# **Urbanized Health Discourse: Chronic Diseases and Preventive Measures**

و اقع الأمراض المزمنة في البيئة الحضرية وسبل الوقاية منها

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### ABSTRACT:

Along with the social and cultural challenges, the effects of increased urbanization on global food system are undeniable. As a matter of fact, the industrialized food system has emerged as an inevitable procedure to meet the pace of urban development. However, the ravages of such a policy not only have engulfed the individual's health and the global food security but has reverberated across the environment as well. In Urban congregations, nutritious products; which are an essential human need; are considered mere commodities most of which are either of unknown origins or featuring harmful ingredients including fats and artificial sweeteners. And yet, such products are consumed at the expense of locally produced goods. In this pertain, this research paper delves into the urban health discourse in an attempt to explore the interaction between urbanization, with its social and environmental dimensions, and chronic diseases including: blood pressure, diabetes, gastrointestinal and respiratory diseases as well as to provide a comprehensive discussion of the most effective prevention measures to curb these diseases.

Keywords: urbanization, chronic diseases, preventive measures, pollution, food system.

#### الملخص:

على غرار التحديات الاجتماعية والثقافية، لا تكاد النظم الغذائية تسلم من التحديات المتصاعدة التي يفرضها شبح التحضر حيث أصبحت سياسة التصنيع الحل الأنجع لمواكبة وتيرة التوسع الحضري، ومما لاشك فيه أن تأثيرات هذه السياسة لم تقتصر على المستوى الفردي فحسب بل ارتقت لتخل بالأمن الغذائي العالمي وكذا التلوث البيئي، فقد أصبح الغذاء عبارة عن سلع في رفوف الأسواق منها ما هو مجهول المصدر ومنها ما هو مجهول المصدر ومنها ما هو مجهول المكونات، بل وتستهلك على حساب السلع محلية الصنع، ولأن المعدة بيت الداء أصبحت هاته الأغذية التي لا تكاد تخلو من الدهون غير الصحية والسكريات الصناعية خطرا صامتا على سكان البيئة الحضرية، ومما لا شك فيه أن الأمراض المزمنة تعتبر من أهم المخاطر التي ترتبط بأسلوب الحياة الحضرية بكل أبعادها الاجتماعية والبيئية، نذكر منها ضغط الدم، السكري، أمراض الجهاز الهضعي، الربو.....إلخ، وفي هذا الصدد تهدف هذه الورقة البحثية إلى استقصاء واقع هاته الأمراض المزمنة، الوقاية، التلوث، النظام الغذائي.

### 1- Introduction:

According to new research, over 50% of the world's population – 4.4 billion inhabitants – live in cities today. And by 2045, the world's urban population is expected to increase by 1.5 times to 6 billion (Urban Development, 2022). Henceforth, the ravages of such an international issue have recently dominated the academic debates. Amidst such debates, issues associated with urban health discourse have propelled to the forefront of this investigation.

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The phenomenon of Increasing urbanization constitutes a significant variable in urban populations' health. The risks associated with the unbalanced industrialized goods, the environmental pollution, and more importantly the sedentary and stressed urban lifestyle unquestionably comes with inevitable healthy ramifications. Noise pollution in modern cities has critically influenced the rise of hypertension and cardiovascular diseases rates. Similarly, prior researches substantiate the belief that air pollution has dramatically directed respiratory illnesses as well as skin disorders. Likewise, concurrent investigations unveil that modern industrial food and unbalanced nutrition habits imposed by the modern lifestyle are major etiologies of gastrointestinal diseases. Such health issues especially chronic diseases have become a major challenge in the modern society.

According to the aforementioned, urbanization has raised significant queries about the overall health discourse in urban congregations. Henceforth, this article theoretically highlights major chronic diseases including: the psoriasis, respiratory diseases, and gastrointestinal disorders in relation to the urbanization process. We shall similarly highlight the ramifications of such diseases with special discussion of the social dimension. Eventually, we shall post a number of precautions and prevention measures to curb the rising tide of these chronic diseases.

