

The Effect of Cultural Practices on The Diabetic Regimen

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The Effect of Cultural Practices on The Diabetic Regimen “*Compliance*”

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Contents (Compliance)

- | Cases
- | Introduction
 - | Definition
 - | Magnitude
- | Methods for Measuring
- | The Determinants of Compliance
- | Strategies for Improving Compliance
- | Conclusion

Cases (1)

A 52-year-old lady known to have type 2 DM on maximum dose of oral hypoglycemic medications, but not controlled.

FBS: 10.1 mmol/L (181.1 mg%)

2hrPP: 14.3 mmol/L (257.4 mg%)

She was advised to be started on insulin but she refused completely. She says:

“No, please, I don’t want insulin”.

What can be done ??

Cases (2)

- | A 50-year-old man known to have type 2 DM on medications, having BMI of about 36, most of the time he misses his appointment, not well controlled over most of the visits.

During discussion about his weight reduction, he said:

"I don't have the time to walk & I eat less than any one else, I cannot do more than what I am doing."

How we can help him??

Cases (3)

- I A 25-year-old man is recently diagnosed to have type 2 DM. He was started on Metformin 500mg TDS.

He has been referred for diabetic education.

During discussion he said:

”I have stop the medication. I am on “Herbal medicine” and I am doing well. I walk daily about half an hour & I am OK.”

What to do for him??

Cases (4)

A 7-year-old boy is presented to A/E with DKA, hospitalized & diagnosed as type 1 DM & started on insulin regimen.

He was well controlled.

After few month of diagnosis & being well controlled, he was readmitted with DKA.

The insulin was discontinued by the family.

Why ?? Let us think about the causes.

Objectives

- To discuss why our patient did / or did not follow our advice?
- What are the factors playing role in compliance or non-compliance?
- How we can determine the compliance?
- How we can improve patient's compliance?

Making Excellent Care Automatic:

