



## Patient Education and Health Promotion

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IMPORTANT

NOTES

GOLD

EXTRA

### OBJECTIVES

- Recognize the impact of different lifestyle modification measures on atlas of morbidity of Saudi population.
- Explain patient education purposes and factors to consider in the process and how to ensure its effectiveness.
- Define health promotion with example to encourage good behavior and discourage bad health behavior.
- Become aware of health belief model.
- Discuss why primary care is the optimum setting for health education and health promotion.

### DONE BY

Team Leader	Nasser AbuDujain
Members	Faisal Alfawaz
Revise	Abdulaziz Aljasser, Nasser Abudujain, Moaid Alyousef
Sources	Drs Slides and Notes

## Defining Health The World Health Organization

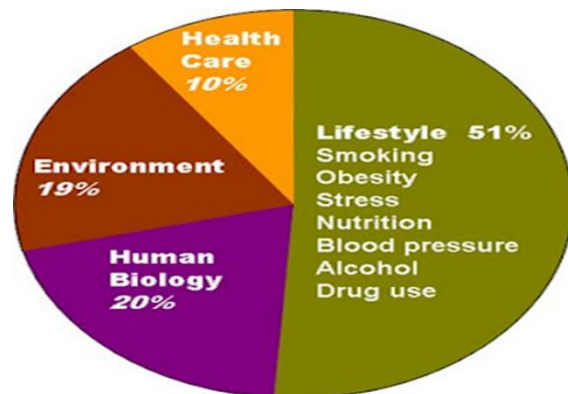
Health is a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity.

### The Atlas of Morbidity in KSA

Diseases and risk factors	*Nozha et al (%)	**Stepwise MOH Study (%)	***HME MOH (%)
Hypertension	26.1	26	15.2
Diabetes Mellitus	23.7	17.9	13.2
Hypercholesterolemia	54	19.3 (TG@0.3)	8.5
Body mass index (BMI)			
A- 30	35.5	36.1	28.7
Overweight	35.6		30.7
Central obesity		29.4	
Smoking	12.8	12.9	12.2
Consuming less than 5 servings of fruits and vegetables/day		93.5	92.8
Low physical activity	96.1	33.8	60.3
Coronary artery disease	5.5		
Metabolic syndrome	39.3		

\*conducted 1995-2000 in more than seventeen thousand Saudis aged 30-70  
 \*\*conducted 2004-2005 in 758 Saudis aged 5-64  
 \*\*\*conducted 2013 on 1700 Saudis aged 18-64

### The commission on social determinants of health: tackling the social roots of health inequities



Best management for health problems is to look for the CAUSE.

We should give more attention to treat causes of obesity, treat and prevent these causes instead of just performing bariatric surgeries. Pie chart: 51% of our health is determined by **lifestyle** habits. So we should direct healthcare budget towards improving lifestyle rather than buying medications for hospitals.

## The Iceberg Phenomenon

The **iceberg phenomenon** is a metaphor emphasizing that in every health problem the number of known cases of **disease** is outweighed by those that remain undiscovered, which is compared to the unseen part of an **iceberg** that is much larger than the part that is visible above the water.



## Physical Activity

A sedentary lifestyle increases the risk of:

- Overall mortality (2 to 3-fold)
- Cardiovascular disease (3 to 5-fold)

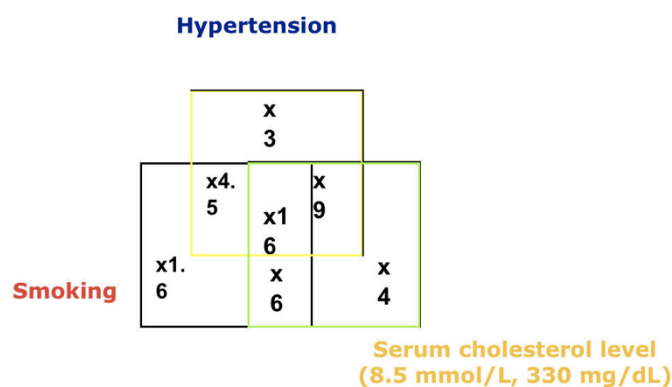
The effect of low physical fitness is comparable to that of hypertension, high cholesterol, diabetes, and even smoking.

