

# IBS CME Isfahan

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Session 2 Burden

# Who is Who ?

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## Scenario 3:

- A 48-year-old female school principal reports persistent problems with abdominal pain, bloating and constipation.
- She experience sharp, crampy abdominal pain two or three days per week relieved by defecation, frequent bloating, and hard stools every two or three days.
- She becomes anxious when in social situations and avoids them, occasionally misses work, and she rates her disability as moderate.
- Physical exam and lab tests are normal with no alarm signs.

# Question 3: Towards a definition

- 3-1 IBS as a concept
- 3-2 Criterion-based Definition
- 3-3 Severity
- 3-4 Symptomatic overlap

## 3-1 IBS as a concept

- Irritable bowel syndrome (IBS) is a **functional disorder** of the gastrointestinal tract characterized by **chronic abdominal pain and altered bowel habits** in the absence of detectable structural abnormalities.
- IBS is associated with increased health care costs and is the second highest cause of work absenteeism.

# Diagnostic criteria (Rome IV)

- Recurrent abdominal pain averaging  $\geq 1$  day/week in the last 3 months, with  $\geq 2$  of the following criteria:
  - Related to **defecation**
  - Associated with **change in frequency** of stool
  - Associated with **change in form** (appearance) of stool
- Criteria fulfilled for the last 3 months with symptom onset  $\geq 6$  months before diagnosis

## 3-2 Criterion-based Definition

**pain**

**$\geq 1$  day/week** ,

last 3 months,

with  $\geq 2$  of :