#### 2- CONCEPTUAL DEFINITIONS

Before considering the compelling relationship between chronic diseases and modern urbanization, an inkling of key concepts shall be instructive. Indeed, Conceptual definitions eventually provide a critical perspective to the discussion of the most effective measures used to curb the expansion of such healthy defects.

### 2-1- Urbanization

"Urbanization refers to the concentration of human populations into discrete areas. This concentration leads to the transformation of land for residential, commercial, industrial and transportation purposes. It can include densely populated centers, as well as their adjacent peri urban or suburban fringes" (Urbanization- Overview, 2022). Such an increasing phenomenon is, thereby, not exclusive for large cities, it can include both rural and urban centers and unquestionably engulf societies in all its social, environmental, economic, and healthy dimensions. In research from TAKANO, urbanization can be classified into four types:

- The metropolitan type: refers to the constant extension of a built-up area in the suburbs of a large city or the influx of commuters arriving from the nearby rural villages to the city.
- The regional center type: refers to the establishment of a new urban center or the expansion of an existing town at a regional node. The centripetal concentration of regional economic power is of this type.
- The industrialization type: this type can be seen in the emergence and development of a newly industrialized region of the nation. It is accomplished by bringing in economic might from an outside territory.

 The old-fashioned industry type: this kind is attained by the growth of urban businesses or traditional local cottage industries in a region. This kind is predicated on capital that naturally arises from regional agricultural production.

### 2-2- Chronic Diseases

Chronic diseases including diabetes, gastrointestinal and respiratory diseases constitute a growing burden not only for individuals but for urban congregations as well. "A chronic disease or illness, in general terms, is a condition that is slow in progression, long in duration, and void of spontaneous resolution, and it often limits the function, productivity, and quality of life of someone who lives with it" (Institute of Medicine et al., 2011c, p.1). According to the American Centers for Disease Control and Prevention (CDC), however; "chronic diseases are defined broadly as conditions that last one year or more and require ongoing medical attention or limit activities of daily living or both" (2022). According to the aforementioned, we may conclude the following common characteristics of chronic diseases.

Notwithstanding the interchangeable use of the two terms "chronic disease" and "chronic illness", Professor Martin, a researcher with a focus on chronic illnesses and vulnerable populations, highlights the significant difference between these terms. Besides the previously mentioned characteristics, Martin further features chronic diseases; which can be either communicable such AIDS or non-communicable such as diabetes, as diseases with "protracted clinical course; of multi-factorial etiology; with no definite cure; gradual changes over time, asynchronous evolution and heterogeneity in population susceptibility..." (2007, p.2086). Chronic illnesses, on the other hand, refer to the social and psychological burden of the lived experience. Whether the chronic disease was communicable or non-communicable, Martin clarifies that chronic illnesses refer to the "experience of intrusive bodily or mental unwelcome unpleasant sensations and includes phenomena such as fatigue, weakness, anomie, confusion, or social stigma." (Martin, 2007, p.2086). In this research, henceforth, we shall adopt the term "disease" to refer to the biomedical disability, and to the term "illness" to approach a more psychological connotation.

According to the aforementioned definitions, we may outline the following features of chronic diseases: the lengthy duration, the seriously required medical care, and the consequential disability.

# 2-3- Preventive Measures.

Preventative measures or precautions refer to the steps or procedures taken in order to prevent a particular disease. "Preventive Health Measures encompass a variety of interventions that can be undertaken to prevent or delay the occurrence of disease or reduce further transmission or exposure to disease. Preventive health measures are an important part of health promotion efforts and many have been recognized as a cost-effective way to identify and treat potential health problems before they develop or worsen." (Preventative Measure | List of High Impact Articles, n.d.).

#### 3- Chronic Diseases at the Nexus of Urbanization and Health Discourse

### 3-1- The Psoriasis:

The psoriasis is a chronic, noncommunicable (NCD), recurrent, and heterogenous skin disease. According to the World Health Organization (WHO), psoriasis is a serious health issue with at least 100 million individuals affected worldwide (2016, p.1). Similarly, statistics In Algeria reveals that the infection rate ranges from 2 to 3 cases per 100 residents with over 20% of the whole Algerian population. According to Professor Ahmed Shehad, a specialist in dermatology at the University Hospital in Constantine, most of this minority suffer from acute psoriasis (Algeria Press Service, 2022). According to the aforementioned, what makes psoriasis, unlike the rest of chronic diseases, propel to the forefront of this research? How is urbanization associated to psoriasis rates? What are major symptoms, implications of this recurrent disease? Eventually, what are the most effective precautions and safety measures to curb the tide of this chronic disease?