## Overweight

Increased weight is associated with:

- Increased risk of overall mortality (up to 2.5-fold in the 30-44 age group, less at older ages)
- Increased risk of cardiovascular mortality (up to 4-fold in the 30-44 age group, less at older ages)
- Increased risk of diabetes (up to 5-fold)
- Increased risk of hypertension
- Increased risk of some cancers
- Increased risk of gall bladder disease like gallstones

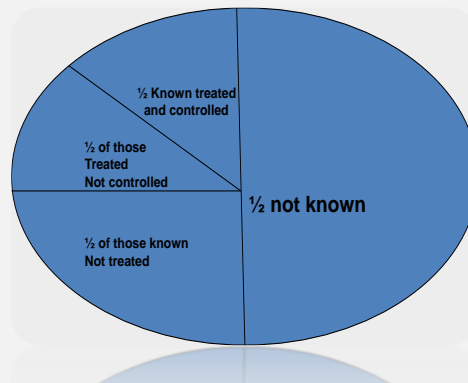
### Levels of Risk Associated with Smoking, Hypertension and Hypercholesterolaemia \*



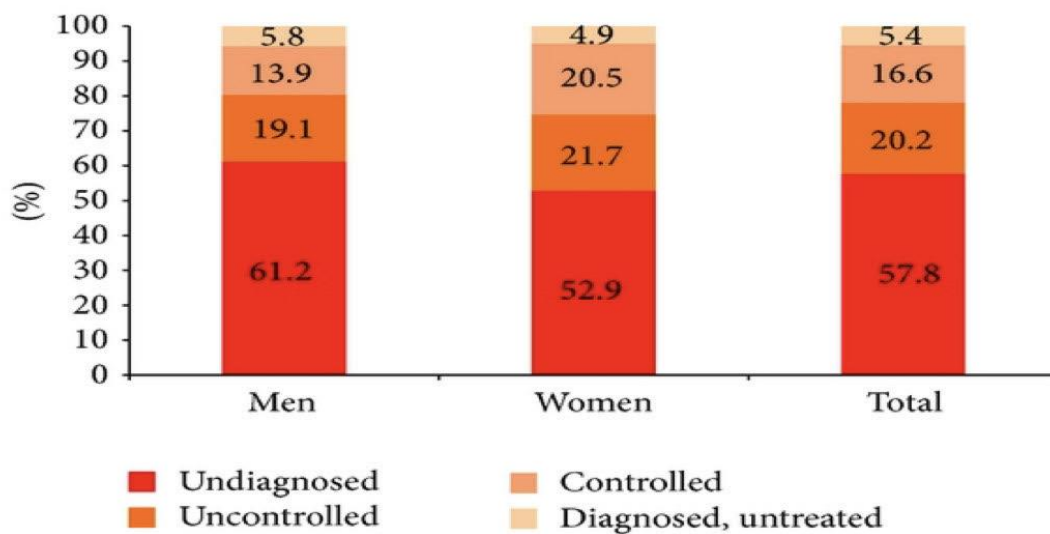
\*The risk of cardiovascular disease is cumulative. So Hypertension alone increases the cardiovascular risk by 3 folds. Smoking: 1.6 folds. High cholesterol: 4 folds. High cholesterol + hypertension: 9 folds. So it's cumulative (more than the sum of the two values alone). Hypertension + smoking: 4.5 folds. High cholesterol + smoking: 6 folds. All three factors together: 16 folds.

## Hypertension

- The Rule of Halves in Hypertension:** The 'rule of halves' for hypertension states that: 'half the people with high blood pressure are not known (undiagnosed), half of those known (diagnosed) are not treated and half of those treated are not controlled'. So only 50% of treated patients are controlled (around 12% of all).