Related to **defecation**  
**change in frequency**  
**change in form**

symptom onset  $\geq 6$  months before  
diagnosis

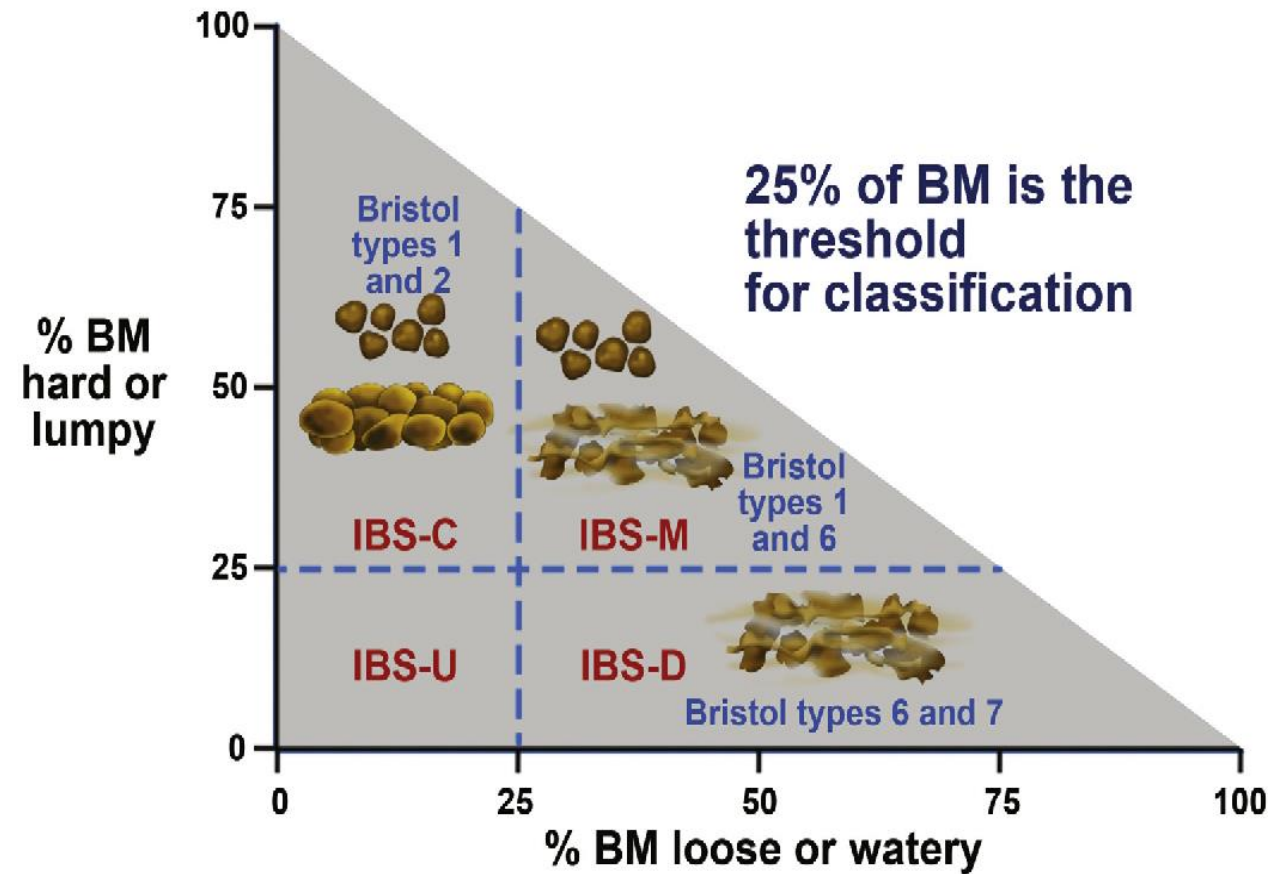
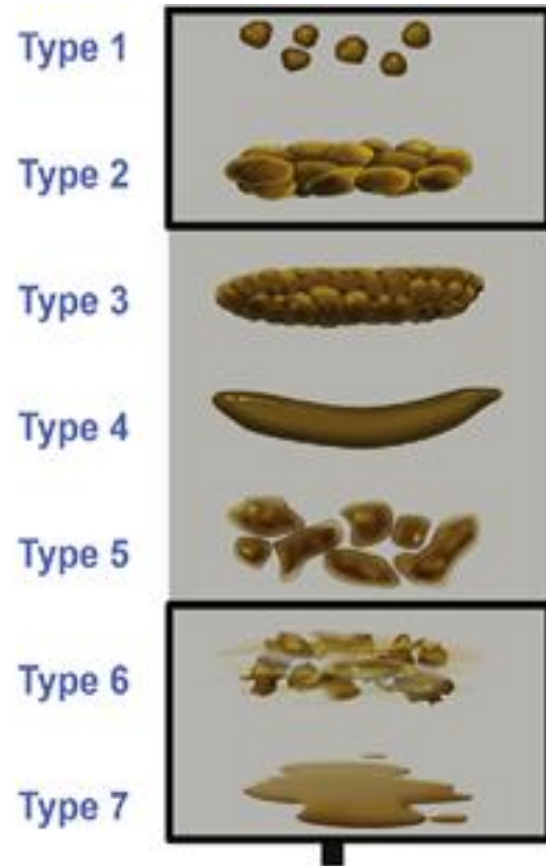
**Rome V is on the way ...**



# Abdominal Pain

- A main clinical feature of IBS according to Rome IV.
- Highly variable in intensity and location.
- It is frequently episodic and crampy.
- Superimposed on a background of constant ache (vs. CAPS) .
- May be mild enough to be ignored or it may interfere with daily activities.

# Classes: Bristol stool form scale (BSFS) not Rome IV FC neither FDr



# 3-3 Severity

## IBS-SS

Place an X anywhere on the line between 0 and 100 to indicate as accurately as possible the severity of your symptoms.

**How severe is your pain?**



**If currently in pain, how severe is your abdominal pain?**



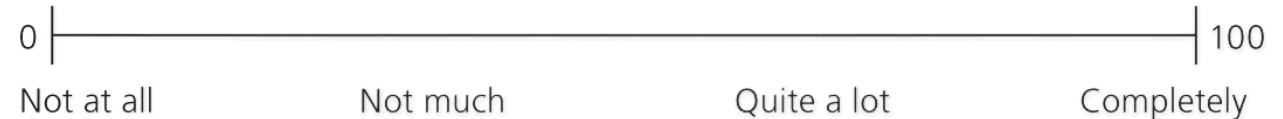
**If you currently have abdominal distention, how severe is it?**



**How satisfied are you with your bowel habits?**



**How much does your IBS affect or interfere with your life in general?**



NOTE: Each of the five questions generates a score from 0 to 100 points, with a maximum total score of 500 points. Mild IBS = 75 to 174 points; moderate IBS = 175 to 299 points; and severe IBS = 300 points or more.

