Although there are national and regional variations, studies have shown that fractures due to osteoporosis represent a serious and common health problem in older men. In fact, around the world approximately one in five men aged 50 and over will break a bone due to osteoporosis.

This means that millions of men are affected in all regions of the world. Nevertheless, there is a persistent neglect of osteoporosis in men, with both the general public and health professionals underestimating the impact of the disease on older males.

The results of an IOF-commissioned survey carried out by YouGov Plc in July 2014 sought to investigate:

- whether people are aware of just how common osteoporosis is in men
- whether doctors are assessing bone health in their male patients, specifically those aged 50 years and over

The survey questioned a total of 13,258 men and women aged 18+ in 12 countries around the world. The countries included in the survey were Australia, Belgium, Brazil, China, India, Jordan, Mexico, South Africa, Spain, United Arab Emirates, United Kingdom, and USA.

Summary of survey results

In response to the question: “What proportion of all men aged 50 years and over will break a bone due to osteoporosis”, and presented with the options: 1 in either 5, 25, 150, 1000, 5000, 10,000 and don’t know, the results were as follows:

GLOBAL

- An average of 73% of all adults surveyed underestimated the risk of broken bones due to osteoporosis in men. Overall there was not a great difference between ages and sexes.
- Of those surveyed who were aged 50 years and over, on average 71% underestimated the risk. There was negligible difference in the sexes (women 72%, men 70%)
- An average of 15% vastly underestimated the risk with 6% believing that osteoporotic fractures only affect one in 10,000 men aged 50 and over.
- A total 17% of respondents selected the option ‘Don’t know’. This was even higher among people aged 50 years and over: on average 22% of older men and 18% of older women said they ‘don’t know’. Together with the high rates of underestimation (70% and 72%), this strongly indicates that there is a general lack of knowledge about osteoporosis in men in the broader population, and especially in the older generation who are at most risk.
- On average only 10% of all those surveyed correctly estimated that osteoporotic fractures affect one in five men globally.
- Of those aged 50+ (the age group most at risk) only 8% of men correctly estimated risk; compared to 10% of women.
- Countries with the lowest average of correct answers were UK (3%), Belgium (6%), Jordan (6%), USA (7%), Spain (8%), United Arab Emirates (8%) and India (9%).

ASIA-PACIFIC REGION (AUSTRALIA, CHINA, INDIA)

- On average 72% of all surveyed in these three countries, and 69% of all aged 50+, underestimated risk.
- 69% of men aged 50+ underestimated risk.
- Of the Asia-Pacific countries surveyed, India showed the highest rate of underestimation of risk at 79%. This compares to a total 81% of Indian men in the 50+ age group underestimating risk.
- Of all countries surveyed worldwide, China had the greatest number of respondents (20%) who estimated correctly.
EUROPE (BELGIUM, SPAIN, UK)
- 76% of all surveyed in these three countries, and 75% of those aged 50+, underestimated risk.
- 72% of men aged 50+ underestimated risk.
- More people in the UK indicated they didn’t know (26%) than in any other country. Only 3% correctly estimated that approximately one in five men are affected by osteoporotic fractures.

NORTH AMERICA (USA)
- 67% of all surveyed, and 65% of those aged 50+, underestimated risk.
- There were negligible differences between men and women (63% and 66%).
- Latin America (Brazil, Mexico)
- 75% of all surveyed in these two countries, and 70% of those aged 50+, underestimated risk.
- There were negligible differences between men and women (71% and 72%).
- Of all countries surveyed worldwide, Mexico had the second greatest number of respondents (18%) who estimated correctly and the lowest number who vastly underestimated risk by 1000-fold or more (9%).

MIDDLE EAST & AFRICA (JORDAN, SOUTH AFRICA, UNITED ARAB EMIRATES)
- 72% of all surveyed in these three countries, and 71% of those aged 50+, underestimated risk.
- There were negligible differences between men and women.
- South Africans had the highest percentage of correct answers among these countries with 14% correct versus 6% and 8% in Jordan and UAE respectively.

In response to the question: “Which, if any, of the following has a doctor ever done during a routine medical check-up?”, and presented with the options: Asked me about my general bone health; Discussed risk factors for osteoporosis; Referred me for a bone mineral density (BMD) test; Asked if I have previously broken a bone; None of these; Don’t know/ can’t recall; Not applicable - I have never been to see a doctor for a routine medical check-up; the results were as follows:

GLOBAL
Of the male respondents aged 50+ who have visited a doctor for a routine check-up*, an average of 53% said that at such a check-up they had never had any form of bone health assessment, i.e. never been asked about bone health, risk factors for osteoporosis, had BMD testing, or been asked about a previous fracture. This compares to 35% of women aged 50+.

