Table 1 General information of 116 patients with gout

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Category | Number of patients (N) | Constituent ratio  (%) | Category | Number of patients (N) | Constituent ratio  (%) |
| **Sex** |  |  | **Nationality** |  |  |
| Male | 110 | 94.8 | Han | 116 | 100 |
| Female | 6 | 5.2 | Others | 0 | 0 |
| **Educational level** |  |  | **Occupation** |  |  |
| Primary school | 8 | 6.9 | Worker | 33 | 28.4 |
| Junior high school | 35 | 30.2 | Farmer | 26 | 22.4 |
| High school or technical secondary school | 39 | 33.6 | Teacher | 6 | 5.2 |
| Junior college | 19 | 16.4 | Cadre | 9 | 7.8 |
|  |  |  | Others | 29 | 25.0 |
| **Health insurance** |  |  | **Household financial status** |  |  |
| Self-paying | 109 | 94.0 | Poor | 8 | 6.9 |
| Social health insurance | 7 | 6.0 | Fair | 99 | 85.3 |
| Commercial health insurance | 0 | 0 | Good | 9 | 7.8 |
| Rural Cooperative health insurance | 0 | 0 |  |  |  |
| **Marital status** |  |  | **Clinical stage** |  |  |
| Unmarried | 19 | 16.4 | Intercritical stage (with tophi) | 2 | 1.7 |
| Married | 95 | 81.9 | Acute stage | 86 | 74.10 |
| Divorced | 1 | 0.9 | Acute stage (with tophi) | 23 | 19.80 |
| Widowed | 1 | 0.9 | Chronic stage (with tophi) | 5 | 4.30 |
| **Age** | 46.81 ± 16.38 |  |  |  |  |

Table 2 Internal consistency reliability of the QLICD-GO

|  |  |  |  |
| --- | --- | --- | --- |
| Domain | Number of items | Cronbach’s α coefficient | Split-half reliability |
| Specific domain (SPD) | 12 | 0.81 | 0.65 |
| General domain (GED) | 28 | 0.84 | 0.73 |
| Physical domain (PHD) | 9 | 0.49 | 0.33 |
| Psychological domain (PSD) | 11 | 0.79 | 0.76 |
| Social domain (SOD) | 8 | 0.77 | 0.72 |
| Total (TOT) | 40 | 0.55 | 0.89 |

Table 3 Specific module factors and factor loading coefficients for items (N = 116)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Brief description | Principal component  (variance contribution %) | | |
| 1 (34.79%) | 2 (11.89%) | 3 (10.86%) |
| TAR 1 | Acute joint pain | 0.176 | 0.727 | 0.237 |
| TAR 2 | Joint redness and swelling | 0.148 | 0.870 | 0.064 |
| TAR 3 | Pyrexia | 0.230 | 0.550 | −0.183 |
| TAR 4 | Recurrent articular gout | 0.241 | 0.650 | 0.392 |
| TAR 5 | Tophi | −0.283 | 0.213 | 0.602 |
| TAR 6 | Nocturia | 0.157 | 0.160 | 0.770 |
| TAR 7 | Impact of lifestyle changes | 0.602 | 0.168 | −0.017 |
| TAR 8 | Drug-induced diarrhea | 0.414 | −0.089 | 0.431 |
| TAR 9 | Drug-induced rash and pruritus | 0.480 | −0.145 | 0.462 |
| TAR 10 | Anxiety about physical disability | 0.756 | 0.313 | 0.121 |
| TAR 11 | Anxiety about gout being passed on to your offspring | 0.787 | 0.279 | 0.039 |
| TAR 12 | Anxiety about long-term drug-related side effects | 0.788 | 0.351 | 0.057 |