## 3-4 Symptomatic overlap

➤ IBS symptoms tend to come and go over time and often overlap with: functional disorders such as fibromyalgia, headache, backache, and genitourinary symptoms.

## Scenario 4:

- A 50 year old woman with a history of fibromyalgia is referred with chronic abdominal pain associated with both constipation and diarrhea for many years. Bowel symptoms have worsened in the past few years.
- Her fibromyalgia symptoms started after an accident in her 30s.
- She has anxiety, and depression and is being treated with TCA and SSRI. Her symptoms have severely affected her quality of life.

- A. Categorical Diagnosis:** The patient's symptoms fulfill Rome IV symptom-based criteria for the diagnosis of IBS.
- B. Clinical Modifier:** IBS-M. fibromyalgia and fatigue
- C. Impact on Daily Activities:** severe
- D. Psychosocial Modifier:** anxiety and depression

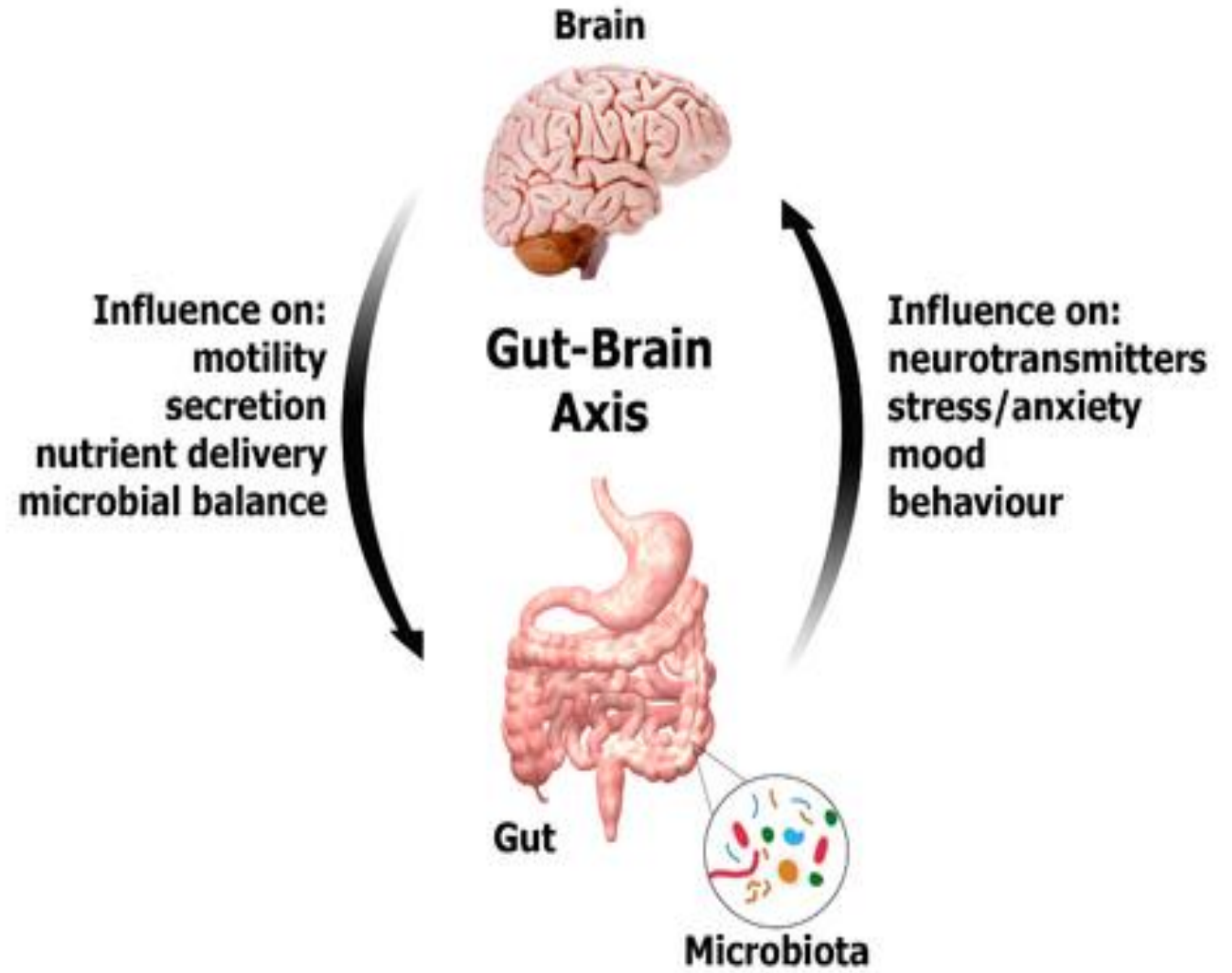
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# Question 4: Coping loneliness and fear

