with existing instruments such as DASH and PRWE. In addition, physical assessments such as handgrip strength were not done in our study.

In conclusion, the IOF-wrist fracture questionnaire appears to be a reliable and responsive quality of life questionnaire, showing sufficient repeatability, high internal consistency and adequate sensitivity to change. It is ready for use in patients with wrist fracture, preferably in combination with Qualeffo-41 for overall evaluation of quality of life with regard to osteoporosis.

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Conflicts of interest None.

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Appendix

IOF-wrist fracture questionnaire

Quality of life questionnaire for patients with wrist fracture.

All questions regard the situation in the last week, except question 12.

All questions should be answered irrespective of the side of fracture and the side of dominance.

- | | |
|---|---|
| 1) Do you still have pain in the fractured forearm or hand? | <input type="radio"/> not at all
<input type="radio"/> a little
<input type="radio"/> moderately
<input type="radio"/> quite a lot
<input type="radio"/> very much |
| 2) Do you have numbness or "pins and needles" in the fractured forearm or hand? | <input type="radio"/> not at all
<input type="radio"/> a little
<input type="radio"/> moderately
<input type="radio"/> quite a lot
<input type="radio"/> very much |
| 3) Do you have stiffness in the fractured forearm or hand? | <input type="radio"/> not at all
<input type="radio"/> a little
<input type="radio"/> moderately
<input type="radio"/> quite a lot
<input type="radio"/> very much |
| 4) Are you disturbed by the deformity of your fractured forearm? | <input type="radio"/> not at all
<input type="radio"/> a little
<input type="radio"/> moderately
<input type="radio"/> quite a lot
<input type="radio"/> very much |
| 5) Can you wash or blow dry your hair? | <input type="radio"/> without difficulty
<input type="radio"/> with a little difficulty
<input type="radio"/> with moderate difficulty
<input type="radio"/> with great difficulty
<input type="radio"/> impossible |

- 6) Can you turn a door key or unscrew the lid of a jar? without difficulty with a little difficulty with moderate difficulty with great difficulty impossible
- 7) Do you have problems with doing your work or homework? no difficulty a little difficulty moderate difficulty may need some help impossible
- 8) Do you have problems with typing or writing? no difficulty a little difficulty moderate difficulty great difficulty impossible
- 9) Can you use private transport e.g. drive a car or use a bicycle? no difficulty a little difficulty moderate difficulty great difficulty impossible
- 10) To what extent has your fractured forearm interfered with your activities during the last week? not at all a little moderately quite a lot very much
- 11) Do you need help from your friends or relatives because of your forearm fracture? never 1 day per week or less 2-3 days per week 4-6 days per week every day
- 12) Would you say that your quality of life has declined during the last three months because of your forearm fracture? not at all a little moderately quite a lot very much

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