

Assessing/Monitoring Patient Compliance

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Patient Communications /
Monitoring / Counseling II
31:725:587

Class Outline

- ♦ Introductions
- ♦ Communications Exercise
- ♦ Compliance / Adherence Overview
- ♦ Assessment / Measurement of Compliance
- ♦ Strategies for Improving Compliance (disease states)
- ♦ Implications of Compliance / Noncompliance for the Pharmaceutical Industry

Why is Compliance Measurement / Understanding Important?

100 patient story:

- ♦ Out of 100 patients...
 - >66% fail to comply with their doctors' orders
 - The top three health problems in America:
 - ♦ Heart: 78% fail to comply
 - ♦ Cancer: 73% fail to comply
 - ♦ Infection: 67% fail to comply

Oath of a Pharmacist

- ♦ At this time, I vow to devote my professional life to the service of all humankind through the profession of pharmacy.
- ♦ I will consider the welfare of humanity and relief of human suffering my primary concerns.
- ♦ I will apply my knowledge, experience and skills to the best of my ability in serving the public and other health professionals.
- ♦ I will keep abreast of developments and maintain professional competency in my profession of pharmacy.

• Understanding patients and why they do or do not take their medication correctly is the cornerstone of modern pharmacy

• Aids pharmacists in the transition from a strictly dispensing role to one of greater clinical visibility

Communications Exercise

- ♦ Pass along the directions...



- ♦ John, Ted, and Sandi were talking about pharmacoeconomics at Clyde's.
- ♦ Ted said they should go to Platinum but doesn't like the \$20 cover charge.
- ♦ Sandi would prefer to go to the Marita's

What is **YOUR** Definition of Compliance / Adherence?

- ♦ Class Examples:
 - Proper Compliance?
 - Noncompliance?
- ♦ Why is it Important to Measure Compliance?
- ♦ What are some Perceived Barriers to Compliance?



Assessment / Measurement of Compliance

♦ Indirect Methods (subjective / objective):

- Patient Interview and Self-Report
- Self-Monitoring
- Counts of Unused Medication
- Persistency (Prescription Renewal) Rates
- Achievement of Therapeutic Goals
- Electronic Monitors

♦ Direct Methods:

- Biological Markers
- Measurement of Drug Concentrations

Assessment / Measurement of Compliance, cont...

♦ Vast majority of pharmacists will have the greatest access to Indirect Methods of assessing patient compliance due to practice setting:

- Retail
- Outpatient
- Clinic

Indirect Methods (subjective / objective):

- ♦ Patient Interview / Self-Report / Counts of Meds:
 - Usually the first evidence that a patient is Noncompliant
 - The use of open-ended questions allows for greater information collection
 - ♦ **Open-Ended Question:** How many times this week have you missed taking your medication?
 - ♦ **Closed-Ended Question:** Have you missed taking your medication this week?
 - **Flaws of this method:**
 - White-Coat Effect / Toothbrush Effect
 - Patient had medication refilled at another pharmacy
 - Verbal orders from Physician to alter medication regimen

Understanding the Details of Noncompliance

- ♦ The Pharmacist must understand:
 - **Frequency** of Non-Compliance
 - **Duration** of Non-Compliance
 - **Degree** of Non-Compliance
 - All **Factors** contributing to Non-Compliance

Factors Contributing to Non-Compliance

- ♦ *Patient issues account for only 25% of all factors contributing to Non-Compliance*
- ♦ *External forces have the greatest effect on whether a patient is compliant or Non-Compliant*
- ♦ **Factors Contributing to Non-Compliance:**
 - The Patient
 - The Medication
 - Spouse - Family - Peers
 - Patient - Health Professional Relationship

Factors Contributing to Non-compliance, cont...

- ♦ **The Patient:**
 - Patient knowledge, attitude, values, and perceptions about their disease and therapy
 - Frustrated, apathetic, and / or unconfident patients are more likely to be Noncompliant
- ♦ **The Medication:**
 - Skills of the patient (inhalers, eyedrops)
 - Difficulty of regimen

Factors Contributing to Non-Compliance, cont...

♦ Spouse / Family / Peers:

- Does the patient receive any help from family or friends?
- Is he or she reliant on a relative or assistant to remember to take medication?

♦ Patient – Health Professional Relationship:

- The patient must be satisfied with his or her relationship with the healthcare provider (including the pharmacist) for trust and confidence in the medication to be established.
- Simply, does the patient understand the HCP?¹

Compliance, the Patient View

♦ The Patient's Attitude Towards Compliance is Shaped by 7 Factors²:

- ♦ Knowledge (patient)
- ♦ Illness Beliefs
- ♦ Symptom Perceptions
- ♦ Anxiety
- ♦ Control of Symptoms and / or Disease
- ♦ Medication Efficacy
- ♦ Patient – Physician / Pharmacist Congruence



How do we Begin to Improve Patient Compliance / Adherence?