- 4-1- Psychological determinants
- 4-2- PsychoSocial impact

# Pathophysiology

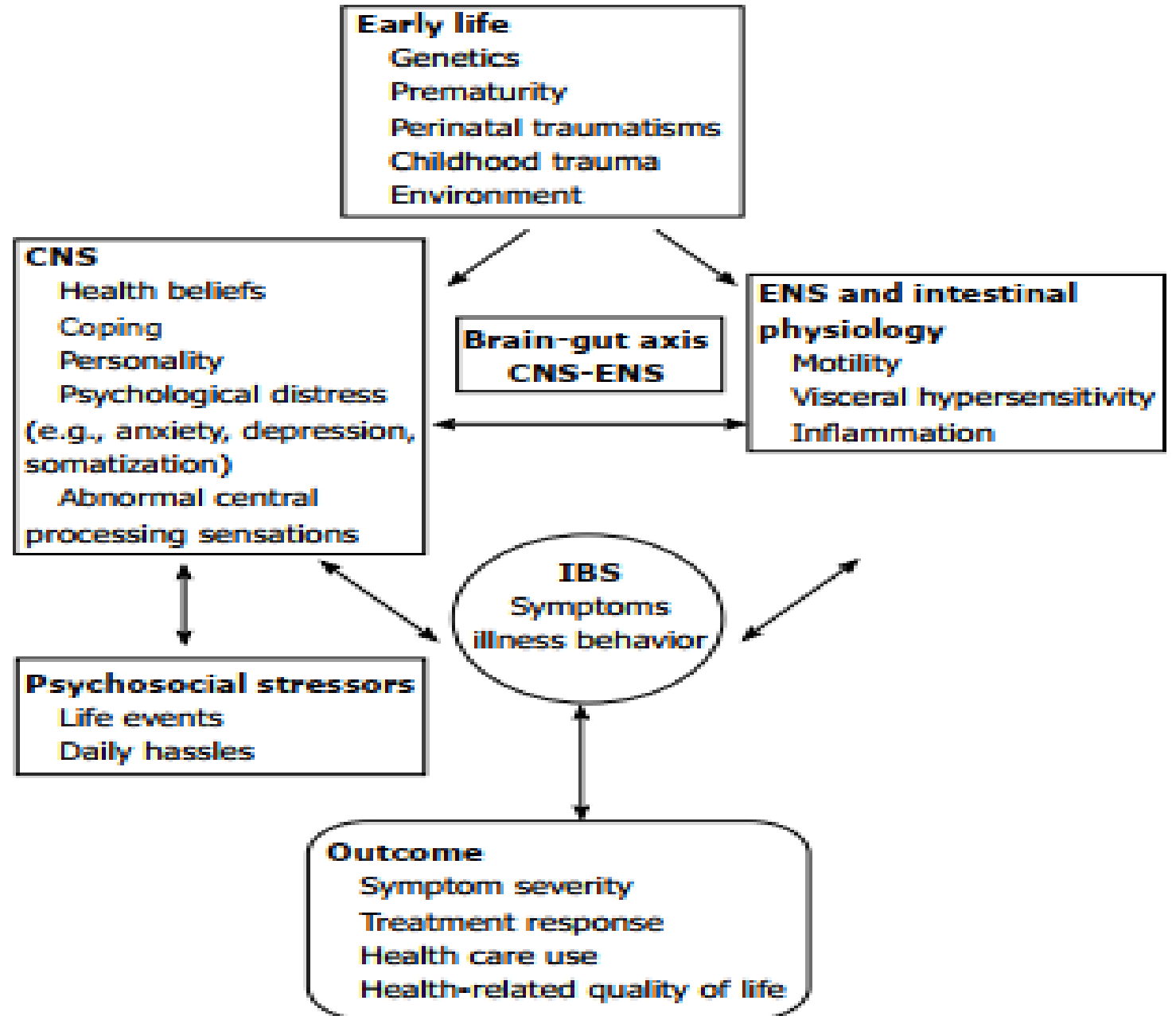
- IBS is a disorder of Gut-Brain Interaction.
- Formerly called Functional Gastrointestinal Disorders.





