

The Importance of Medication Adherence



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History of Terminology: Compliance

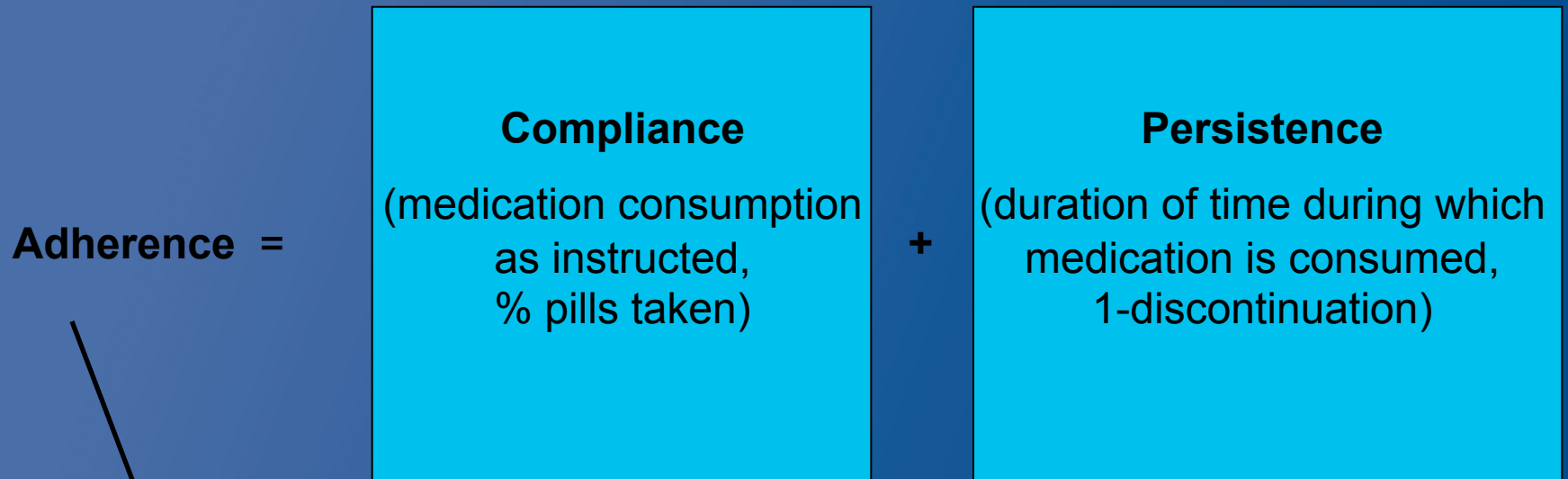
- Hippocrates believed that patients fake ingestion of their medications
- Compliance used initially- used as a descriptor for patients' obedience to recommendations with prescribed treatments (Sackett & Haynes, 1976)
- Gilbert et al (1980) measured clinicians' ability to detect non-compliance among patients, and revealed that clinicians were accurate with only 10% of patients

- World Health Organization (WHO) introduced the term adherence to change the undertone of blame and paternalism associated with compliance (2003)

Adherence

- Initially the term was synonymous with compliance, which was then criticized for its paternalistic undertones
- The extent to which patients follow instructions (Haynes et al, 2008)
- A collaboration to achieve mutually derived goals (Rose et al, 2000)

What is Medication Adherence?