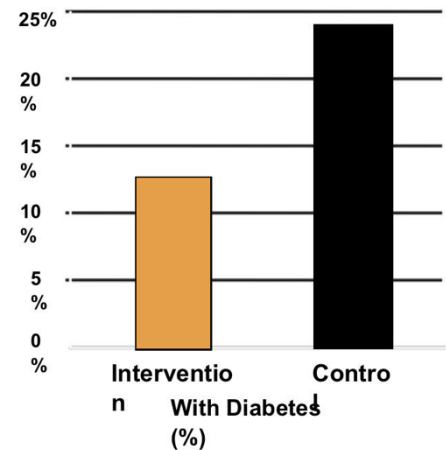


### Percent distribution of diagnosis and treatment status among hypertensive Saudis aged 15 years or older, 2013 :



## Benefit of Treating The Metabolic Syndrome: Finnish Diabetes Prevention Study.

pre-diabetes patients were divided into intervention group (diet, exercise, smoking cessation) and control group. After 4 years, risk of diabetes reduced by 58%.



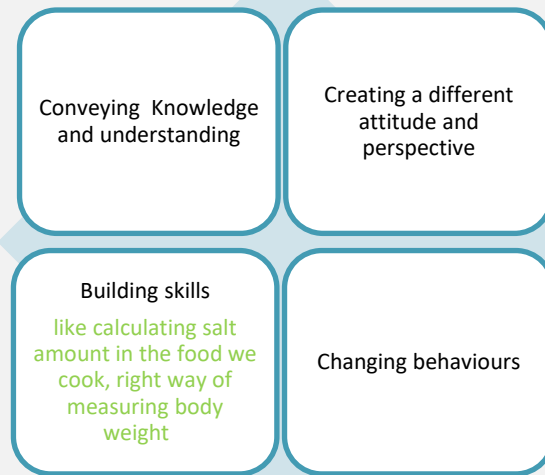
## Impact of health behaviors on blood pressure CHEP 2014

Intervention	Systolic BP (mmHg)	Diastolic BP (mmHg)	Evidence grade
Diet and weight control	-6.0	-4.8	B
Reduced salt/sodium intake	-5.4	-2.8	A
DASH diet	-11.4	-5.5	B
Physical activity	-3.1	-1.8	D
Relaxation therapies	-3.7	-3.5	B-D
Multiple	-5.5	-4.5	

### Evidence for lifestyle modification

- A weight loss diet resulted in reductions in body weight and BP.
- Reduced sodium intake reduces blood pressure, risk of stroke and fatal coronary heart disease.
- The inverse association between low-fat dairy foods and fluid dairy foods and risk of EBP.
- A high fruit and vegetable intake is inversely associated with BP levels.
- Regular aerobic exercise significantly reduces BP the equivalent of 1 class of antihypertensive medication.
- Hypertension was associated with smoking in a dose–response manner.
- Improve sleep quality could serve as effective primary, secondary, and tertiary.

## Principles of Patient Education



### Factors to Consider

- Patient's and family's beliefs and values
- Their literacy, educational level and language
- Emotional barriers and motivations
- Physical and cognitive limitations
- The financial implications of care choices

### To Ensure Patient Education is Effective

- Incorporate it into mission and strategic priorities
- Create environment that encourage patient education efforts
- Ensure infrastructure to oversee, provide and support patient education
- Incorporate it policies, procedures and protocol
- Ensure performance improvement address patient education
- Provide necessary resources (staff, training and materials)

## Improving Patient Education

### Assess educational and clinical needs

- Include in patient education classes
- Skills lab for patient and family
- Individualize printed materials (? culturally sensitive)
- Educational telephone program
- Self-monitoring diaries for self-assessment and learning
- Well prescription (behavior, exercise, diet, stress, reading etc.)
- Workshops for staff
- Multidisciplinary patient education committees + patient +family (needs, design, evaluate)

