

Table 5 Logistic univariate and multivariate analysis of the contribution of available determinants for hand disability in the subgroup (n=3906)

Determinants	Frequency (%)	R² in univariate analysis	Odds ratio (95% CI)	
			Univariate analysis	Multivariate model
Age (years) ≥70	30.8	0.033	2.7 (2.0 to 3.7)	2.2 (1.5 to 3.3)
Rheumatoid arthritis	2.8	0.032	6.5 (3.8 to 11.1)	2.5 (1.3 to 4.8)
Stroke	2.6	0.016	4.4 (2.4 to 8.0)	2.3 (1.0 to 5.6)
Female sex	58.3	0.046	3.7 (2.5 to 5.5)	2.3 (1.4 to 3.7)
Hand pain	16.8	0.082	5.2 (3.7 to 7.1)	3.8 (2.6 to 5.7)
Parkinson's disease	0.4	0.031	40.3 (12.0 to 135.1)	59.4 (15.1 to 234.6)
Pain in neck/shoulder	21.9	0.039	3.0 (2.2 to 4.2)	1.8 (1.2- 2.6)
Manual occupation	29.4	0.017	2.1 (1.5 to 2.9)	1.7 (1.2- 2.5)
Thyroid disease *	11.5	0.003	1.6 (1.0 to 2.5)	1.0 (0.6 to 1.8)
Diabetes	4.7	0.004	1.9 (1.1 to 3.4)	1.5 (0.7 to 3.1)
History of fracture (hand/wrist)	9.3	0.001	1.4 (0.8 to 2.4)	1.1 (0.6 to 2.0)
Osteoarthritis in any joint	24.7	0.034	2.8 (2.0 to 3.8)	1.5 (1.0 to 2.2)
BMI ≥ 30 kg/m ²	13.8	0.000	1.0 (0.6 to 1.6)	0.7 (0.4 to 1.6)
Gout	0.8	0.000	0.8 (0.1 to 5.9)	–
Radiological hand OA	28.3	0.019	2.1 (1.5 to 2.9)	1.4 (0.9 to 2.0)

Total explained variance of hand disability with all determinants in the multivariate logistic regression model was 21.2 %.

* Thyroid disease consists of hypothyroidism, hyperthyroidism, or other thyroid disease.

