Prevalence of chronic diseases in older Palestinian adults and common pharmacological interventions: a cross-sectional study

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Abstract

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Editorial note: the Lancet
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Background Older people (aged 60 years and older) are more susceptible than younger people to multiple medical disorders and are therefore more frequently exposed to polypharmacy. We investigated prevalence of chronic diseases and medical conditions, medications used, and associated sociodemographic factors among older adults of the Palestinian population.

Methods A cross-sectional study was done between June, 2013, and January, 2014. The study population was Palestinians aged 60 years and older living in the West Bank and East Jerusalem. Study participants were selected in a stratified random manner. The sample was selected from all governorates (strata) according to the size of the population of each governate on the basis of census data from the Palestinian Central Bureau of Statistics. The research team visited and interviewed older residents in their houses. Questionnaire items were explained in informal language to participants by the interviewer, to ensure complete understanding, and answers were recorded by the interviewer. Informed written consent was obtained from each participant. The study design and protocols were revised and approved by the Research Ethics Committee at Al-Quds University.

Findings 1574 older Palestinian adults were invited to participate, of whom 1192 (76%) enlisted. The mean age was $70 \cdot 3$ years (SD $8 \cdot 58$, range 60-110 years). 55% (659 of 1192) were female and 45% (533) were male. The majority (84%; 996) were non-workers or retired; monthly income for 78% of participants (930) was less than 2500 NIS, which falls in the low-income group. More participants (78%; 934) had governmental health insurance than had private insurance (8%; 89) or no insurance (14%; 169). 40 chronic diseases and conditions were reported. The mean number of diseases reported per participant was $2 \cdot 33$ (SD $1 \cdot 68$, range 0-11). Cardiovascular, endocrine, and musculoskeletal conditions were the most frequently reported. 66% of participants (787 of 1192) reported at least one cardiovascular condition, 40% (480) at least one endocrine condition, and 32% (385) at least one musculoskeletal condition. The most prevalent cardiovascular condition was hypertension, which affected 54% of participants (647); the most prevalent endocrine condition was diabetes (38 \cdot 2%, 455); and the most prevalent musculoskeletal condition was arthritis (13 \cdot 7%, 163). The total number of different types of medication (both prescribed and overthe-counter drugs) was 175. The mean number of medications per participant was $4 \cdot 54$ (SD $2 \cdot 83$), and the highest number of different medications being taken by one participant was 17. Commonly prescribed therapeutic agents were aspirin (prescribed to 48% of participants, 575 of 1192), angiotensin-converting-enzyme inhibitors (34%, 403), diuretics (34%, 409), metformin (27%, 323), paracetamol (23%, 270), and protein pump inhibitors (23%, 275).

Interpretation The findings provide insights into the most prevalent chronic diseases and conditions, as well as the most commonly used medications among older Palestinians. Cardiovascular, endocrine, and musculoskeletal conditions were the most prevalent diseases. Older Palestinians adults are subjected to polypharmacy, which should be assessed whenever they are evaluated for health problems, and drug interactions should be carefully checked. Physicians, pharmacists, health professionals, and health policymakers in Palestine should consider increasing citizens' health awareness and encourage healthy lifestyles to decrease the incidence of these diseases. In addition, intersectoral cooperation between the governmental and non-governmental organisations will be key in the fight against chronic diseases in older Palestinian adults.

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Contributors

AN, BW, and AA conceived and designed the study. AN, YA, IK, SAS, MS, AJ, MQ, EM, BSL, and WA collected data. AN and BW analysed data. AN, BW, and AA wrote the abstract. All authors have seen and approved the final version of the Abstract for publication.

Declaration of interests

We declare no competing interests.

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