Preventing overmedicalization by listening and sharing

Overmedicalization and Quaternary Prevention

Lecce - Italy

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ITALIAN NETWORK OF - SCIENTIFIC ASSOCIATIONS AFFILIATED WITH WONCA
Papillary thyroid cancer
Meniscectomy in elder people
SIGNS AND SYMPTOMS OF PROSTATE CANCER THAT YOU MUST KNOW

- Sexual Dysfunction
- Changes in Bladder Habits
- Weakness or Numbness in Legs
- Frequent Pain
- Blood in the Urine

To explore more, visit www.Top10HomeRemedies.com
What should I do?

• saying to the patient that probably the surgical intervention won't increase her survival but will increase the need of tests and drug therapy for all life?
• What should I suggest to the patient who wants to get quickly over the pain of knee?
• Should I deny the PSA test to the elder patient? Yes, of course, but how can I tell him that harms of a diagnosis would be more than the benefits?
Aims of the Conference

• To spread knowledge about the entity of the overdiagnosis matter
• To know the risk of overdiagnosis and overmedicalization deriving from imaging for IHA in asymptomatic people
• To spread the concept of Quaternary Prevention
• To give some tools to face the problem in the everyday practice
• To contribute to the position paper of WONCA Europe on the topic of overdiagnosis
World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians

Founded in 1972

118 Member Organizations in 131 countries and territories

Membership of about 500,000 family doctors

Involve more than 90 per cent of the world’s population
WONCA Italia

Coordinamento Italiano delle società scientifiche aderenti al WONCA
European definitions of Family Medicine

General Practice:

- is normally the first point of medical contact..
- makes efficient use of health care resources through coordinating care ....
- develops a person-centred approach.....
- is responsible for the provision of longitudinal continuity of care as determined by needs of the patient
- has a specific decision making process determined by the prevalence and incidence of illness in the community
- promotes health and well-being both by appropriate and effective intervention
- manages comprehensive care....
Characteristics of General Practice

FDs play an advocacy role

"protecting patients from the harm which may ensue through unnecessary screening, testing, and treatment"

(WONCA Europe: Definitions of General Practice/Family Medicine)

Quaternary prevention

defined as “an action taken to identify a patient at risk of over-medicalization, to protect him/her from new medical invasion, and to suggest interventions which are ethically acceptable”

(WONCA Dictionary of General Practice)
High level of care?
Overdiagnosis

“We have entered an era in which we can find diseases and illnesses in many more people .. But it is not clear that, by making everyone a patient, we are necessarily improve their health”

Gilbert Welch 2012

A definition:

Overdiagnosis occur when people without symptoms are diagnosed with a disease that ultimately will not cause them to experience symptoms or early death.
The concept of prevention: a good idea gone astray?

“A renewed (and possibly renamed) conceptualization of ‘prevention’ would consider:

1. Population orientation (even for clinical medicine)
2. Population-attributable risk rather than individual (relative) risk
3. Morbidity burden rather than disease burden
4. Tandem estimation of the benefits and costs of strategies to improve both population health and the distribution of health within populations
5. Improving overall health rather than disease prevention as a major goal.”

(B. Starfield 2007)
A cause of overdiagnosis

Inappropriateness is the consequence of the encounter of two fears with many interests
- Fear of the patient to have a disease
- Fear of the doctor to underestimate a problem or for defensive medicine
- Interests of the industries and professionals
"Doing nothing, but having the courage sometimes to wait – to use time as both a diagnostic and a therapeutic tool – to see what nature does – to wait and see. These are essential skills...that are profoundly important if we are not to fall into the seductive traps of overdiagnosis and overtreatment."

(Iona Heath)
Overdiagnosis: A clinical matter

Screening detected, overdiagnosis occurs in some people without symptoms (some cancers can regress or fail to progress or grow very slowly)

(Back 1998)

Overdiagnosis is acceptable if it is compensated for definite advantages!
Breast Cancer Early Detection
by Mammography

Mammography screening may reduce the number of women who die from breast cancer but this has no effect on overall cancer deaths. Among all women taking part in screening, some women will be overdiagnosed with non-progressive cancer and unnecessarily treated.

