

Additional file 1: Multimorbidity patterns by gender* – results from tetrachoric factor analyses§

	Females	Males
Cardiovascular and metabolic disorders	Eigenvalue: 6,34 Associated diagnosis groups (factor loadings): - Hypertension (.71) - Purine/pyrimidine metabolism disorders /Gout (.60) - Diabetes mellitus (.55) - Obesity (.52) - Renal insufficiency (.47) - Lipid metabolism disorders (.45) - Liver diseases (.39) - Chronic ischemic heart diseases (.38) - Atherosclerosis/PAOD (.35) - Cardiac valve disorders (.31) - Chronic cholecystitis/Gallstones (.29) - Cardiac arrhythmias (.28) - <i>Urinary tract calculi (.28)</i> - Cardiac insufficiency (.26)	Eigenvalue: 1,96 Associated diagnosis groups (factor loadings): - Hypertension (.70) - Diabetes mellitus (.59) - Renal insufficiency (.55) - Chronic ischemic heart diseases (.53) - Purine/pyrimidine metabolism disorders /Gout (.50) - Atherosclerosis/PAOD (.50) - Lipid metabolism disorders (.49) - Obesity (.47) - Cardiac insufficiency (.46) - Liver diseases (.40) - Cardiac valve disorders (.37) - Cardiac arrhythmias (.37) - <i>Tobacco abuse (.32)</i> - <i>Cerebral ischemia/Chronic stroke (.30)</i> - <i>Anemias (.30)</i> - <i>Neuropathies (.27)</i> - Chronic cholecystitis/Gallstones (.25)
Anxiety, depression, somatoform disorders and pain	Eigenvalue: 2,37 Associated diagnosis groups (factor loadings): - Chronic low back pain (.61) - Hypotension (.58) - Migraine/Chronic headache (.53) - <i>Noninflammatory gynecological problems (.52)</i> - Somatoform disorders (.51) - Hemorrhoids (.45) - Depression (.44) - Anxiety (.39) - Allergies (.38) - Osteoporosis (.37) - Chronic gastritis/GERD (.36) - Joint arthrosis (.35) - Intestinal diverticulosis (.32) - Insomnia (.31) - Lower limb varicosis (.31) - Dizziness (.30) - <i>Rheumatoid arthritis /Chronic Polyarthritis (.29)</i> - Thyroid dysfunction (.27) - Asthma/COPD (.27)	Eigenvalue: 7,14 Associated diagnosis groups (factor loadings): - Chronic low back pain (.66) - Hypotension (.54) - Somatoform disorders (.58) - Hemorrhoids (.51) - Migraine/Chronic headache (.49) - Depression (.47) - Anxiety (.47) - Joint arthrosis (.44) - <i>Prostatic hyperplasia (.43)</i> - Allergies (.41) - Intestinal diverticulosis (.40) - Chronic gastritis/GERD (.40) - Insomnia (.37) - Dizziness (.37) - <i>Sexual dysfunction (.35)</i> - Osteoporosis (.35) - Lower limb varicosis (.33) - <i>Urinary tract calculi (.30)</i> - Thyroid dysfunction (.27) - Asthma/COPD (.27) - <i>Severe hearing loss (.27)</i>
Neuropsychiatric disorders	Eigenvalue: 1,71 Associated diagnosis groups (factor loadings): - Dementias (.78) - Parkinson's disease (.56) - Cardiac insufficiency (.51) - Urinary incontinence (.49) - Cerebral ischemia/Chronic stroke (.43) - Depression (.36) - <i>Renal insufficiency (.33)</i> - <i>Chronic ischemic heart diseases (.31)</i> - <i>Dizziness (.30)</i> - <i>Anemias (.29)</i> - <i>Atherosclerosis/PAOD (.25)</i>	Eigenvalue: 1,75 Associated diagnosis groups (factor loadings): - Dementias (.70) - Parkinson's disease (.60) - Urinary incontinence (.55) - Cerebral ischemia/Chronic stroke (.38) - Depression (.33) - Cardiac insufficiency (.31)

* Gender-specific associations of diagnosis groups with a pattern are presented in italic letters.

§ Factor loadings < .25 have been omitted. PAOD: peripheral arterial occlusive disease;

COPD: chronic obstructive pulmonary disease; GERD: gastroesophageal reflux disease