Prior researches, awareness campaigns, and charity organizations have thoroughly been concerned about various chronic diseases. Yet, little is known about the psoriasis as a recurrent chronic disease. Indeed, this Papulosquamous disorder is significant due to the following features:

- According to the WHO, this skin disorder has unpredictable course of symptoms with no clear etiology so far. (2016).
- The psoriasis triggers a number of significant comorbidities including psoriatic arthritis, psychological, cardiovascular, and hepatic diseases. The recognition and management of such associated diseases are an indispensable part of holistic care for the psoriasis patients. (Raharja et al., 2021, p170).
- Unlike other skin diseases, psoriasis is heterogenous. Hence, it can be highly variable in morphology, distribution, and severity. (Langley, 2005, p19).
- The psoriasis patients face many barriers including high costs of treatment and limited access to health care, lack of awareness, and more importantly, the lack of skin specialist in developing countries. (The World Health Organization, 2016, pp.23-24).

# 3-1-1- The Psoriasis amid the modern lifestyle

One of the most persistent views of chronic diseases; by both scientists and sociologists, is the association that presumably occur between chronic diseases and the urban lifestyle. Besides the major genetic component, psoriasis is thought to occur as a response to environmental triggers and the lifestyle which feature the urban society. A better understanding of the Onset and Exacerbation of psoriasis may be very useful to curb the its prevalence. Henceforth, we may classify psoriasis stimuli into two types: manageable and unmanageable factors

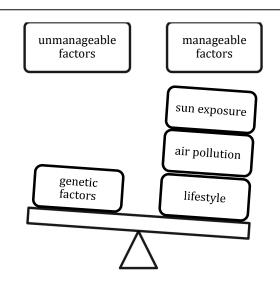


Fig 1. manageable and unmanageable factors of Psoriasis - Source: own creation.

The chart above demonstrates the extent to which factors featuring the urban life may trigger an outbreak of psoriasis symptoms. In research from Braathen et al., a higher prevalence of psoriasis among females was found in urban vis-à-vis rural areas (1989, p.6).

Urbanization is not only associated with demographic development but with social and nutritious dimensions as well. Psoriasis has been associated to both smoking and Alcohol. According to a comprehensive review and meta-analysis, smokers are more likely to have psoriasis than people without the condition. Similarly, alcohol consumption was observed to be greater in patients with psoriasis. (Kamiya et al., 2019, p.5).

Evidently, according to new research, greater exposure to air pollutants, such as carbon monoxide and fine particulate matter, were significantly associated with later psoriasis flares. (Gavidia, 2022). Similarly, in research from Seo et al, evidence was found that long-term exposure to air pollution independently increased the risk of developing psoriasis (2022, p.2). Likewise, exposure to the UV radiation that reaches the Earth's surface has been proven to have negative effects on a subset of patients with extremely photosensitive psoriasis as their skin disorder become severe in the summer months. (Kamiya et al., 2019, p.3).

# 3-1-2- Clinical Types of Psoriasis

**Plaque psoriasis**: characterized by raised, red, scaly patches occurring on the limbs and the trunk, especially on the elbows, knees, hands, around the navel, and over the lower back

**Palmer psoriasis**: characterized by small, deep seated pustules form that usually only affect the palms and soles..

**Guttate psoriasis:** Characterized by numerous small, red, scaly patches quickly develop over a wide area of skin

**Psoriatic nails:** Characterized by small pits in the nail plate, orange-yellow areas may be present beneath the nail plate termed as "oil spots", detached nail from the bed., and thickened, dystrophic, and discolored nail plate.