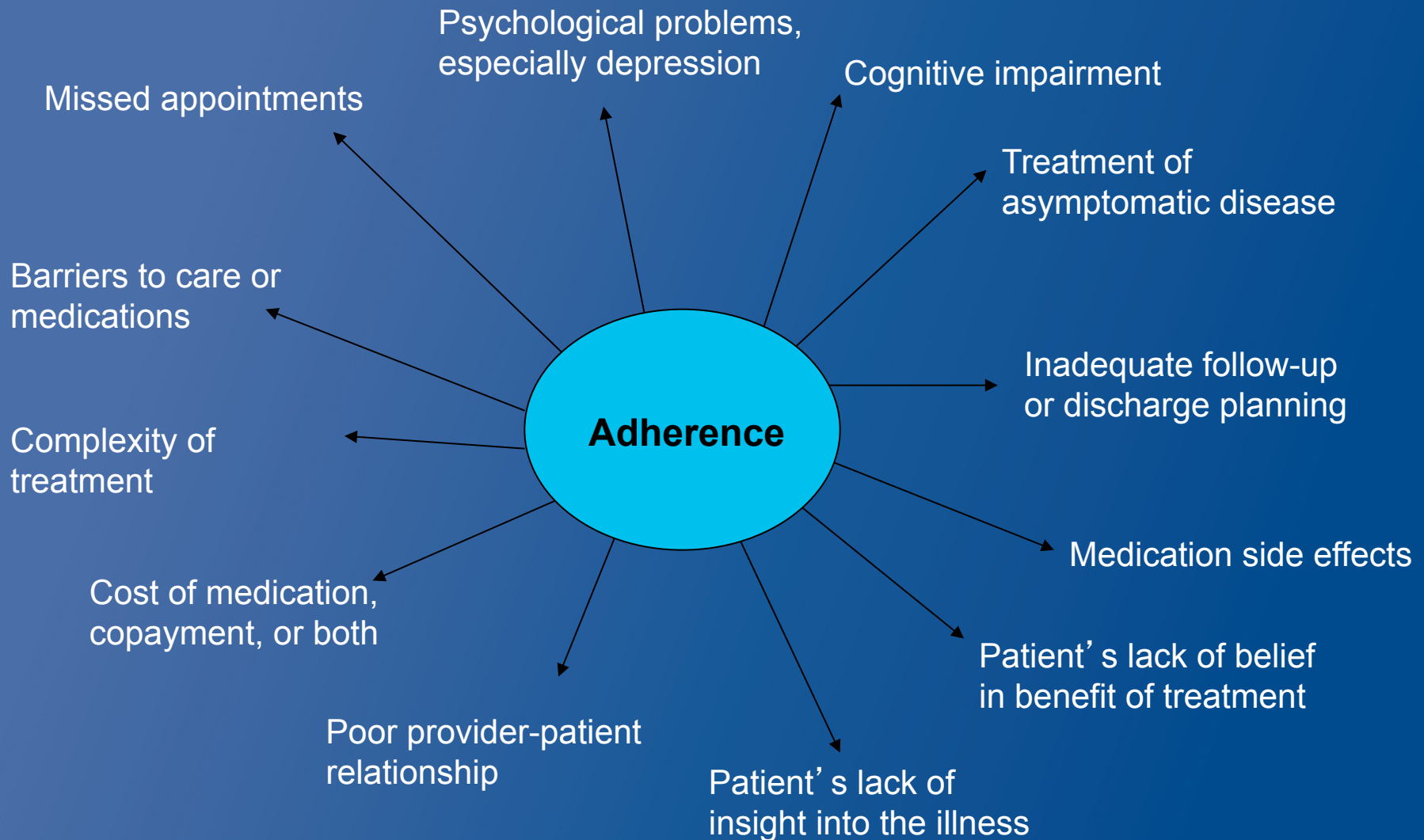
The amount of time someone is taking medications as instructed

Adherence/Compliance

- Typical non-adherence to medications is 50%
 - 24-90% in mental health
- Adherence influenced by
 - Extent, duration, and severity of disease
 - Complexity of treatment regimen
 - Cost of medications
 - Education, social support

Haynes et al, *Cochrane Collaboration*, 2008

Adherence is Complex and Multifactorial





Medication adherence is best when...