**Table 4 Correlations between QLICD-GO items and their own domains**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Physical function | Psychological function | Social function | Specific module |
| GPH1 | 0.534\*\* | 0.175 | 0.188\* | 0.137 |
| GPH2 | 0.332\*\* | 0.031 | 0.129 | 0.161 |
| GPH3 | 0.431\*\* | 0.271\*\* | 0.083\* | 0.218\* |
| GPH4 | 0.436\*\* | 0.012 | 0.263\*\* | 0.279\*\* |
| GPH5 | 0.133 | 0.285\*\* | 0.145 | 0.407\*\* |
| GPH6 | 0.494\*\* | 0.067 | 0.027 | 0.223\* |
| GPH7 | 0.573\*\* | 0.007 | 0.014 | 0.354\*\* |
| GPH8 | 0.514\*\* | 0.025 | 0.057 | 0.230\* |
| GPH9 | 0.318\*\* | 0.356\*\* | 0.054 | 0.226\* |
| GPH10 | 0.537\*\* | 0.396\*\* | 0.208\* | 0.407\*\* |
| GPS1 | 0.337\*\* | 0.085 | 0.289\*\* | 0.311\*\* |
| GPS2 | 0.167 | 0.402\*\* | 0.032 | 0.163 |
| GPS3 | 0.258\*\* | 0.073 | 0.201\* | 0.156 |
| GPS4 | 0.237\* | 0.560\*\* | 0.118 | 0.260\*\* |
| GPS5 | 0.091 | 0.643\*\* | 0.105 | 0.378\*\* |
| GPS6 | 0.041 | 0.633\*\* | 0.192 | 0.492\*\* |
| GPS7 | 0.084 | 0.742\*\* | 0.127\*\* | 0.397\*\* |
| GPS8 | 0.046 | 0.612\*\* | 0.074 | 0.360\*\* |
| GPS9 | 0.146 | 0.671\*\* | 0.174 | 0.477\*\* |
| GPS10 | 0.260\*\* | 0.041 | 0.374\*\* | 0.234\* |
| GPS11 | 0.115 | 0.555\*\* | 0.016 | 0.363\*\* |
| GSO1 | 0.214\*\* | 0082 | 0.605\*\* | 0.220\* |
| GSO2 | 0.151 | 0.095 | 0.492\*\* | 0.169 |
| GSO3 | 0.195\* | 0.147 | 0.482\*\* | 0.052 |
| GSO4 | 0.084 | 0.005 | 0.671\*\* | 0.036 |
| GSO5 | 0.109 | 0.020 | 0.657\*\* | 0.080 |
| GSO6 | 0.027 | 0.385\*\* | 0.132 | 0.368\*\* |
| GSO7 | 0.246\*\* | 0.376\*\* | 0.350\*\* | 0.460\*\* |
| GSO8 | 0.183\* | 0.076 | 0.569\*\* | 0.125 |
| TGO1 | 0.138 | 0.320\*\* | 0.216\*\* | 0.667\*\* |
| TGO2 | 0.189\* | 0.246\*\* | 0.122 | 0.455\*\* |
| TGO3 | 0.177 | 0.290\*\* | 0.075 | 0.691\*\* |
| TGO4 | 0.067 | 0.043 | 0.162 | 0.125 |
| TGO5 | 0.105 | 0.239\*\* | 0.045 | 0.509\*\* |
| TGO6 | 0.049 | 0.319\*\* | 0.015 | 0.511\*\* |
| TGO7 | 0.024 | 0.127 | 0.091 | 0.381\*\* |
| TGO8 | 0.013 | 0.007\* | 0.241\* | 0.368\*\* |
| TGO9 | 0.028 | 0.425\*\* | 0.083 | 0.741\*\* |
| TGO10 | 0.020 | 0.358\*\* | 0.079 | 0.704\*\* |
| TGO11 | 0.008 | 0.402\*\* | 0.152 | 0.774\*\* |
| TGO12 | 0.098 | 0.194\* | 0.077 | 0.637\*\* |

Note: \*\*: *P* < 0.01, \*: *P* < 0.05

*GPH* Gout instrument physical function question, *GPS* Gout instrument psychological function question, *GSO* Gout instrument social function question, *TAR* Gout instrument targeted question