Numbers for women aged 50 years or older who did or did not participate in screening for about 10 years.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>1000 women without screening</th>
<th>1000 women with screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many women died from breast cancer?</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>How many women died from all types of cancer?</td>
<td>21</td>
<td>21</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Harms</th>
<th>1000 women without screening</th>
<th>1000 women with screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many women without cancer experienced false alarms or biopsies?</td>
<td>50</td>
<td>about 100</td>
</tr>
<tr>
<td>How many women with non-progressive cancer had unnecessary partial or complete breast removal?</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

Numbers in the Fact Box are rounded. Where no data for women above 50 years of age are available, numbers refer to women above 40 years of age.
Date last updated: 13 March, 2014
Prostate Cancer Early Detection

by PSA testing and palpation of the prostate gland

Numbers are for men aged 50 years or older, not participating vs. participating in early detection for 11 years.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>1,000 men without early detection</th>
<th>1,000 men with early detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many men died from prostate cancer?</td>
<td>7</td>
<td>7*</td>
</tr>
<tr>
<td>How many men died from any cause?</td>
<td>210</td>
<td>210</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Harms</th>
<th>1,000 men without early detection</th>
<th>1,000 men with early detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many men without cancer experienced a biopsy and a false alarm?</td>
<td>–</td>
<td>160</td>
</tr>
<tr>
<td>How many healthy men were diagnosed and treated** for prostate cancer unnecessarily?</td>
<td>–</td>
<td>20</td>
</tr>
</tbody>
</table>

* This means that about 7 out of 1,000 men (50+ years of age) with early detection died from prostate cancer within 11 years.

** E.g. prostate removal or radiation therapy, which can lead to incontinence or impotence.

Source: Ilic et al. (2013) Cochrane Database of Systematic Reviews, Art. No.:CD004720.
Overdiagnosis: a cultural matter

- The ability to detect smaller abnormalities asymptptomatically tends to increase the prevalence of any given disease
- In turn this leads to overestimate the benefits of therapies, as milder forms of the disease are treated and improvements in health (recovery) are wrongly ascribed to treatment success
- A cycle of increasing testing and treatment starts, which may eventually cause more harm than benefit
- Doctors are very often not aware about the problem of overdiagnosis

(Black 1998)
A same diagram

<table>
<thead>
<tr>
<th>Disease</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thyroid cancer</td>
<td>Chronic kidney disease</td>
</tr>
<tr>
<td>Melanoma</td>
<td>Attention deficit hyperactivity disorder</td>
</tr>
<tr>
<td>Kidney cancer</td>
<td>Gestational diabetes</td>
</tr>
<tr>
<td>Prostate cancer</td>
<td>Pulmonary embolism</td>
</tr>
<tr>
<td>Breast cancer</td>
<td>.....</td>
</tr>
</tbody>
</table>
A muddled information

• Biennial mammography screening is recommended by the most important guidelines (but often a young or very elderly woman asks for it without symptoms!)
• PSA screening is not recommended by the most important international guidelines (but several specialist local guidelines suggest the prostate screening)
• There are not proof that an annual blood tests’ screening is useful in asymptomatic people (but media always suggest “doing something for our health”)
• Thorax x-ray or CT scan are not recommended as screening (but “if you are a big smokers what are you doing for your health?”)
A cultural pressure

From industries
- Direct to consumer advertising
- Disease ‘awareness’ campaigns
- Medical education
- Financial ties with professional and patient groups

From health professionals’ associations
- Many diagnosis maximize the patient pool

From judicial matters
- Professionals are punished from missing, never for overdiagnosis
In conclusion

Overdiagnosis is implicit in the modern medicine ....but we must act (all health professionals) to limit negative consequences for people and communities.

Our duty is taking care the patients as well as avoiding harm and suffering.

We should always take in account that too much medicine could be harmful for our patients.

Listening needs and expectations of the patient and communicating the scientific knowledge by the doctor allow sharing with patients an informed decision making process.