- The diagnosis is short term/self-limiting
- The symptoms are predictable & improve with the medication
- The medication is taken for a short period of time
- The medication is taken once a day
- The medication does not have side effects
- The medication is inexpensive

*Drugs don't work in patients who
don't take them.*

— C. Everett Koop, MD
Former US Surgeon General



Inflammatory Bowel Disease (IBD)



- IBD is a chronic condition, with an unpredictable course characterized by exacerbations & remissions
- No cure
- Impact on lifestyle/socially stigmatizing
- Medications have side effects
- Age: young-independence just developing
- Confusion with goals of therapy

Adherence in IBD

- Typical adherence to medications is 50%¹
 - Estimates ~ 60% for 5-ASAs
 - Estimates ~40% with thiopurines
 - Azathioprine, 6MP
- Effects:
 - More flares, hospitalizations
 - Higher medical costs (despite less medicine costs)

1.Kane SV. Aliment Pharmacol Ther 2006;23:577–85

2.Haynes et al, Cochrane Collaboration, 2008;

Adherence in IBD: Complex

Treatment-related

- Dosage/dosing regimen
- Convenience
- Formulation
- Cost/reimbursement
- Adverse effects
- Effectiveness



Illness-related

- Severity, extent, duration of disease
- Frequency and intensity of flare-ups
- Complications



Adherence

Patient-related

- Skills/knowledge to follow regimen
- Belief systems
- Psychiatric disorders
- Male gender, non-married status



1.Kane SV. Aliment Pharmacol Ther 2006;23:577–85

2.Bernal I et al. Dig Dis Sci 2006;51:2165–69

3.Lopez-Sanroman A, Bermejo F. Aliment Pharmacol Ther 2006;24(Suppl 3):45–9

Factors that Affect Adherence in IBD



- People who are more likely to adhere to therapy
 - Have less disease flare-ups
 - Are more knowledgeable about their treatment
- Clear instructions and educational materials provided by healthcare professionals increases knowledge about
 - Importance of treatment
 - Risks of non-adherence

Lopez-Sanroman A, Bermejo F. *Aliment Pharmacol Ther.* 2006;24(Suppl 3):45-49.

Kane SV. *Aliment Pharmacol Ther.* 2006;23:577-585.

Risk Factors for Non-Adherence



- Male
- Marital status
- Recent Procedure
- Greater Extent of Disease
- Taking > 4 medications
- >TID dosing

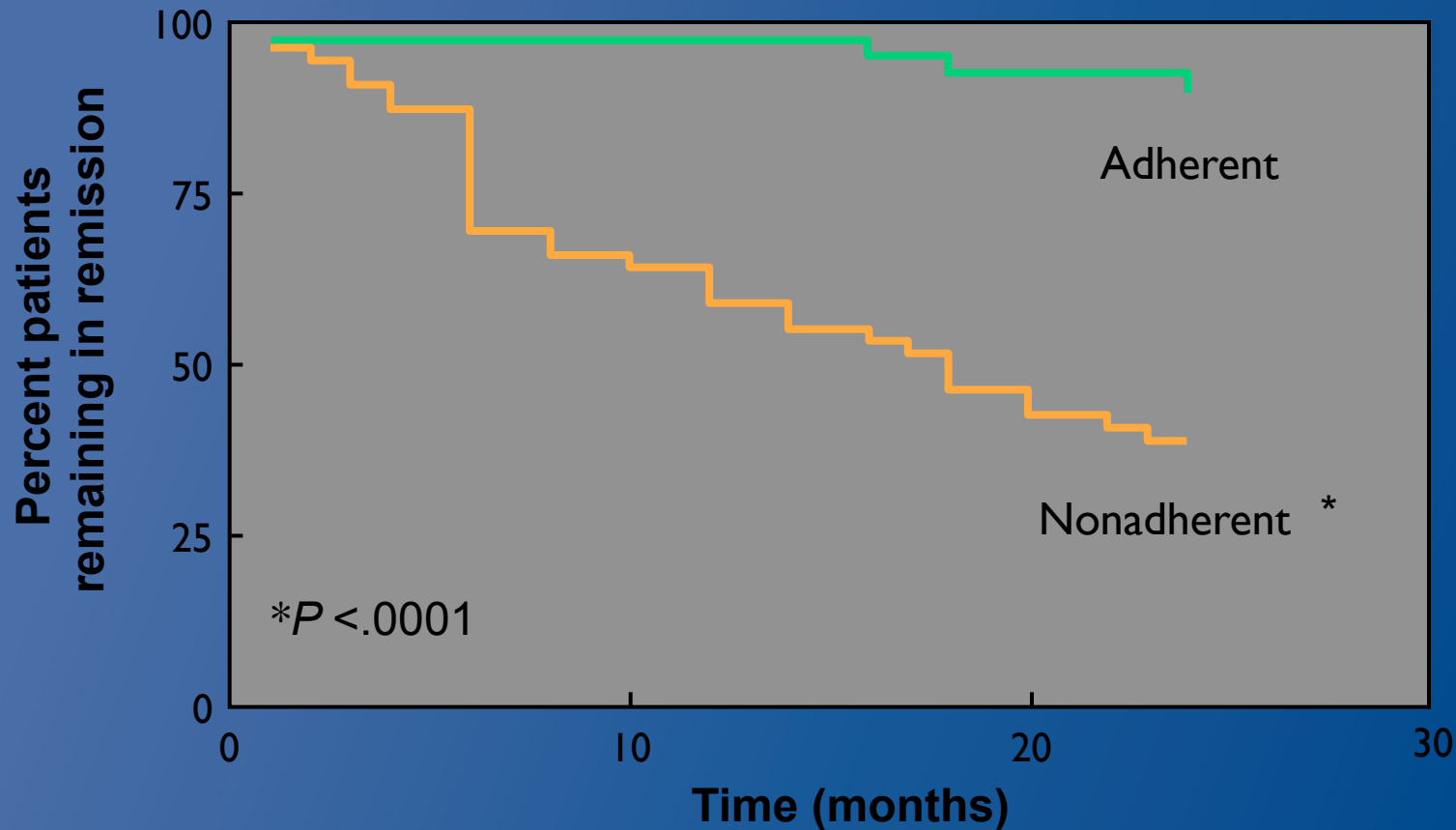
Males:

