



Approaches to Osteoporosis in Lebanon

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Osteoporosis is the most common and probably the most debilitating and painful metabolic disease of bone encountered in clinical practice. It represents a major drain on medical resources and therefore early diagnosis and treatment of osteoporosis are very important for the prevention of fractures and their high financial and emotional costs.

DEXA scanning is the most widely used technique in the world today. It has a margin of error of 1% to 2% and exposes the patient to less radiation than a typical chest X-Ray. Osteoporosis screening using DEXA machines is about where mammography was 10-15 years ago in terms of public awareness. With more widespread testing, osteoporosis could be treated sooner promoting a better quality of life for many people provided an improved screening of patients is carried out.

To assess management of osteoporosis and its economic costs among Lebanese subjects, a retrospective analysis was performed on questionnaires filled by 1,000 patients who had previously undergone their 1st BMD study. The questionnaires asked about age, previous fractures, risk factors for osteoporosis, type of specialist who ordered the test and the indication of testing. The height and weight were measured on the day of BMD testing and added to the questionnaire sheet.

BMD has been performed unnecessarily in 330 patients (33%), as this group of women had no risk factors for osteoporosis and the study was ordered as a part of routine health care.

- 284 healthy women underwent BMD testing 14 of them fulfill the criteria for having that test done (table 1).
- Orthopedic surgeons and Gyn-specialists ordered more than 70% of these test (table 2).

The calculated cost for these un-necessary BMD measurements was 24 million Lebanese pounds (\$16,500).

Table 1

	Total	+ve risk factors	No risk factors
Postmenopausal women	430	429	1
Women with irregular menses	286	227	59
Healthy women	284	14	270

Table 2

Specialty	# Patients	No risk factors
Orthopedic surgeons	398	59
Gyn Specialist	301	106
Endocrinologist	101	4
Rheumatologist	21	2
Neurosurgeons	17	15
G.P., family actions	152	121
Others	10	9

Lebanese physicians must base their decisions strictly on indications and accepted guidelines and should order BMD test in presence of risk factors. The scientific advisory committee of the NFO recommends screening for osteoporosis in:

- Estrogen-deficient women who are considering hormone replacement therapy or other therapy.
- Patients with osteopenia.
- Patients with vertebral pathologies revealed on radiographs.
- Patients receiving glucocorticoid therapy.
- Those with asymptomatic primary hyper-Para thyroidism and would benefit from surgical intervention.
- Patients with multiple risk factors for osteoporosis.
- Patients who had history of fragility fracture.

This information will provide more accurate means of assessing which women are more likely to have osteoporosis and would benefit from the test, saving time and money for those women who do not need it. Identifying the risk factors will lead to cost containment strategies in osteoporosis management.