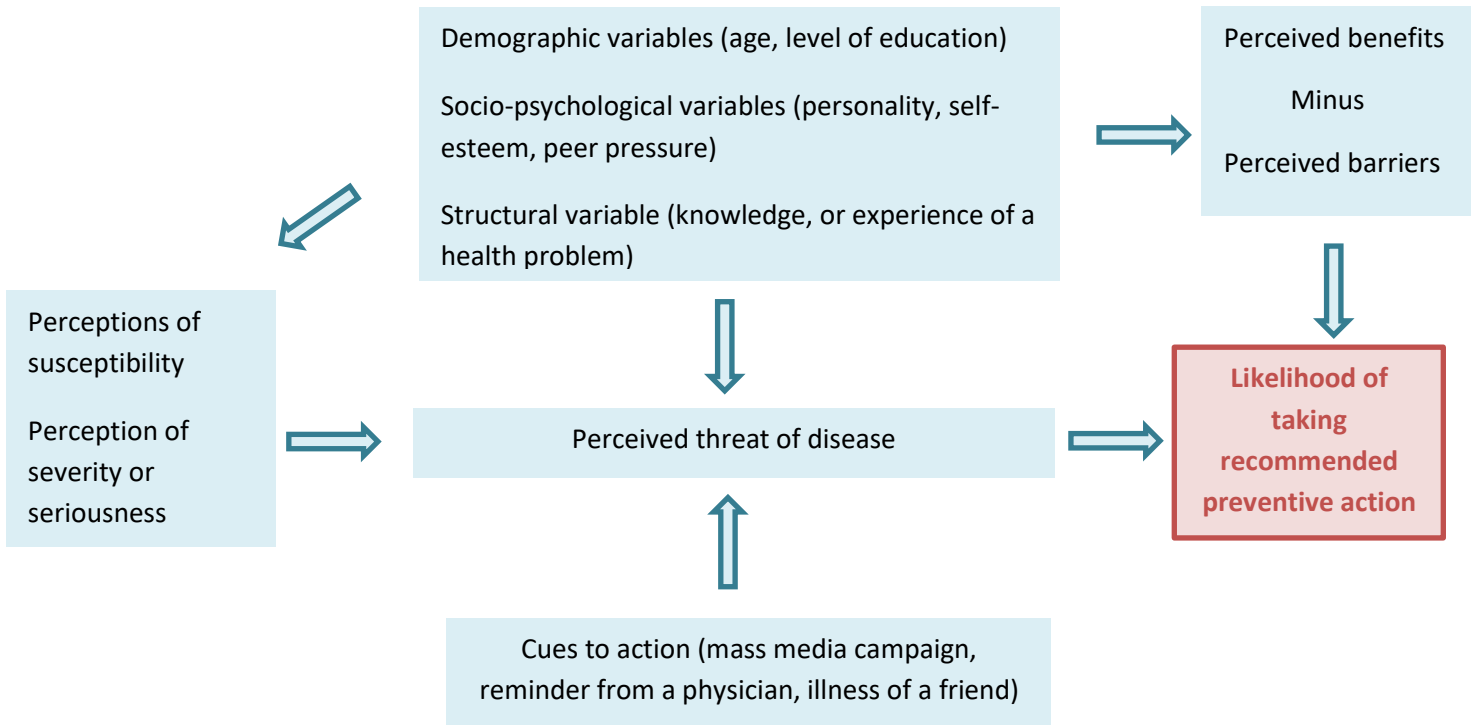
## Challenges to Effective Education

- Sensory and physical impairments
- Illiteracy
- Language
- Age
- Social, cultural, spiritual

## The value of patient education can be summarized as follows:

- Improved understanding of condition, diagnosis, disease, disability
- Improved understanding of methods and means to manage multiple aspects of medical condition.
- Improved self-advocacy in deciding to act both independently from medical providers and in interdependence with them.
- Increased Compliance.
- Patient Outcomes –respond well to plan – fewer complications.
- Informed Consent.
- Utilization – More effective use of medical services.
- Satisfaction and referrals.
- Risk Management - Lower risk of malpractice when patients have realistic expectations.