- Diagnosis of UC
- Employed

Females:

- Age <30

Nonadherence to 5-ASA Therapy Clinical Impact



What does this mean?



- Those who took their medication as prescribed (adherent) were less likely to flare (or more likely to remain in remission)
- Non-adherence was associated with recurrence

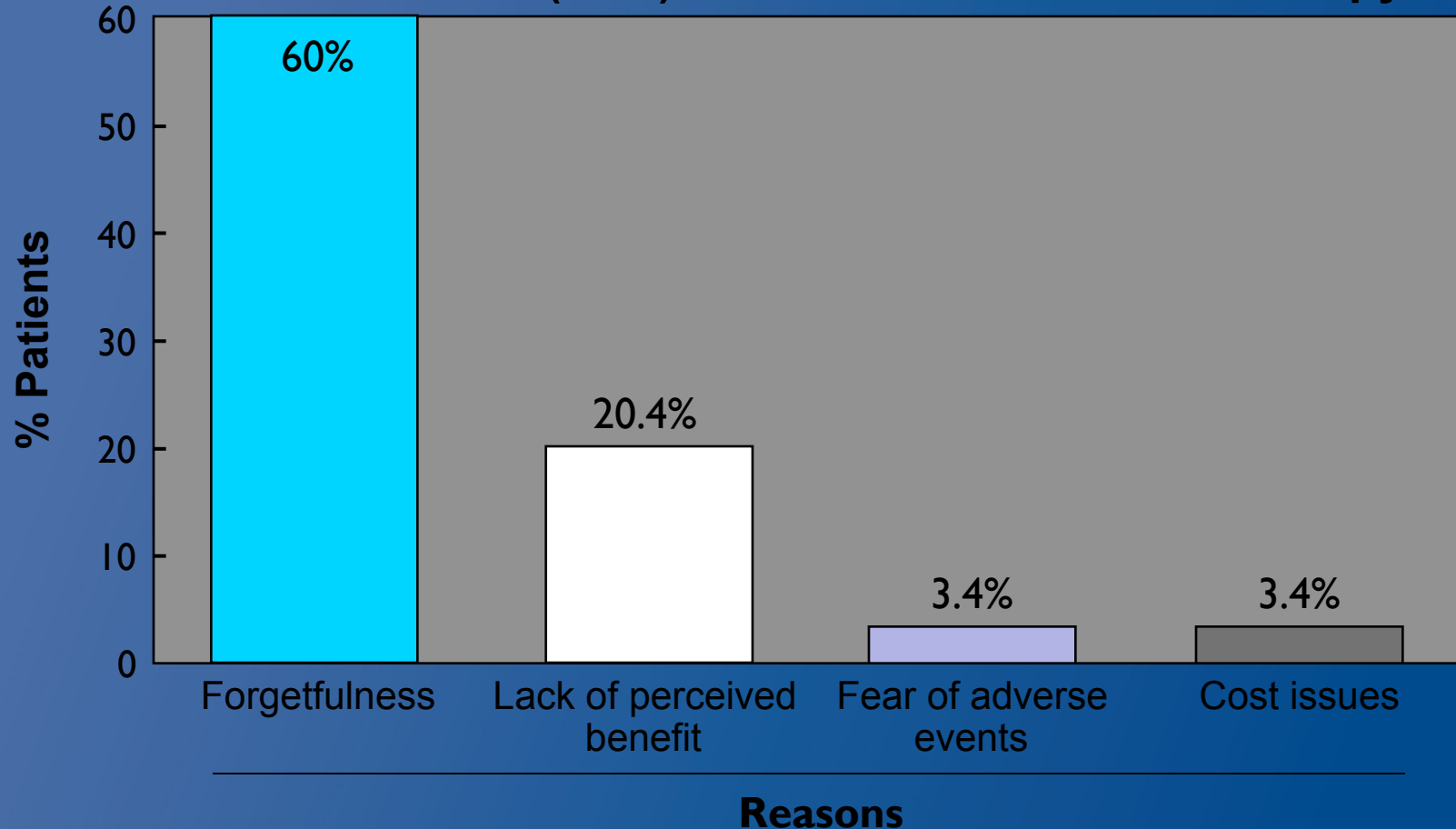
What Do Patients Say?

Study in 2009 by Gray

- 100 patients with UC interviewed
- Most important attribute to therapy is to provide consistent relief (> 95%)
- 76% said important to be convenient
- 60% said once a day very important
- Conclusion: Patients care about effectiveness, safety more than cost, convenience

Nonadherence in Quiescent UC

59/99 Patients (60%) Nonadherent to 5-ASA Therapy



What can providers do to improve adherence....

- Simplify regimen
- Discuss reminder system
- Involve family/significant others
- Stress the importance of honesty
- Facilitate shared decision-making & mutual goal setting
 - Contracting with patients

Improving Adherence



- ◆ Education on why medications are important:
 - ◆ IBD is a lifelong chronic disease
 - ◆ Decreased risk of disease progression
 - ◆ Decreased risk of flare ups
 - ◆ Increased chance of disease regression
 - ◆ Possible decreased risk of colon cancer

Velayos, FS, et al. *Am J Gastroenterol*. 2005; 100: 1345-1353.

Pica, R, et al. *Inflamm Bowel Dis*. 2004; 10: 731-736

Picco MF, et al *Inflamm Bowel Dis*. 2006: 12: 537-542.

What can YOU do to improve adherence.....

- ◆ Ask about once a day dosing
- ◆ Ask when the medication will start to improve symptoms, and which symptoms will improve
- ◆ Ask what will happen if symptoms don't improve at that time
- ◆ Have a reminder system
- ◆ Involve family/sign others

Time-saving Adherence Methods for Patients



- Smart phone alarms/ reminders
- Combining medications together in one place
 - Pill box
- Put medications with another routine activity (i.e.— toothbrush)
- Chart medications and symptoms

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Summary

- Non-adherence is:
 - Prevalent in IBD patients
 - Clinically relevant- associated with flare ups
 - Multi-factorial/ complex
 - Easy to study, hard to fix
- Non-adherence will not improve without education



**It's important to stay on
your medication even if
you feel better.**