**Scalp psoriasis:** characterized by raised, red, thick, scaly plaques on the scalp and around the hairline.

**Erthroderma:** a rare, serious condition where skin redness (erythema) can affect more than 90% of the body surface

**Flexural psoriasis:** characterized byred, well-defined areas in skin folds (flexures) such as the armpits and between the buttocks.

Fig 2. Clinical Types of Psoriasis. Source: Adapted from (Chandler & Chandler, n.d., pp 5-10; Langley, 2005, pp.19-20)

# 3-1-3- Social life of the Psoriasis patients

Notwithstanding that psoriasis is not a fatal disease, it has unquestionably a large impact on patients' social and psychological life. Therefore, psychological treatment along with physical observance for such a complex disease is quite mandatory.

In research from Langley, people suffering from psoriasis are more likely to have aversion towards their life quality compared to patients of other chronic diseases. They have sentiments of stigmatization and isolation from social life standards. Such sentiment, Langley argues; may aggravate and lead to depression and suicide ideation in more than 5% of patients. (2005, p.20). The skin disorder, therefore, adversely affect the conventional social relations.

In a report from UN Women Palestine Country Office, Asmaa Al Attar, a 27years old unemployed mother, resides in Rafah City with her two kids; was diagnosed with psoriasis when she was nine years old. When she turned twenty, she got married. However, she requested a divorce due to her husband's abuse seven years later. "Because of my psoriasis, I have suffered so many forms of violence, whether from my ex-husband, my family, or society. It made me contemplate putting an end to my life" (Because of My Psoriasis, I Have Suffered so Many Forms of Violence, 2021).

According to The World Health Organization, Psoriasis can be psychologically devastating. The lack of self-esteem, anxiety, anger, depression, helplessness, and suicidal inclinations are the most common psychological comorbidities recorded among patients of psoriasis. (2006, p.16). In UK, a population-based cohort study using data collected as part of patient's electronic medical record from 1987 to 2002 found that in excess of 10,400 diagnoses of depression, 7,100 diagnoses of anxiety, and 350 diagnoses of suicidality are attributable to psoriasis annually. (OLIVIER et al., 2010, p2)

Besides mental health implications and psychological burden, influences on work productivity have been recorded among psoriasis patients. The heterogonous disease affects people on a micro and macro level. On a micro level, psoriasis maybe aggravated for patients with physical occupations in which body locations remain unprotected and necessary medical tools including gloves are not used. On macro level, the socioeconomic burden of Psoriasis is inevitable. The annual cost of psoriasis in the United States was estimated at 11.5 billion US dollar in 2008. (WHO, 2006, p.17).

### 3-1-4- Preventive Measures

According to the aforementioned, we may conclude that precautions and preventive measures should occur at the following three levels: Individual, Social, and economic level.

On individual level:

- Considerate understating of the psoriasis' triggers is indispensable for healthcare and for a better control of the disease prevalence.
- Involvement in medical and charity associations of psoriasis.
- As mentioned earlier, avoiding air pollutants which play a critical role in psoriasis outbreak is mandatory.
- Healthy lifestyle and a suitable diet are required. According to new research, a special diet for each patient with psoriasis should be tailored according to their needs and comorbidities (Garbicz et al., 2021, p. 13).
- Adherence to treatment. As a matter of fact, low adherence to is associated with either insufficient communication regarding the drugs' instructions or with dissatisfaction and psychiatric morbidity. (The World Health Organization, 2006, p. 25)

On Social Level:

- Thorough awareness about the psoriasis as a NCD not only reduces the psychological impact but increases the social inclusion of psoriasis patient as well.
- The establishment of charitable associations which provide: social support, awareness campaigns, psychological empowerment for vulnerable patients, and fund-raising organization.

On economic level:

 Healthcare professionals must improve public funding as medicines used for such disorders are expensive. State advocacy to higher access to healthcare especially for low-income patients.