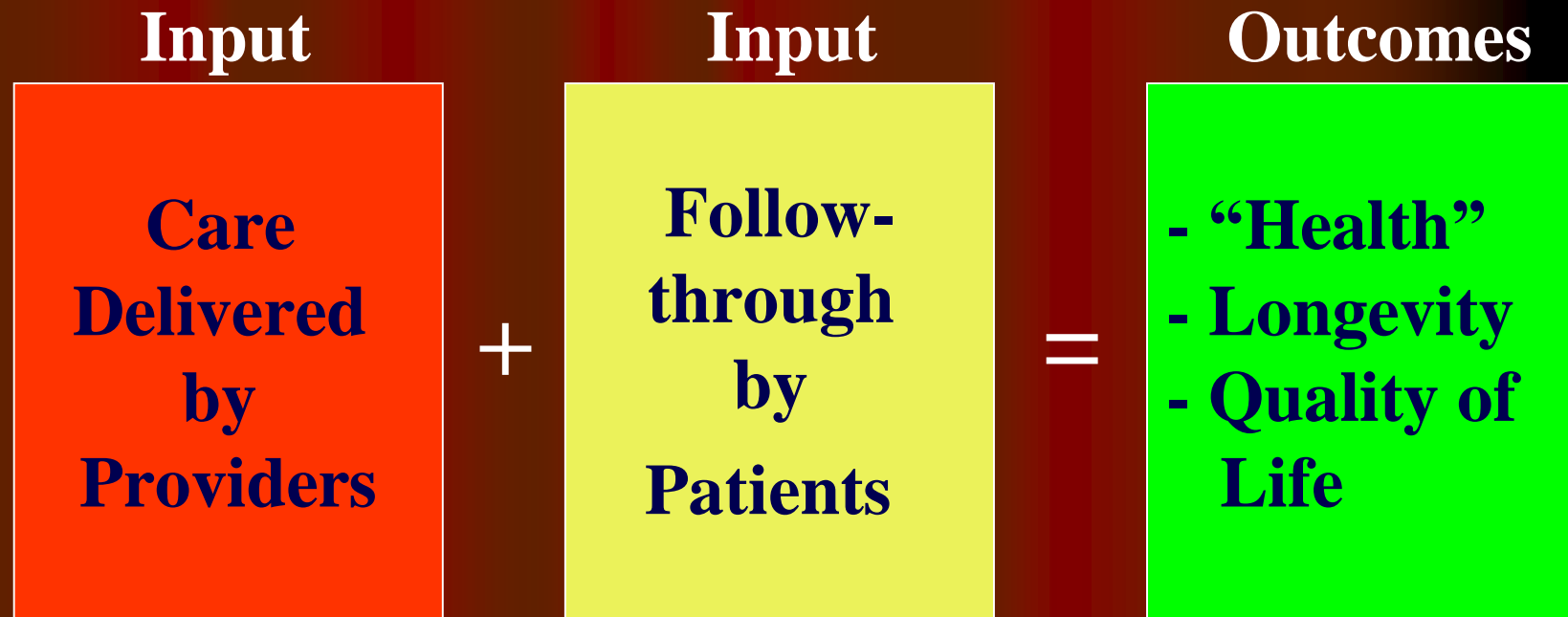
Improve Services for chronic diseases

Diagnosis & Treat

Monitor & Control



Healthcare Equation



Introduction*

- Definition of compliance:
 - adherence to the regimen of care recommended by a health professional and persistence with it over time.
 - Compliance has long been criticized as denoting obedience—"following health professional orders."
 - alternatives—"adherence" or "cooperation" or "concordance" "SELF MANAGEMENT"

Self-management vs. Compliance

Self-management

- Patients consult with medical professionals
- Patients act in informed self-interest
- Patients are equal partners in their care

Compliance

- Medical professionals are in charge
- Patients obey doctor's orders
- Patients have less power than professionals

A Systematic Review of Adherence With Medications for Diabetes

- A literature search (1966–2003)
- Quantitative data on adherence with oral hypoglycemic agents and insulin
- Result: adherence to OHA therapy ranged from 36 to 93% in patients remaining on treatment for 6–24 months.

Diabetes Care 27:1218–1224, 2004

Introduction (cont)

- At most, 50% of people with chronic disease comply with their doctor's recommendations, irrespective of disease, treatment, or age.
- Adherence and persistence are poor even among patients with diseases with a high and moderate risk of death.

Introduction (cont)

- Many factors related to patients, doctors, and the medical system affect compliance with treatment.
- Similar problems exist in all countries.
- Patients and health professionals are equally responsible.
- adverse side effects are the prime culprit.

Introduction (cont)

- the Royal Pharmaceutical Society of Great Britain:

the panel recommends a **£1.8m** (\$2.7m) research budget to support analysis of the problem and training of health professionals.

Type

Compliance Rate

| Appointment: By health professional 50%
By Patient 70%

| Short-term : Prevention 60%
Medication Cure & Rx 70%

| Long term : Cure & Rx 50%
Prevention 5 %

Important Factors in compliance

- | The Disease

- | The Clinic

- | The Treatment

Important Factors in compliance

- | The Disease:
 - | Mental illness
 - | Symptoms
 - | Disability
 - | Duration

Important Factors in compliance

I The Disease:

- I Mental illness

.....negative

- I Symptoms

.....negative

- I Disability

.....positive

- I Duration

.....negative

Important Factors in compliance

- The Clinic :
 - Waiting time
 - Individual appointment time
 - Health insurance

Important Factors in compliance

- | The Clinic :

- | Waiting time

-negative

- | Individual appointment time

-positive

- | Health insurance

-positive

Important Factors in compliance

- | The Treatment:
 - | Parenteral
 - | Number of medication
 - | Duration of Rx
 - | Cost
 - | Side effect
 - | Frequency of dosing
 - | Rx effects

