

# PALESTINE

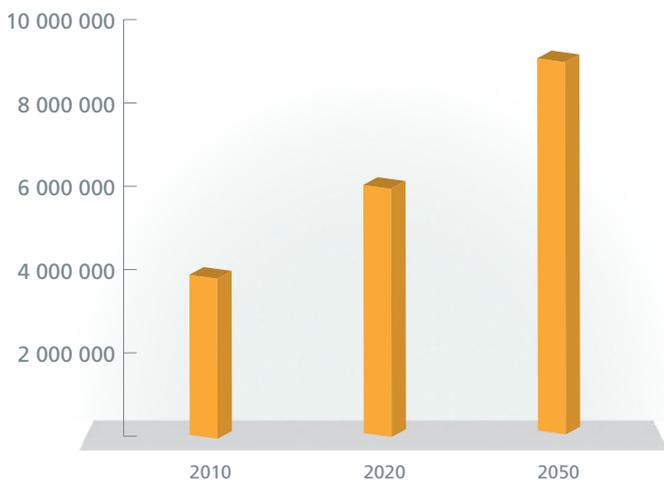
## OVERVIEW

Osteoporosis is not yet a health priority in Palestine. Basic epidemiological studies are lacking; additionally there is an absence of any statistical evidence regarding incidence of major osteoporotic fractures and a lack of government involvement in the prevention of osteoporosis. The Palestinian Osteoporosis Prevention Society (POPS) conducted a study on the prevalence of osteoporosis among postmenopausal women published in May 2010 in *Archives of Osteoporosis* and it was found that around 40% of postmenopausal women were affected. The poor socioeconomic status of the Palestinian population and the abundance of other health priorities have meant that osteoporosis has not achieved a high priority within the Ministry of Health's public health strategy. Many of the population have limited access to medication through the health care system, even though these drugs are available on the open market.

## KEY FINDINGS

Currently it is estimated that 4 million people live in Palestine: 9.2% are aged 50 or over (368 000) and 54% of this population are women (fig 1).

**FIGURE 1** Population projection for Palestine until 2050



## EPIDEMIOLOGY

More than 50% of the studied population were osteopenic at age 60-69 years (table 1 and 2).

**TABLE 1** Prevalence of postmenopausal osteoporosis/osteopenia at the lumbar spine, femoral neck and total hip among Palestinian women living in the West Bank region of Palestine.

SITE	OSTEOPOROSIS	OSTEOPENIA	NORMAL
Spinal	29.7%	40.4%	29.9%
Femoral neck	24%	47.9%	28.1%
Total hip	14%	46%	40%
At any site	40.6%	74%	50%
At all sites	8%	5.5%	16%

## Hip fracture

Direct hospital costs for hip fractures are USD 3500-4500.

## Vertebral fracture, other fragility fractures

No information available.

## DIAGNOSIS

In Palestine, there are 6 DXA machines and 2 quantitative ultrasound (QUS) machines. These diagnostic tools are available in urban centers only. The cost of a DXA exam is USD 25 and USD 7 for QUS assessment. The waiting time to access both exams is of a few days. These exams are not reimbursed by any government health plan and only some private insurance offer reimbursement.

## REIMBURSEMENT POLICY

No information available.

## CALCIUM AND VITAMIN D

Calcium and vitamin D supplement are available but not widely distributed. Foods fortified with calcium or vitamin D are available.

## PREVENTION, EDUCATION, LEVEL OF AWARENESS

Among the postmenopausal Palestinian women in the West Bank, the level of awareness of osteoporosis is associated with age, educational level, residency and the use of dietary supplements (calcium, vitamin D, and multivitamin) and milk consumption. Oestrogen replacement therapy is not linked to awareness, due to the fact that hormonal treatment is instituted based on clinical examination and evaluation.

Only about 12% of the studied postmenopausal women answered correctly at least 70% of questions that were included in the calculation of the knowledge score on osteoporosis. This low score is mostly due to several factors including:

- lack of adequate health education
- poor contact between subjects and health centres for women of postreproductive age
- absence of regular programmes for periodic health and clinical evaluation due to cultural beliefs (milk only for children, and doctors only for sick people)
- fairly large family sizes
- poor economic conditions

These findings point to the urgent need to raise the level of awareness about osteoporosis in the society and to recognize osteoporosis as one of the major health complications that requires immediate attention at both the official level and the public level.

However, education and prevention programs have been implemented with the support of the Ministry of Education and the Ministry of Health and guidelines for the management of osteoporosis are being developed in collaboration with the Ministry of Health.

## REFERENCE

Ref. Abd-Alhameed I, Saba E, Darwish HM (2010) Prevalence and awareness of osteoporosis among postmenopausal Palestinian women. Arch Osteoporos 5: 111-118

**TABLE 2** Osteoporosis/osteopenia at the lumbar spine, total hip and femoral neck in relation to age

	SITE	AGE (YEARS)				
		49	50-59	60-69	70-79	≥80
LUMBAR SPINE	OSTEOPOROSIS	-	19%	36%	45.2%	75%
	OSTEOPENIA	23.8%	41.7%	40.7%	41.9%	25%
	NORMAL	76.2%	39.3%	23.3%	12.9%	-
TOTAL HIP	OSTEOPOROSIS	-	4.3%	13.4%	33.3%	87.5%
	OSTEOPENIA	38%	36%	58.1%	51.6%	12.5%
	NORMAL	62%	59.7%	28.5%	15.1%	-
FEMORAL NECK	OSTEOPOROSIS	4.8%	11.4%	27.3%	47.3%	62.5%
	OSTEOPENIA	33.3%	44.5%	56.4%	44.1%	37.5%
	NORMAL	16.9%	44.1%	16.3%	8.6%	-

REF Abd-Alhameed I, Saba E, Darwish HM (2010) Prevalence and awareness of osteoporosis among postmenopausal Palestinian women. Arch Osteoporos 5: 111-118