The importance of adherence to treatment

Sultan Kav RN, PhD
Associate Professor Baskent University
Faculty of Health Sciences
EONS Past President
www.cancernurse.eu
Conflict of Interest

None
Paradigm shift in treatment delivery for cancer

Old paradigm

New paradigm
Why Important?

- 50% of chronically ill patients undergoing long term treatment are adherent (WHO, 2003)

- There is an assumption that adherence would not be a problem in cancer patients

- However studies show that there is never 100% adherence (Lebovits et al, 1990; Noens et al, 2009; Partridge et al, 2010; Simons et al, 2011)
…Why Important?

“Drugs don’t work if people don’t take them.” (C. Everett Koop)
Adherence

- Is an individual patient behavior
- Has not been comprehensively addressed in cancer care
- Greatest barrier
What is Medication Adherence?

“The extent to which a person's behavior—taking medication, following a diet, and/or executing lifestyle changes—corresponds with agreed recommendations from a health care provider.” (WHO, 2003)

The International Society for Pharmacoeconomics and Outcome Research (ISPOR) defined adherence as synonymous with compliance, “the degree or extent of conformity to the recommendations about day-to-day treatment by the provider with respect to the timing, dosage, and frequency.”
Definitions of Compliance and Persistence

Cramer et al, 2008
Measuring Adherence

1. **Subjective measurements** by asking patients, family members, caregivers, and physicians about the patient's medication use

2. **Objective measurements** by counting pills, examining pharmacy refill records, or using electronic medication event monitoring systems

3. **Biochemical measurements** by adding a nontoxic marker to the medication and detecting its presence in blood or urine or measurement of serum drug levels.

(Ruddy, Mayer & Partridge, 2009)
Five Dimentions of Adherence

- Health System/HCT
- Condition related
- Social-economic
- Patient related
- Therapy related

WHO, 2003

5-6 July 2013, Barcelona
Non-adherence is Complex, With Many Influences

Reasons are Systematic, Medical, and Individual in Origin

- Self mgmt behaviors
- Mental state
- Motivation
- Depression
- Low health literacy
- Organizational skills
- Stress
- Worry
- Cost, income
- Denial
- Relationship with caregivers
- Social support structure
- Asymptomatic disease
- Side effects
- Multiple conditions
- Complex medical regimens

So solutions must be analytical, multifaceted
### Types of Non Adherence

<table>
<thead>
<tr>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hesistance to initiate Therapy</td>
</tr>
<tr>
<td>Skipped doses</td>
</tr>
<tr>
<td>Medication discontinuation</td>
</tr>
<tr>
<td>Dose self-adjustment</td>
</tr>
<tr>
<td>Over-adherence</td>
</tr>
<tr>
<td>İnapprropriate drug administration</td>
</tr>
</tbody>
</table>

Wick, 2011
Factors associated with medication non-adherence

Disease related
- comorbidities
- Unknown tumor size
- Node positive disease
- History of antidepressant use

Therapy related
- Side-effects
- Longer duration of therapy
- Difficulties swallowing tablets and inconvenience
- Timing; type of drug

(Verbrugghe et al, 2013)
Patient-related factors associated with medication non-adherence

**Intentional**
- Concerns about symptoms
- Lower perceived necessity by the patient for taking the drug
- The opinion that missing a dose makes no difference
- Lower perceived quality of life

**Unintentional**
- Forgetting
- Accidentally taking too much of the prescribed drug

Patient-related factors associated with adherence

**Self-efficacy**
The belief that medication intake as being prescribed would help to cure from cancer

**Having neutral or negative beliefs about the value of the drug**

(Fink et al, 2004; Grunfeld et al 2005; Noens et al 2009)

5-6 July 2013, Barcelona
Social and economic factors

A higher educational level
Married status

Younger age (< 45)
Older age (> 85)
Higher out-of-pocket costs (> 30$)
Female gender

(Verbrugghe et al, 2013)
<table>
<thead>
<tr>
<th>Healthcare system factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced knowledge of the disease and treatment</td>
</tr>
<tr>
<td>Longer duration of the first visit</td>
</tr>
<tr>
<td>Nurses and phone follow-ups</td>
</tr>
<tr>
<td>Shorter duration of treatment f/u visits</td>
</tr>
<tr>
<td>Prescribing errors and conflicting information regarding consequences</td>
</tr>
<tr>
<td>Different doctors responsible for follow-up</td>
</tr>
<tr>
<td>Not previously being informed about side effects</td>
</tr>
<tr>
<td>Less patient participation in decision making than wanted</td>
</tr>
<tr>
<td>Receiving too much or too less support than needed</td>
</tr>
</tbody>
</table>

(Verbrugghe et al, 2013)
Interventions for enhancing medication adherence

SHORT: counselling, written information, phone control.

