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Prevalence and socio-economic impact of chronic pain in Portugal

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Chronic pain has been proposed as a disease in its own right and a major public health problem, with socio-economic consequences comparable to cardiovascular diseases or cancer. In order to design policies aiming at reducing the burden of chronic pain, it is essential to know its prevalence, management and socio-economic impact. Since no data were available regarding the situation in Portugal, an epidemiological study was undertaken using the method of Computer Assisted Telephone Interview - CATI. Telephone numbers were selected by Mitofsky-Waksberg two stage random digit dialling sampling method, defining a random sample of participants nationwide, resulting in a sample of 5,094 validated interviews of individuals ≥ 18 years old.

Chronic pain prevalence, as defined by pain present for at least 6 months, several times per month and present during the last month, was estimated to be 29.6% (28.2 - 30.9, 95% CI). If a pain intensity criterion was used (moderate or severe; ≥ 5 on a 0-10 numeric rating scale - NRS) the prevalence estimate was 14.3% (13.3 - 15.4, 95% CI). As expected, the prevalence was higher in females and increased with age, with a peak prevalence of

moderate or severe chronic pain in 38.5% females belonging to the age group of 70-74 years (31.4 - 46.1, 95% CI).

A more in-depth analysis was performed in those respondents reporting pain for at least 6 months and present during the last month, corresponding to 35.9% of our sample (n=2,210). Median pain duration was 10 years (5 - 20y, P25 - P75) and median average pain intensity was 5 on a 0-10 NRS (4 - 6, P25 - P75). The main location of pain was the lower back, followed by the lower limbs and neck. Osteoarthritis was the main cause of pain (42%) followed by intervertebral disk disorders (21%) and osteoporosis (15%). Pain management was carried out by family physicians of the public sector in most cases (61%), with a mean of 4.5 visits/patient/year (VPY). A specialist (secondary care) was consulted by 22% of the patients (4.3 VPY), only 1% consulted a pain specialist (4.8 VPY). A large majority of the respondents (85%) were being treated for their pain, but one in five patients reported to be dissatisfied or very dissatisfied with their pain management, attributing it to lack of efficacy of the treatment or holding their physician responsible for it. Non-steroidal anti-inflammatory drugs were used by approximately 41% of the respondents, 26% used analgesics and antipyretics and only 2% took opioids. Approximately 27% reported that they felt pain frequently or all the time while taking the prescribed drugs.

In a third phase of the study, 300 patients were interviewed to evaluate the socio-economic impact of their chronic pain. Of these, 45% reported that pain interfered with their work, 9% had lost their job and 18% had early retirement directly due to their pain condition. On average, each patient had 14 days/year of sick leave. Taking into account the active population of Portugal, its average salary and the welfare costs associated with sick leave, an annual cost of approximately € 250 million was estimated. Moreover, it was estimated that each patient spent on average approximately € 70/month on direct and indirect costs associated with their pain, representing up to 35% of their family budget.

In conclusion, chronic pain affects a sizeable proportion of the Portuguese adult population and its management is far from being optimal. The high costs associated with chronic pain could be substantially reduced by investing human and financial resources to increase its adequate management.