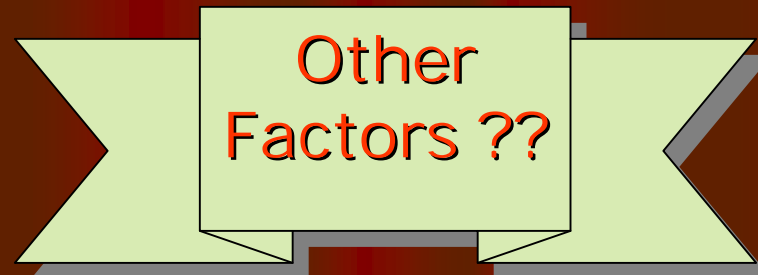
Important Factors in compliance

I The Treatment:

- I Parenteralpositive
- I Number of medication.....negative
- I Duration of Rxnegative
- I Costnegative
- I Side effectnegative
- I Frequency of dosingnegative
- I Rx effectspositive

Important Factors in compliance

- | The Disease
- | The Clinic
- | The Treatment



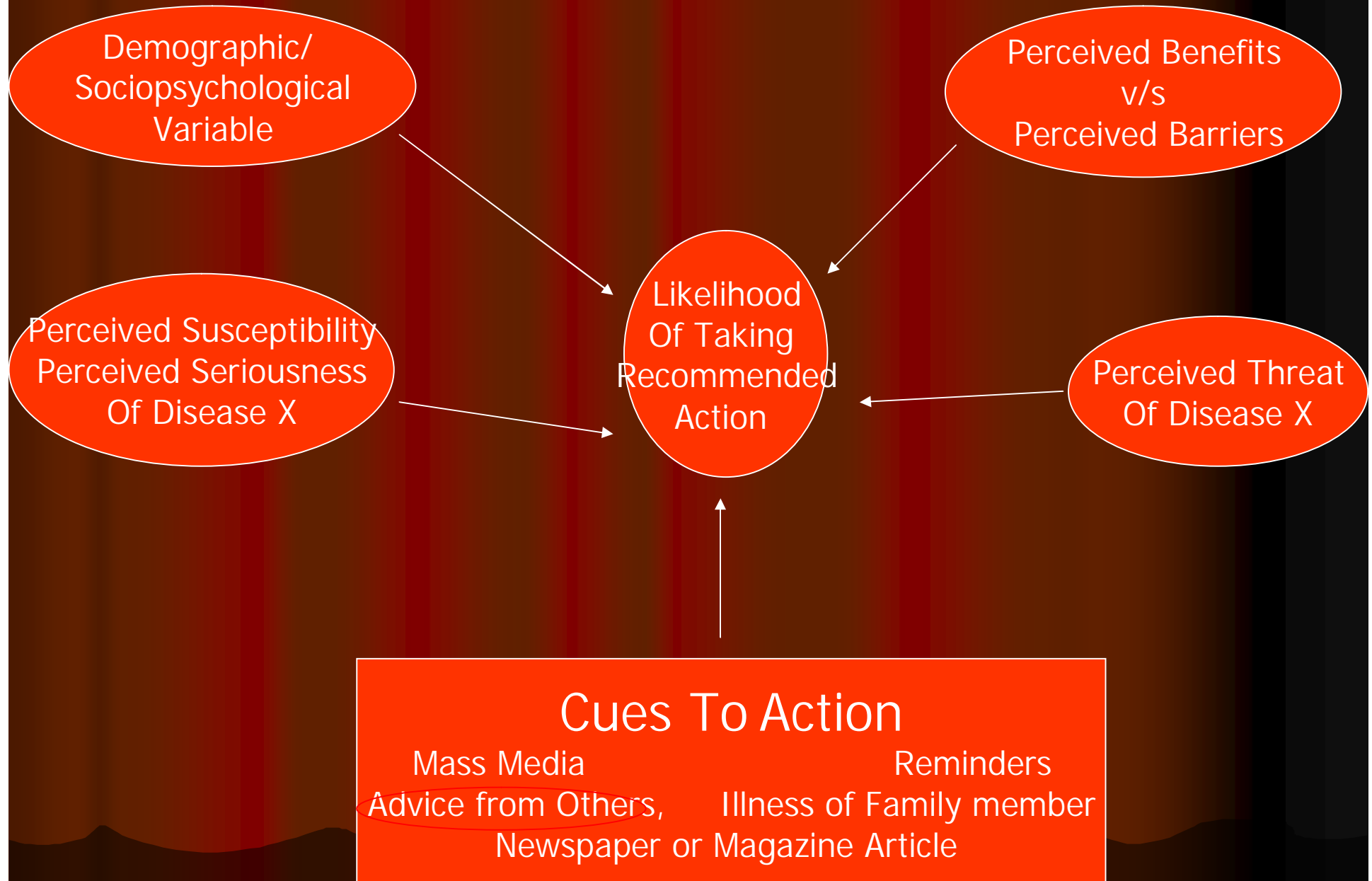
Other
Factors ??