Table 5 Coefficients of correlation between domains of the QLICD-GO and those of the SF-36 instrument

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SF-36 | QLICD-GO | | | |
| PHD | PSD | SOD | SPD |
| Physical function (PF) | 0.520\*\* | 0.205\* | 0.289\*\* | 0.398\*\* |
| Role function (RF) | 0.356\*\* | 0.267\*\* | 0.317\*\* | 0.379\*\* |
| Bodily pain (BP) | 0.436\*\* | 0.298\*\* | 0.215\* | 0.390\*\* |
| General health (GH) | 0.255\*\* | 0.399\*\* | 0.406\*\* | 0.441\*\* |
| Vitality (VT) | 0.472\*\* | 0.387\*\* | 0.483\*\* | 0.542\*\* |
| Social function (SF) | 0.298\*\* | 0.363\*\* | 0.371\*\* | 0.426\*\* |
| Role emotional (RE) | 0.321\*\* | 0.219\* | 0.318\*\* | 0.342\*\* |
| Mental health (MH) | 0.420\*\* | 0.447\*\* | 0.485\*\* | 0.554\*\* |

Note: \**P* < 0.05, \*\**P* < 0.01

Table 6 Responsiveness of the QLICD-GO

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Domain/Aspect | Pretreatment | Posttreatment | Paired *t*-test | | SRM |
| *t* | *P* |
| **Physical function (PHD)** | **55.41±12.82** | **71.92±11.51** | −15.98 | **<0.001** | **1.48** |
| Basic physical function (BPF) | 59.09±15.04 | 67.16±13.32 | −6.82 | <0.001 | 0.63 |
| Independence (IND) | 59.34±20.24 | 83.69±18.00 | −12.32 | <0.001 | 1.14 |
| Energy and discomfort (EAD) | 40.30±20.86 | 66.16±16.49 | −13.37 | <0.001 | 1.24 |
| **Psychological function (PSD)** | **61.79±16.23** | **68.03±14.08** | −5.52 | **<0.001** | **0.51** |
| Cognition (COG) | 63.69±18.50 | 69.61±18.81 | −3.28 | 0.001 | 0.30 |
| Emotion (EMO) | 58.74±19.67 | 65.73±16.37 | −5.42 | <0.001 | 0.50 |
| Will (WIL) | 74.35±23.65 | 77.80±21.31 | −1.91 | 0.059 | 0.18 |
| Personality (PER) | 66.81±25.91 | 71.12±20.75 | −1.95 | 0.054 | 0.18 |
| **Social function (SOD)** | **75.54±14.91** | **78.29±12.51** | −3.03 | **0.003** | **0.28** |
| Interpersonal communication (INC) | 81.47±15.85 | 85.42±13.04 | −4.03 | <0.001 | 0.37 |
| Social support (SSS) | 76.22±17.66 | 76.29±14.44 | −0.05 | 0.958 | 0.00 |
| Social role (SOR) | 65.63±22.35 | 70.58±19.03 | −2.84 | 0.005 | 0.26 |
| **General domain (GED)** | **63.38±11.92** | **72.20±10.94** | −11.60 | **<0.001** | **1.08** |
| **Specific domain (SPD)** | **52.89±17.74** | **64.62±14.71** | −10.08 | **<0.001** | **0.94** |
| Symptoms and signs (SAS) | 48.78±19.23 | 74.21±15.88 | −15.28 | <0.001 | 1.42 |
| Drug-related side effects (DSE) | 77.59±21.84 | 71.98±22.64 | 2.92 | 0.004 | 0.27 |
| Psychological changes (PC) | 46.71±27.45 | 46.55±25.94 | 0.09 | 0.932 | 0.01 |
| **Total (TOT)** | **60.31±12.27** | **69.98±10.95** | −12.95 | **<0.001** | **1.20** |