## Phases of the Health Belief Model



## Six main constructs

### People are ready to act if they:

1. Believe they are susceptible to the condition. (**perceived susceptibility**)
2. Believe the condition has serious consequences (**perceived severity**)
3. Believe taking action would reduce their susceptibility to a condition or its severity (**perceived benefit**)
4. Believe cost of taking action (**perceived barriers**) are outweighed by the benefits.  
Barriers are like tax, increase prices of cigarettes
5. Are exposed to factors that prompt action (e.g., television, reminder...etc.) (**cues to action**)
6. Are confident in their ability to successfully perform an action (**self-efficacy**)



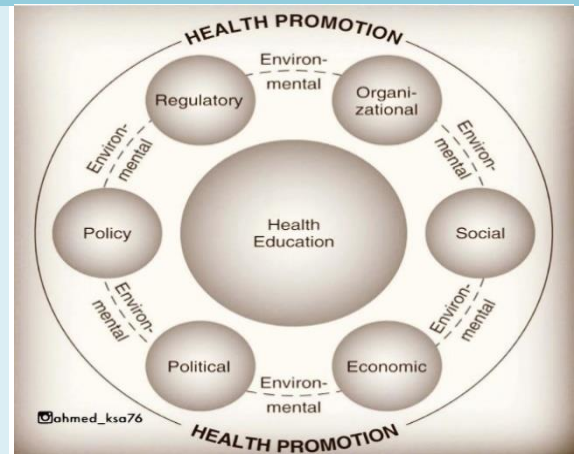
## What is Health Promotion?

*Concept was first introduced in USA 1979*

environmental, social, and financial supports that help individuals and groups reduce negative health behaviors and promote positive change among various population groups in a variety of settings.

To promote positive change the government increased tax, price of cigarettes. Prohibited selling for children under 18 yo, and smoking indoors.

To increase physical exercise: **health education** (8000 steps – in 30 minutes), **organization**: set good areas for exercise, campaigns, marathons.



## Behavior Change Is it an Easy Task?

- Can we expect people to adopt a healthy lifestyle after they have been exposed to a health promotion program?
- Can we force people to participate in sport and physical activities because we believe they are good for their health and soul?
- **No** ... Getting people to engage in health behavior change is a complex process that is very difficult even under the best of conditions. (e.g. Even though the population is aware and **educated** about the fact that smoking is harmful, some people continue to do it)

## What Has Been Done?

- **In the past three decades:**
  - widespread interest in good health, wellness, and health behaviors,
  - recognized for its potential to improve quality of lives, longevity & adaptation healthy lifestyle,
  - Programs to promote good health among general population.
- **WHO Annual Global Move for Health initiative**
  - To promote healthy diets and physical activity among the world population, both male and female, of all ages and conditions including disabilities worldwide.
- **WHO Global Strategy on Diet, Physical Activity and Health**

## Why aren't we effective?

- Programs not based on health behavior theories or outcomes assessment.
- The programs planners may:
  - Not have the necessary knowledge of health promotion program planning, implementation, evaluation and lack adequate training in health behavior theories.
- Having good intentions and the knowledge in exercise and sports are not enough.

## How Do We Change Culture?

- In some culture, “plump” used to be a sign of health and wealth.
- In the Middle East, “round” is seen as successful.
- Some Africans view “heavy” women as a sign of having rich husbands.

- ❖ Measures which promote good health and prevent or delay the onset of diseases or their complications **is anticipatory care?**
- ❖ This care aims to:
  - Improve the quality of life
  - Reduce the premature disability
  - Increased life expectancy

**The optimum setting for anticipatory care is Primary Health Care/Family medicine/GP.**

- ❖ Frequent contacts.
- ❖ Defined population.
- ❖ Primary-care team.
- ❖ Dr.-Pt. relationship.
- ❖ Holistic approach.

## QUESTIONS

### QUESTIONS (1)

- “Believe cost of taking action are outweighed by the benefits” is which one of the following terms?

A) Perceived barriers

B) Perceived benefit

C) Cues to action

### QUESTIONS (2)

- Which of the following is not considered a challenge to effective education?

A) Language

B) Age

C) Enthusiasm

### QUESTIONS (3)

- “Are confident in their ability to successfully perform an action” is which one of the following terms?

A) Perceived benefits

B) Self-efficacy

C) Perceived severity

### QUESTIONS (4)

- TRUE OR FALSE, Health Education is the same as Health Promotion?

A) TRUE

B) FALSE

## ANSWERS

A, C, B, B