| Health Professionals

| Patients

Health Believe Model



The relationship between the health belief model and
compliance of persons with diabetes mellitus

- A correlation of 0.5 occurred between patients' overall compliance levels and their level of health belief motivation.
- The highest levels of correlations occurred with cues to action.

Diabetes Care, 3(5); 1980: 594-598,

Patient Responsibilities

- | Attend clinic visits
- | Keep home monitor records
- | Notice & report symptoms
- | Take multiple medications
- | Make diet changes
- | Limit certain food
- | Care for their feet
- | Exercise



Patients May Fulfill Their Responsibilities If...

- | ...they understand what to do & why??...
- | ...they believe they can do it...
- | ...it helps them to feel much better *quickly*
- | ...they're not depressed
- | ...they can afford it

Other Factors

- | Health Professionals

- | Patients

Strategies for improving compliance

Patient-Professional Interaction: “Meeting”

- | It is a goal-seeking activity in which the goals of one party may or may not be clear to other party. (Byrne & Long)
- | The consultation should be a discussion and sharing of ideas between two **experts**.

TRANSACTIONAL ANALYSIS MODEL- ERIC BYRNE

Health Professional

Patient

PARENT



CHILD

ADULT



ADULT

CHILD



PARENT

Transactional Analysis

Parent to Child

Child to Parent

Adult
To
Adult

I Handing Over:

Has the patient accepted the
management plan we have agreed?
(Negotiating, influencing & gift-wrapping)

“Roger Neighbour”

Self-monitoring of blood glucose significantly improves metabolic control in patients with type 2 diabetes mellitus: the Auto-Surveillance Intervention Active (ASIA) study.

Diabetes Metab. 2003 Dec;29(6):587-94.

Lifestyle changes can be achieved through counseling and follow-up in first-degree relatives of patients with type 2 diabetes.

J Am Diet Assoc. 2003 Jul;103(7):835-43.

Effects of an automated electronic reminder in changing the antiplatelet drug-prescribing behavior among Italian general practitioners in diabetic patients: an intervention trial.

Diabetes Care. 2003 May;26(5):1497-500.

- | Changes in diabetes self-care behaviors make a difference in glycemic control: the Diabetes Stages of Change (DiSC) study.

Diabetes Care. 2003 Mar;26(3):732-7.

The role of the family in managing therapy in minority children with type 2 diabetes mellitus.

continuing family involvement in the management of adolescent patients with DM is strongly advised for optimum therapeutic results.

J Pediatr Endocrinol Metab. 2002 Apr;15 Suppl 1:547-51.

A structured program of diabetes self-management education was effective in contributing to favorable diabetes health outcomes

Diabetes Educ. 2000 Nov-Dec;26(6):995-

Stress management improves long-term glycemic control in type 2 diabetes.

stress management program in a "real-world" setting can result in clinically significant benefits for patients with type 2 diabetes.

