Chronic disease patients and adherence to treatment

Gabriella Pravettoni
ADHERENCE

“the extent to which a person’s behaviour - taking medication, following a diet, and/or executing lifestyle changes - corresponds with agreed recommendations from a health care provider.”

(World Health Organization, 2003)
ADHERENCE

At treatment and follow-up

- Taking medications correctly and as prescribed
- Participation in scheduled follow-ups

Life-style behaviours (diet and sport)

Physical activity: at least 150 minutes of moderate to intense activity or 60 minutes of intense activity per week

Diet: consumption of at least 5 portions of fruit and vegetables each day

Stop smoking

(American Cancer Society, 2006)

Poor adherence to treatment could influence its efficacy and increase healthcare and related costs
Some data...

Table 2. Percentage of Cancer Survivors Meeting the Recommendations for Physical Activity, Fruit and Vegetable Consumption, and Smoking by Cancer Group

<table>
<thead>
<tr>
<th>Cancer Group</th>
<th>Physical Activity (%)</th>
<th>5-A-Day (%)</th>
<th>Smoking (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>37.1</td>
<td>18.2</td>
<td>88.1</td>
</tr>
<tr>
<td>Prostate</td>
<td>43.2</td>
<td>15.6</td>
<td>91.6</td>
</tr>
<tr>
<td>Colorectal</td>
<td>35.0</td>
<td>15.9</td>
<td>91.3</td>
</tr>
<tr>
<td>Bladder</td>
<td>36.0</td>
<td>16.3</td>
<td>82.6</td>
</tr>
<tr>
<td>Uterine</td>
<td>29.6</td>
<td>19.1</td>
<td>91.1</td>
</tr>
<tr>
<td>Skin melanoma</td>
<td>47.3</td>
<td>14.8</td>
<td>89.0</td>
</tr>
</tbody>
</table>

Abbreviation: 5-A-Day, consumed five servings of fruits and vegetables each day.
What are the factors that can influence adherence?
The World Health Organization (WHO) has grouped the factors that could influence adherence behaviour into 5 dimensions:
Psychosocial characteristics and adherence

«You can’t win the fight against cancer if you ignore the repercussions on the psyche»

L. Grassi
Depression has an important role in predicting non-adherence.

It can influence expectations of results, the perception of benefits and obstacles, and the reasons for non-adherence to the prescribed treatment.

Theofilou & Panagiotaki, 2012
In different therapeutic regimes, no significant influence of anxiety emerges on adherence behaviour.

Studies in the field of cancer indicate that anxiety is positively correlated with adherence.

Anxiety could be associated with an increase in adherence as some anxious individuals are more hypervigilant and seek greater medical care.

Theofilou & Panagiotaki, 2012
Optimism can be associated with a greater tendency to take medications.

Optimism makes patients more involved and focused regarding treatment objectives, fostering and improvement in psychological well-being.

Optimistic patients seem to be better focused on the effects of treatment, with a higher propensity to adherence.

Carver, Lehman & Antoni, 2003; Theofilou & Panagiotaki, 2012
Psychosocial characteristics and adherence

Social support

Emotional support, support of loved ones and of the medical staff favour adherence to treatment

Negative attitude to treatment

Forgetfulness related to medication-taking

Motivation

Theofilou & Panagiotaki, 2012
How is adherence measured?

There is no unanimous consensus on adherence optimal value: the threshold stated in different scientific publications varies from 80% to 95% (Osterberg & Blaschke, 2005)

Methods of medication adherence

- **Medication Possession Ratio (MPR)**
  - Relationship between prescriptions and drug-dispensing
  - Electronic tools in the package to record daily opening (MEMS)

- **Manual pill count**

- **Questionnaires (e.g. MARS)**
What can be done to increase adherence?
Acting on the patients goals

...Goals Theory

• Goals may be defined as:
  – Anticipatory internal representations (or regulatory states) which activate and regulate the actions of the individual

• They have a **directive function**:  
  – They focus attention and effort on relevant actions

*Castelfranchi & Miceli, 2004*
Goals in disease

- Disease (in its physical and emotive components) disturbs and interrupts goal-directed actions

- The distancing of the “pre-disease” goals strengthens depressive symptoms and damages the patient’s self-esteem
  - Harmful effect on adherence

Goals in disease

• In order for the goal to reach its final stage (execution/pursuit), all the beliefs that “support” the aim must be satisfied (beliefs related to right conditions, resources, capacity of the acting individual).