# 4-1- Psychological determinants

## Disorder of Brain-Gut Interactions



## 4-2- Psychosocial impact

**Table 1 Psychological and social factors in irritable bowel syndrome**

**Environmental factors**

- Early life events
- Upbringing environment
- Incentives
- Family function
- Abuse history

**Psychosocial stressors**

- Life events (divorce, unemployment, death of a close relative)
- Daily hassles

**Personality traits**

- Neuroticism, agreeableness, conscientiousness
- Alexithymia

**Health beliefs**

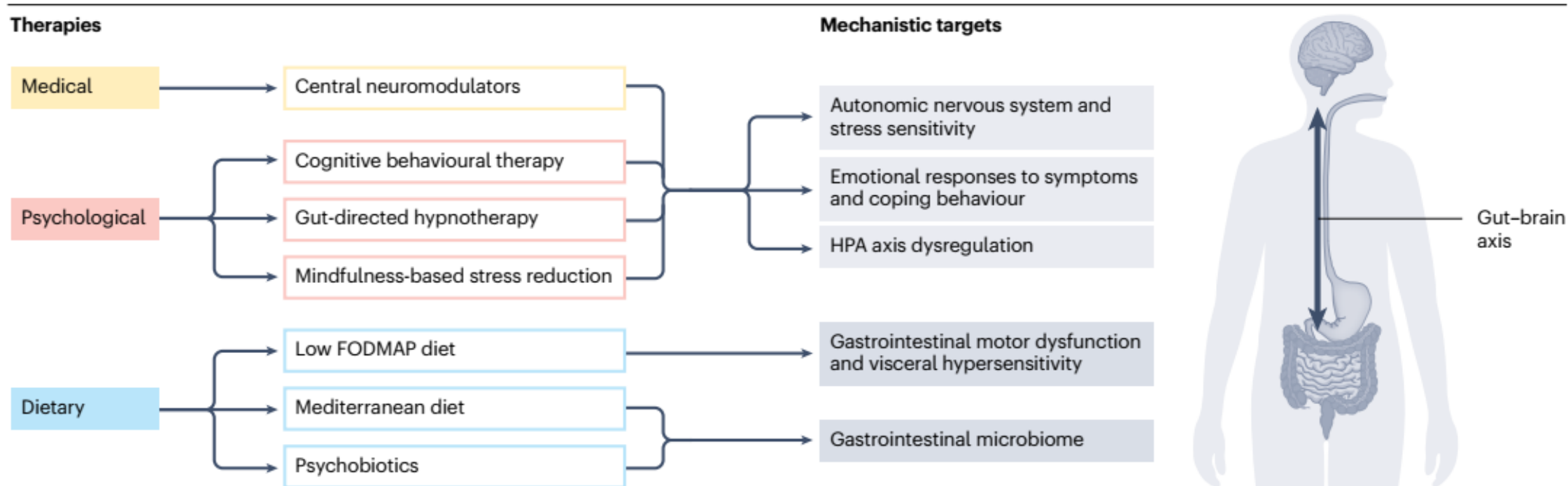
- Hypochondriacal beliefs
- Illness representation
- Perceived susceptibility

**Coping strategies**

- Maladaptive coping (catastrophizing, self-blame, substance abuse)

**Negative emotions and psychiatric disorders**

- Mood disorders (major depression and dysthymic disorder)
- Anxiety disorders (generalized anxiety disorder, panic disorder, post-traumatic stress disorder)
- Somatization and somatoform disorders
- Neurasthenia



**Fig. 2 | Key mechanistic targets and interventions that improve IBS and depression via the gut–brain axis.** Various biological aberrations are present in the gut–brain axis in patients with irritable bowel syndrome (IBS), depression and anxiety. Medical, dietary and psychological therapies (right) can each theoretically target one or more of these aberrations, and when used in combination, they could work synergistically. Although only one key mechanisms or set of mechanisms is presented here for each

therapy, some of these therapies might target more than one mechanism. For example, central neuromodulators and hypnotherapy might also target visceral hypersensitivity, the low FODMAP (fermentable oligosaccharides, disaccharides, monosaccharides and polyols) diet might influence symptoms via the microbiome, and the Mediterranean diet might target the hypothalamic–pituitary–adrenal (HPA) axis.