Diabetes Care. 2002 Jan;25(1):30-4

Teaching subjects with type 2 diabetes how to incorporate sugar choices into their daily meal plan promotes dietary compliance and does not deteriorate metabolic profile.

Diabetes Care. 2001 Feb;24(2):222-7.

Behavioural intervention in the management of compliance in young type-I diabetics.
especially in the management of compliance and metabolic control, enhancement of knowledge and quality of life.

J Assoc Physicians India. 2000 Oct;48(10):967-71.

Interventions to Improve the Management of Diabetes in Primary Care Outpatient. A Meta-analysis.

Complex interventions in which patient education was added and/or the role of a nurse was enhanced led to improvements in patient outcomes as well as the process of care.

Diabetes Care 24:1821–1833, 2001

Effectiveness of Self-Management Training in Type 2 Diabetes (A systematic review of RCTs)

Positive effects of self-management training on knowledge, frequency and accuracy of selfmonitoring of blood glucose, self-reported dietary habits, and glycemic control were demonstrated in studies with short follow-up

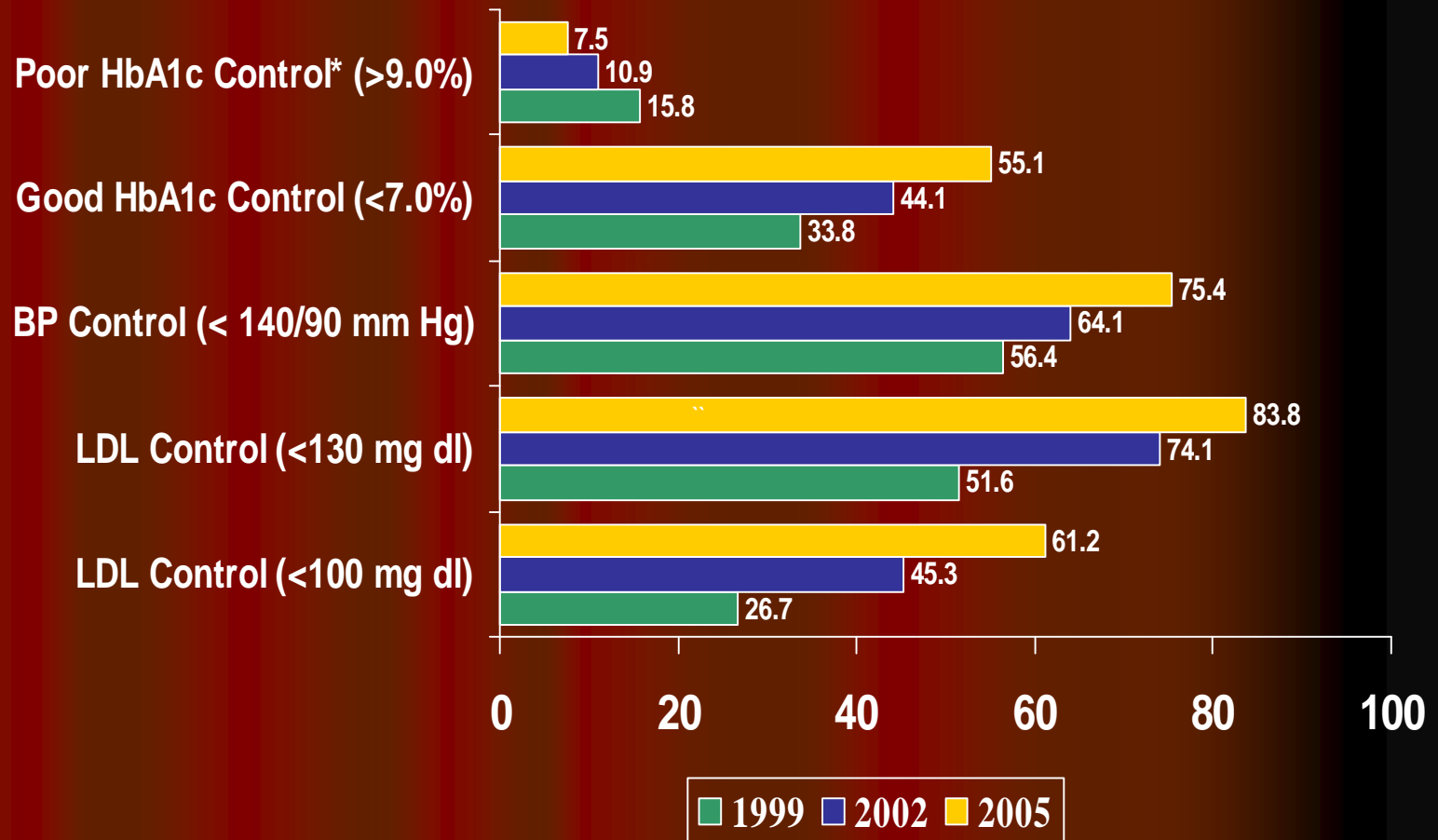
Diabetes Care 24:561–587, 2001

- | Impact of social support and stress on compliance in women with gestational diabetes
- | Results indicate that the level of reported compliance was high for both insulin administration and diet with minor stressors and greater social support were associated with greater compliance.

Diabetes Care, 13(4); 1990: 441-443

Improvement In Key Clinical Measures

% of adult patients with



* Lower is better for this measure.

Patient Longevity Study

- | Information is essential
- | Successful outcome in chronic disease is *transformation*:
 - Adaptation to changed self
 - Adaptation to changed circumstance
 - Active, comprehensive self-management

- 1-yr controlled study of diabetes educ:
83 pts.

- Finding:

- *Patients who took part in diabetes self-mg education had significantly better quality of life, foot care, eye care, and hospitalization rates.*

McMurray et al., *AJKD* 40(3):566-575, 2002

Determinants **of** **Compliance**

Ways of measuring compliance

- Therapeutic outcome
- Impression of health professional
- Patient interview