• If some of the beliefs for the goal-processing are invalidated by the patient, the “goal is dead” (abandoned, in suspended, left to lie dormant).

Castelfranchi, 1996
Towards a redefinition of goals

• It is necessary to redefine the goals (absolute and intermediate) **by doing work linked to the patient’s beliefs and wishes**

– The active commitment of the patient to actions relevant to the pursuit of evaluated goals promotes better psychological and physical well-being *(Hoppmann & Klumb, 2006)*
To redefine goals...

It is necessary to assess the value attributed to these by the patients

Goals - values

- Wishes
- Needs
- Beliefs
- Sensations
Re-defining goals

- Co-participation in deciding and establishing goals

INCREASES:

- Personal involvement in reaching the goal
- The goal-performance relationship

Locke & Latham, 2006
PERSONalized medicine

- The genetic approach
- The 4Ps in medicine: Predictive, Participatory, Personalized, Preventive
The 5Ps in Medicine

To safeguard the values, preferences and needs of patients it is necessary to take into consideration the psycho-cognitive aspects of each individual.

Box 1 | Advantages of P5 medicine

- Engaging patients in personalized treatment as well as management plans
- Bolstering the responsibility of patients for their own health care
- Giving instruments to assess and empower patients quality of life
- Reduced side effects and improved treatment efficacy
- Support for physicians to better guide patients in making their choices

P5 medicine: a plus for a personalized approach to oncology

Alessandra Gorini and Gabriella Pravettoni

The March 2011 issue of Nature Reviews Clinical Oncology included a focus on personalized cancer medicine. Of particular interest was the article by Leroy Hood and Steven Friend (Hood, L. & Friend, S. H. Predictive, personalized, preventive, participatory medicine). Patients need to receive clear information about their disease and the available therapeutic options. In addition, it is critical to improve the informed consent process by providing patients with clear and personalized documentation. This information and
Patient-centred approach

Adherence is the expression of a doctor-patient relationship based on respect and alliance, without constraint or manipulation, and with active participation by both.

The active involvement of the patient in the decision process is fundamental.

**Shared decision-making**

- Increases patient satisfaction
- Improves outcomes

Falvo, 2010, 2011
Patient-centred approach

Shared DM

Patient Empowerment
Many national health institutions recommend the shared decision-making process, but is it always possible?
Difficulties expressed by doctors

- Lack of communicative skills
- Difficult to investigate preferences
- Difficult to manage patient expectations
- Difficult to reconcile time, context and requests
- Fear of inducing negative emotions
Specific training in managing communication and emotions would be needed for the shared decision-making process to be employed.
# Modes of interaction

(adapted from Charles et al., 1999)

<table>
<thead>
<tr>
<th>Model</th>
<th>Paternalistic</th>
<th>Shared</th>
<th>Informed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flow</strong></td>
<td>One-way</td>
<td>Two way</td>
<td>Two way</td>
</tr>
<tr>
<td><strong>Direction</strong></td>
<td>Doctor → Patient</td>
<td>Doctor ↔ Patient</td>
<td>Doctor ↔ Patient</td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>Diagnosis &amp; treatment</td>
<td>Diagnosis &amp; treatment Patient values</td>
<td>Diagnosis &amp; treatment</td>
</tr>
<tr>
<td><strong>Amount</strong></td>
<td>Minimum</td>
<td>All relevant info</td>
<td>All relevant info</td>
</tr>
<tr>
<td><strong>Discussion</strong></td>
<td>Doctor</td>
<td>Doctor &amp; Patient</td>
<td>Doctor &amp; Patient</td>
</tr>
<tr>
<td><strong>Decision</strong></td>
<td>Doctor</td>
<td>Doctor &amp; Patient</td>
<td>Patient</td>
</tr>
</tbody>
</table>
TECHNOLOGY
&
HEALTH
The spread of technology and communication in all sectors of human society in recent years have led to significant social, cultural and economic effects, changing habits and behaviours and influencing daily life, via the persuasive and ubiquitous use of the media and of traditional content thanks to the great opportunities offered by new technologies.
Telemedicine and Social communities

The possibility of creating a virtual service that offers consultation with different professionals, plus the opportunity to communicate with other people who are experiencing (or have experienced in the past) the same disease, could favour increase in adherence.

- Doctor-patient communication
- Sharing of experiences between patients
- Video-guide for patients
A future perspective...

Social communities

Individual goals are transformed into shared goals with a strengthening of personal resources
Thank you for your attention!

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