LONG AND COMPLEX: Combination of care + information + counselling, remember, auto-monitoring, reinforcements, family, psychological reinforce, mail communication, crisis intervention, nurses and phone follow-ups and other forms of care and supervision.
I: Key Assessment Questions
to assess the patient's knowledge of the treatment plan, current medications, and ability to obtain and take an oral cancer agent

II: Patient Education
general patient teaching instructions applicable to all oral cancer agents (storage, handling, disposal, system to remember, actions if problems)

III: Drug Specific information
used to provide drug-specific information (dose & schedule, side effects, and potential interactions)

IV: Evaluate
questions that may be asked to ascertain understanding of the information provided

An additional page is added as a hand-out of Drug-Specific Information that can be provided to the patient in the absence of any other prepared information
Download the MOATT with the following files. Clicking the link will automatically download the MOATT.

The MOATT is a patented and protected property of MASCC. Written approval from MASCC is required for reproduction.

- **English - MOATT**
- **English - MOATT for printed card style** (word)
- **Arabic - MOATT**
  Translation by Hanan Sac-Hazboun, Rula Giacaman (2009)
- **Chinese - MOATT**
  Translation by Jing Chen (2009)
- **Danish - MOATT**
  Translation by Linette Poulsen, Pia Olsen (2009)
- **French - MOATT**
  Translation by Manon Lemoande (2009)
- **Greek - MOATT**
  Translation by Elizabeth Patiraki, Anna Papadouri (2009)
- **Hindi - MOATT**
  Translation by Vijay Roy (2009)
- **Russian - MOATT**
  Translation by Anton Snegovoy and Dheepak Kanagavel (2010)
- **Serbian - MOATT**
  Translation by Dusanka Tadic (2009)
- **Spanish - MOATT**
  Translation by Paz Fernandez Ortega (2009)
- **Thai - MOATT**
  Translation by Bench Dicka (2009)

Translated into 13 Languages: Arabic, Chinese, Danish, French, German, Greek, Hindi, Japanese, Russian, Serbian, Spanish, Thai, Turkish.
The Five Ws (and H) of taking drugs correctly

<table>
<thead>
<tr>
<th>Why</th>
<th>• Are you taking the drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where</td>
<td>• You should store the drug</td>
</tr>
<tr>
<td>When</td>
<td>• You should take the drug</td>
</tr>
<tr>
<td>What</td>
<td>• You should expect side effects</td>
</tr>
<tr>
<td>Who</td>
<td>• You should call if you have side effects</td>
</tr>
<tr>
<td>How</td>
<td>• You should take the drug</td>
</tr>
</tbody>
</table>
Summary

• Medication adherence is not exclusively the responsibility of the patient
• Increasing adherence may have a greater effect on health than improvements in specific medical therapy
• Medication-taking behavior is complex and involves patient, physician, and process components
...Summary

- Identification of nonadherence and non persistence is challenging and requires specific interviewing skills

- Solutions include;
  - Encouraging a “blame-free” environment
  - Opting for less frequent dosing
  - Improving patient education
  - Assessing health literacy
  - Paying attention to nonadherence
Questions for discussion

1. Who cares for patient and family/caregiver education in oncology practices?

2. How the education for the people beginning oral therapies should be done?

3. What are the challenges around adherence to treatment?

4. What strategies would be effective to improve adherence and patient outcomes?
Thank you

Sultan Kav RN, PhD

skav@baskent.edu.tr
sultan.kav@gmail.com
Time to Vote!

5-6 July 2013, Barcelona
Question 1

Who provides for patient and family/caregiver education in oncology?

1 > Patient advisory group
2 > General Practitioner / Family doctor
3 > Government
4 > Nurse
Question 2

Do people beginning oral therapies need special instructions / education?

1 > Yes
2 > No
Question 3

What are the challenges around adherence to treatment?

1 > Side effects
2 > “Feeling better” factor
3 > Self-discipline
4 > Lack of support from family
5 > Work pressure
6 > Travel distance
What strategies would be effective to improve adherence and patient outcomes?

1. Public education
2. Patient to patient individual counselling
3. Financial support
4. Media coverage
5. More detailed information from clinicians
5-6 July 2013, Barcelona

2ND COLORECTAL CANCER PATIENT CONFERENCE

2013

Your life, your responsibility