- Filling of prescription
- Pill count

What Works?

Meta-analysis of 153 intervention studies to improve compliance:

- No single strategy showed a clear advantage over another
- Interventions with cognitive, behavioral, *and* affective components were more effective than single-focus interventions.

Roter et al., Effectiveness of interventions to improve patient compliance: a meta-analysis.
Med Care 36(8):1138-61, 1998

Compliance

■ Appointment

■ Acute medical regimen

■ Chronic medical regimen

Strategies

Mailed reminders
Telephone reminders
Efficient scheduling

Explicit communication
Extended educator role

Monitoring
Behavioral modification
Explicit communication

Strategies for improving compliance

| Educational Strategies

| Behavioral Strategies

Educational Strategies

- | Brevity
- | Organization
- | Readability
- | Repetition
- | Specificity
- | Extending education to the community
- | Consultation style
 - | Counseling v/s consulting
 - | > listening than talking
 - | Discussion v/s lectures

Behavioral Strategies

- | Communication :
Support, reward, concern, expectation, warmth & friendly communication
- | Reminders
- | Tailoring
- | Contracting
- | Self-monitoring
- | Reinforcement to maintain the original change of behavior
- | “Personalizes Motivational intervention” (MI)

Helping Patients Cope and Address Healthy Lifestyle

- Personalized Motivational Intervention (PMI):
 - Motivational Interviewing
 - Culture-centered counseling

Background

- I Motivational intervention (MI) is intended to promote behavior change by starting
- I “where the client is at” and using a specific set of strategies and skills to move the client forward in the process of change.
- I The earliest MI studies were on smokers and problem drinkers who were found to cycle back and forth through distinct “stages of change” before achieving full, sustained remission.
- I The stages were named:

Stages of Change

- | Pre-contemplation
- | Contemplation
- | Determination (or preparation)
- | Action
- | Maintenance

Concept of “Brief Intervention”

- I Brief interventions—
counseling (very brief 5 – to
10-minutes) delivered by
primary care providers in
the context of several
routine office visits—