Approximately 5% (of both sexes) did not know or could not recall.

This indicates that, globally, when we consider this older generation (aged 50+), doctors are 18% less likely to check for bone health issues during routine check-ups for men than they are for women. The differences between the sexes were especially marked in certain countries:

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage Less Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>31%</td>
</tr>
<tr>
<td>South Africa</td>
<td>30%</td>
</tr>
<tr>
<td>Brazil</td>
<td>30%</td>
</tr>
<tr>
<td>Belgium</td>
<td>23%</td>
</tr>
<tr>
<td>Spain</td>
<td>22%</td>
</tr>
<tr>
<td>Australia</td>
<td>16%</td>
</tr>
<tr>
<td>Jordan</td>
<td>21%</td>
</tr>
<tr>
<td>India</td>
<td>20%</td>
</tr>
<tr>
<td>UAE</td>
<td>9%</td>
</tr>
<tr>
<td>UK</td>
<td>8%</td>
</tr>
<tr>
<td>Mexico</td>
<td>3%</td>
</tr>
<tr>
<td>China</td>
<td>3%</td>
</tr>
</tbody>
</table>

Note: these numbers don’t include the ‘don’t know’ responses or respondents who have never been to a doctor for a routine check-up.

On average, 9% of men (and 8% of women) aged 50+ indicated that they had never been to see a doctor for a routine medical check-up. In this age group only 1% of Australian men aged 50+ had never had a routine check-up - in stark contrast to 35% of Jordanian men.
When analyzing the results for the response “Discussed risk factors for osteoporosis” for the 50+ age group, specifically:

- In South Africa doctors were almost 10 times as likely to discuss risk factors with women as men (9.6 times).
- Countries where doctors were nearly five times as likely to discuss risk factors with women as men: USA and Belgium (5.5 and 4.6 times, respectively).
- Countries where doctors were three times as likely to discuss risk factors with women as men: UAE and UK (both 3 times exactly).
- Countries where doctors were twice as likely to discuss risk factors with women as men: Brazil, Australia and Spain (2.5, 1.9 and 1.7 times, respectively).
- Countries where there were negligible differences between doctors discussing risk factors with men and women were: Mexico, China, and India (1.2, 1.3 and 1.4 times, respectively).
- Jordan is highlighted as the outlier where 0% of women in this age group indicated that their doctor had discussed risk factors for osteoporosis as compared to 7% of men.

Notes

1. Australia: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,000 adults. Fieldwork was undertaken between July 7–16, 2014. The survey was carried out online. The figures have been weighted and are representative of all adults (aged 18+) in Australia.

2. Belgium: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,000 adults. Fieldwork was undertaken between July 9–16, 2014. The survey was carried out online. The figures have been weighted and are representative of all adults (aged 18+) in Belgium.

3. Brazil: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,001 adults. Fieldwork was undertaken between July 8–12, 2014. The survey was carried out online. The figures have been weighted and are representative of all adults (aged 18+) in Brazil.

4. China: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,031 adults. Fieldwork was undertaken between July 8–16, 2014. The survey was carried out online. The figures have been weighted and are representative of all China adults (aged 18+).

5. India: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,045 adults. Fieldwork was undertaken between July 7–21, 2014. The survey was carried out online. The figures have been weighted and are representative of all adults (aged 18+) in India.

6. Jordan: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,001 adults. Fieldwork was undertaken between July 7–25, 2014. The survey was carried out online. The figures have been weighted and are representative of all adults (aged 18+) in Jordan.

7. Mexico: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,032 adults. Fieldwork was undertaken between July 8–17, 2014. The survey was carried out online. The figures have been weighted and are representative of all adults (aged 18+) in Mexico.

8. South Africa: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 502 adults. Fieldwork was undertaken between July 7–14, 2014. The survey was carried out online. The figures have been weighted and are representative of all adults (aged 18+) in South Africa.

9. Spain: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,029 adults. Fieldwork was undertaken between July 9–16, 2014. The survey was carried out online. The figures have been weighted and are representative of all adults (aged 18+) in Spain.

10. United Arab Emirates: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,026 adults. Fieldwork was undertaken between July 7–21, 2014. The survey was carried out online. The figures have been weighted and are representative of all adults (aged 18+) in the UAE.

11. United Kingdom: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 2,424 adults. Fieldwork was undertaken between July 7–8, 2014. The survey was carried out online. The figures have been weighted and are representative of all UK adults (aged 18+).

12. USA: All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 1,167 adults. Fieldwork was undertaken between July 8–13, 2014. The survey was carried out online. The figures have been weighted and are representative of all US adults (aged 18+).