# Question 5

- 4-1 Population epidemiology
- 4-1 Healthcare burden

## 4-1 Population epidemiology

- Throughout the world, ~10–20% of adults and adolescents have symptoms consistent with IBS.
- IBS is a disorder that affects all ages, although most patients have their first symptoms before age 45.
- Women are diagnosed with IBS two to three times as often as men and make up 80% of the population with severe IBS.

- From 4176 studies identified, 18 eligible studies were included. It was reported that in Iran, the prevalence of IBS was in the range of 1.1% to 25% and was more common in women.

Irritable Bowel Syndrome in Iran: SEPAHAN Systematic Review No. 1. Int J Prev Med. 2012 Mar.

- In 4763 subjects aged 19-70 years the overall prevalence of IBS was 21.5%. IBS was more prevalent in women than men (24.0 vs. 18.3%,  $P < 0.001$ ).

Epidemiological features of irritable bowel syndrome and its subtypes among Iranian adults. Ann Gastroenterol. 2015 Apr-Jun

# Variation in prevalence

- Methodological differences
- Diverse pathophysiology and risk factors  
(genetics, gastrointestinal infection, the role of diet and the gut microbiome, and the influence of psychological co-morbidity)
- Wider recognition of the condition
- Developing countries adopting a more Westernized diet and lifestyle; behaviors

- IBS has a substantial effect on the individual and their quality of life , and incurs substantial costs, both in terms of healthcare delivery, but also with respect to society and the economy