Efficacy research:

- q reduces alcohol
consumption by high-risk
drinkers
- q grief
- q exercise, nutrition,
diabetes
- q parenting
- q elder caregivers



Basic Tenets of PMI

- | Detecting the patient's perceptions
- | Gradually introduce reality in the face of detrimental coping
 - | Developing discrepancy (MI Basic Principle)
- | Empathy, but do not reinforce negative or inaccurate beliefs (MI Basic Principle)
 - | Use a non-threatening, demeanor
 - | Goal to establish therapeutic alliance

Basic Tenets of PMI

- Timing—later may be better if practice milieu supports, use time to build rapport so person/family will return
- Promote grief work
- Support self-efficacy (MI Basic Principle)
- Roll with resistance and avoid argumentation (MI Basic Principle)

(Key features of MI): **F.R.A.M.E.S**

- | **Feedback:** Specific & tailored to pts
- | **Responsibility:** It is up to you; your choice
- | **Advice:** Firm & clear recommendations
- | **Manu:** Different ways to work it out; you choose
- | **Empathy:** No push & no confrontation
- | **Self-efficiency:** You can do it

TECHNIQUES OF MI

O.A.R.S.

I OARS Skills

- I Open-ended Questions

- I Affirmation

- I Reflective listening

 - I Repeat, Rephrase, Paraphrase, State feeling

 - I “Do you mean _____?”

- I Summarize

Clues to Improve Compliance

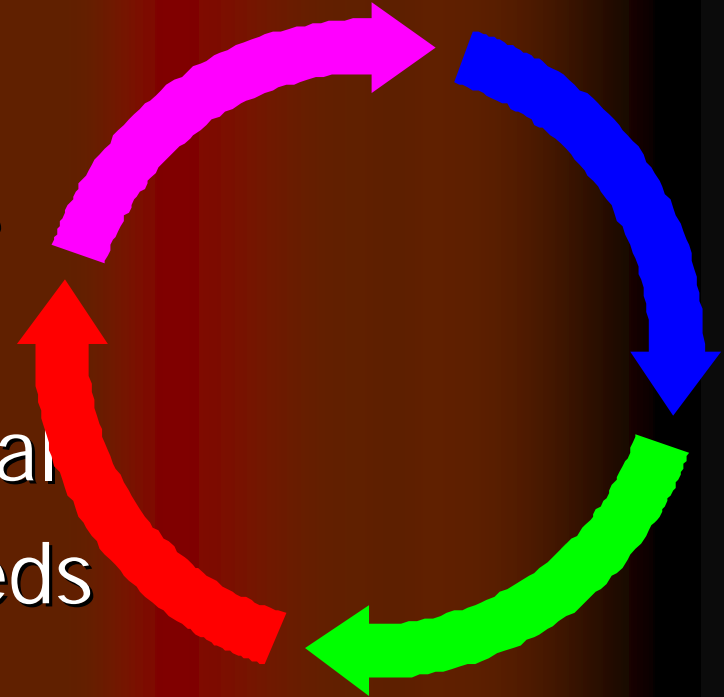


- | Health literacy
- | Control/autonomy
- | Education, exercise,
& psychosocial support
- | Demographic factors

Help patients to become experts

Offer resources:

- Assess learning needs
- Encourage questions
- Provide source material
- Reassess learning needs



How can we help patients to become experts?

Offer support:

- “Teach them to fish”
- Help troubleshoot
- Reassure them that they can succeed



Conclusions

- | Chronic disease requires a new paradigm
- | A successful outcome is self-management
- | Patients benefit from a self-management approach that supports their independence
- | Partnering with your patients to help them become experts can improve outcomes

HOW??

Conclusion

- | Effective Communication
- | Counseling
- | Positive friendly attitudes
- | Adult to Adult style
- | Organization
- | Personalized Motivational Intervention
- | Team work / Partnership

Good Pt's care & high compliance