- ◆ Understand the factors that contribute to Noncompliance
- ◆ Identify the desired outcome for both the patient and the healthcare provider
- ◆ Develop a plan to resolve Noncompliance
 - Work with other healthcare providers
 - February 19th lecture
- ◆ Implement changes to regimens, patient behaviors, etc.¹

Two Methods for Resolving Noncompliance

- ◆ Motivational Methods
- ◆ Tools and Techniques
 - Class Examples?

Motivational Methods for Resolving Noncompliance

- ♦ Explain Benefits of the Medication
 - ♦ WIIFM
- ♦ Raise Awareness of Body Cues
- ♦ Explain Ways to Self-Evaluate
 - ♦ Patient taking his or her own blood pressure
- ♦ Help Develop Coping Mechanisms¹
 - ♦ Eliminate embarrassment of having to take certain medications

Tools and Techniques for Resolving Noncompliance

- ♦ Compliance Aids
- ♦ Enlisting support of the spouse or other family members
- ♦ Increase Supervision
- ♦ Social-service intervention
- ♦ Switching to an alternative dosing schedule or dosage form
- ♦ Behavioral modification techniques
- ♦ Controlled therapy
- ♦ Self-monitoring programs¹

How Are We Doing So Far?

- ♦ McDonald, et. Al. conducted a retrospective study to determine the efficacy of current Patient Compliance improvement techniques³
 - Interventions in Short-Term Treatments
 - Interventions in Chronic Conditions
 - Changes in Dosing Schedules for Long-Term Regimens (Chronic Conditions)
 - Psychiatric Disorders, Diabetes, HIV, Rheumatoid Arthritis, Epilepsy, etc.
- ♦ Study found that “current methods of improving medication adherence for chronic health problems are mostly complex, labor-intensive, and not predictably effective.

So, How Do We Improve?

- ♦ Increase Pharmacists' clinical roles in medicine
 - In 1996, The American Association of Colleges of Pharmacy Commission to Implement Change In Pharmaceutical Education endorsed **pharmaceutical care** as the main mission of pharmacy practice⁴
 - **Hepler and Strand**⁵ were the modern developers of pharmaceutical care delivered by pharmacists
 - ♦ Work centered around improving a patient's quality of life through increased compliance and decreased symptomatology
- ♦ Approach each Compliance issue on a case by case / disease state by disease state basis

Related Disease States

- ♦ ADHD*
- ♦ Asthma*
- ♦ HIV*
- ♦ Hyperlipidemia
- ♦ Hypertension
- ♦ Thrombosis
- ♦ Transplant

ADHD

- ♦ Prevalence: 8-10%
- ♦ Medication Noncompliance is reported to be 20 – 65%⁶
- ♦ Why were these patients Noncompliant?
 - ♦ Inconvenience of multiple daily dosing
 - ♦ Social stigma associated with ADHD
 - ♦ Issues with long-term side effects
 - ♦ Inadequate supervision
 - ♦ Oppositional and defiant behavior

Improving Compliance with ADHD Medications

- ♦ Changes in formulation
 - Once-daily treatments
 - Accomplished with Extended Release formulations
- ♦ Education / Information
 - Should be aimed at the parent or caregiver at first
 - Parent or caregiver should be empowered to educate / inform the patient

Improving Compliance with Asthma Medications

- ♦ Myers⁷ performed a retrospective analysis of several studies that looked at the use of Asthma compliance aids
 - Peak Flow Meters
 - Metered-Dose Inhaler monitors
 - ♦ MDI Chronolog
 - ♦ “The Doser”

HIV / AIDS

- ♦ Sclera, et. Al.⁸ determined that >95% compliance rate was necessary to realize the true benefit of HAART (highly active antiretroviral therapy)
- ♦ Compliance rates with HAART range from 55 to 76%
- ♦ Why are people noncompliant?
 - Forgot (up to 66%)
 - Away from home (up to 57%)
 - Busy with other things (up to 53%)
 - Change in daily routine (up to 51%)

Improving Compliance with HIV / AIDS Medications

- ♦ Improvement is aimed at measurement of compliance:
 - ♦ Questionnaire
 - ♦ Interview
 - ♦ Pill count
 - ♦ Pharmacy refill
 - ♦ Plasma drug concentrations
- ♦ Patients who received psychological counseling (therapy, adapted medication scheduling, and problem-solving information) were 95% compliant⁸

Implications of Compliance / Noncompliance for the Pharmaceutical Industry

- ♦ Pfizer spends >\$5billion on research and development annually
- ♦ Purchase of Pharmacia raises budget to an estimated \$7billion annually
- ♦ Pfizer now employees >13,000 sales representatives
- ♦ Noncompliance affects efficacy data related to clinical trials

Objective Assessment of Patient Compliance in Clinical Trials

- ♦ Erbitux example



- ♦ Compliance effects Phase III of clinical trials

Questions?



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