# 4-1 Healthcare burden

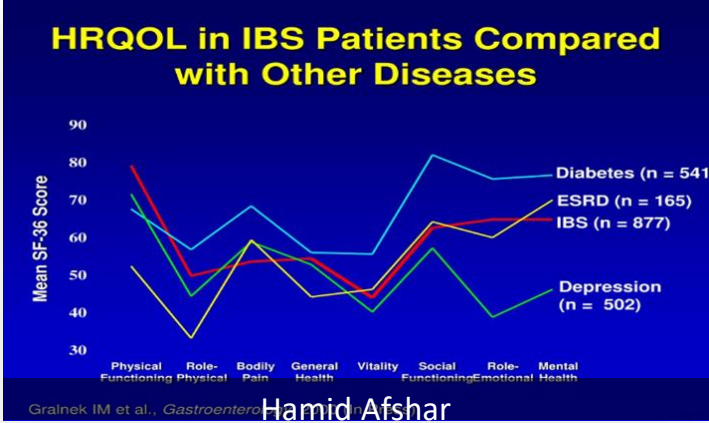
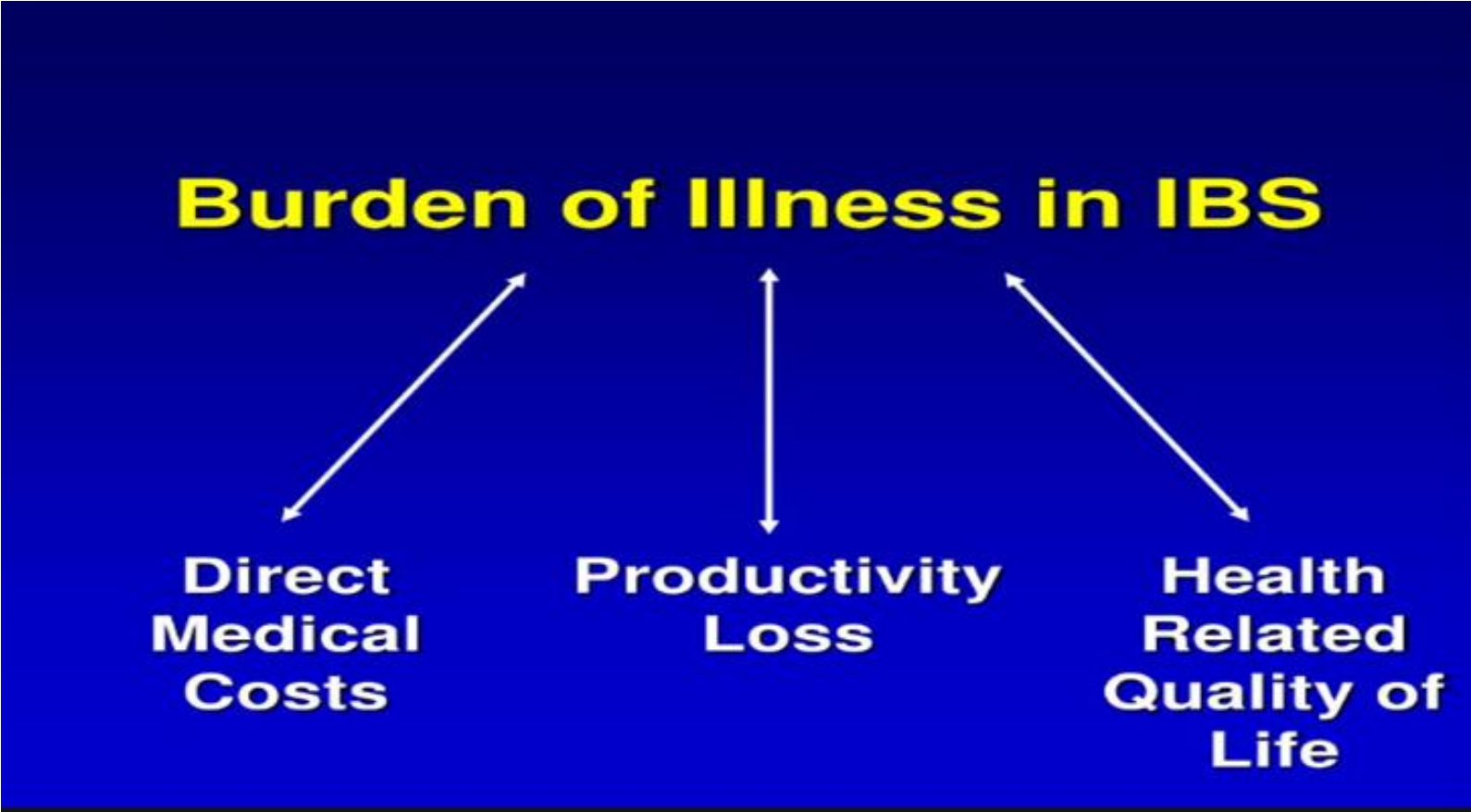
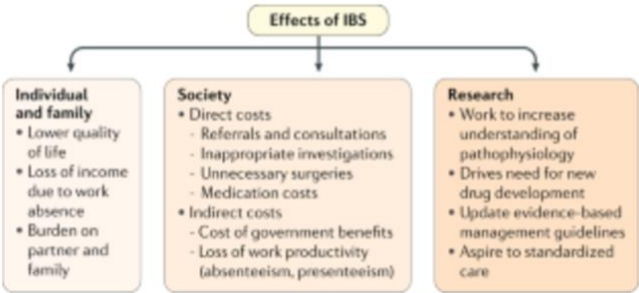


Fig. 2: The effects of IBS.



# IBS - Psychological Burden

## Patient:

Nature of the symptoms

Variability of the symptoms, Abdomen extent (multi-organ apparatus)

Paradoxical messages

Time pressure

Point of view; quick fixing

No multi-dimensionality

Poor communication

## Doctor:

Time pressure

Point of view

No multi-dimensionality

Poor communication

# IBS; a difficult to treat illness

How to refer the patient?



# “Choosing Wisely Recommendations”

- 5 principles to guide test ordering:
  - 1. Was the test performed previously?
  - 2. Would the test result change care of the patient?
  - 3. What are potential adverse consequences of a false-positive result?
  - 4. Are there potential dangers over the short term if the test is not performed?
  - 5. What is the motive for performing the test, such as patient's request or reassurance?