# 3-2-Osteoporosis

Osteoporosis is a long-term, chronic and noncommunicable bone disease. (Osteoporosis, n.d,2017) Osteoporosis has recently become a major public health issue affecting approximately about 200 million people worldwide. One in three women and one in five men over the age of 50 are suffering from this disease across the globe. Mortality rates attributed to osteoporosis fractures are outstanding since they equaled mortality rates resulted from illnesses such as breast cancer with a percentage ranging from 15 to 30%. (Nevin Hammam, 2018, p.14)

Osteoporosis is a silent disease that aims mainly at thinning and weakening bones. It reduces the bone mass and deteriorates its tissue. Thereby, this disorder not only results in the vulnerability and fragility of bones but increases fracture risks as well. (Nevin Hammam, 2018, p.14)

According to Eldjazaironline, over 7 million Algerians suffer from Osteoporosis. Professor Hweishat, head of Joint and Bone Diseases Department at the University Hospital of Douira, declared that 35.8% of Algerians postmenopausal women were diagnosed with Osteoporosis . 20 % is the estimated death rate among those affected by fractures resulting from osteoporosis especially among women. (Nevin Hammam, 2018)

Osteoporosis is often described as the silent illness since its signs remain unveiled until late stages. major symptoms of the osteoporosis include constant pain, significant loss in weight and height over time, back pain, spinal deformity and stooped postures. Accurate diagnosis of Osteoporosis and fractures risk requires bone density measurement by DXA at the hip and spine (Osteoporosis - Symptoms and Causes, 2021).

# 3-2-1- Causes of Osteoporosis

There are many leading factors that can cause Osteoporosis such as low calcium intake. The appropriate amount of calcium for an adult is estimated to be 1,000 mg of calcium per day. This amount reaches 1,200 mg per day for women over the age of 50 and men over the age of 71. Any excess or lack in this amount can greatly affect the bones and double the risk of having Osteoporosis. (McCallum, 2021), Causes of Osteoporosis include:

- Unbalanced eating habit is a major factor for the disorder etiology. people who are
  underweight tend to have less bone mass which increases the ability of thinning bones.
  Likewise, people who restrict themselves from eating or are diagnosed with illnesses such
  as anorexia nervosa have a high risk of getting Osteoporosis (Osteoporosis Symptoms and
  Causes, 2021).
- Osteoporosis has a major genetic component (Osteoporosis Symptoms and Causes, 2021).
- Because of menopause, higher rates of this disorder is found among women above the age of 50.

- For men, Deficiency in testosterone, which is a medical condition known as Hypogonadism can be a leading factor to Osteoporosis.
- One of the most neglected factors of Osteoporosis is air pollution. Long exposure to carbon dioxide increases longitudinal bone loss which increases fractures risks. (Nguyen, 2017, p.2)

# 3-2-2- Osteoporosis amid the modern lifestyle

Many surveys have been conducted to investigate the link between urbanization and Osteoporosis. In research from Mika Matsuzaki, a nutritional epidemiologist in the Department of Non-communicable Disease Epidemiology in London School of Hygiene and Tropical Medicine, and her colleagues; more than 30 statistical articles have been analyzed in an attempt to compare between the rates of Osteoporosis in rural and urban areas in countries with high and low wages. The study revealed that the rates of Osteoporosis in urban areas outnumbers those in rural areas in countries such as Norway and Sweden. However, the percentage differed from one country to another. The spread of Osteoporosis in urban areas was attributed mainly to the previously mentioned factors which can be summed up as follows: the fast lifestyle that people who live in urban areas adopt. The quick daily rhythm affects people's health as they are less exposed to the sun, which means they get less portions of vitamin D, they are constantly exposed to polluted air which affect their bone mass, the excessive time spent on chairs and the limited movement affects the bone tissue. (Matsuzaki et al., 2015, pp.7-8).

In this pertain, modern life diets culminate in Osteoporosis disorder. The quality of food people consume unquestionably affects their bones. As a matter of fact, the latter require a balanced amount of calcium and vitamin D to replenish themselves without side effects. Poor diets based on fast food meals and soft drinks that most people, who are in rush, tend to ingest undoubtedly lack necessary nutritious elements (Bone Health and Osteoporosis Foundation, 2022). The consumption of certain food types such as added sugar, salt, ultra-processed foods and Consuming foods that contain high levels of cortisol might cause bone loss and decrease bone formation (What Is the Osteoporosis Diet?, 2022).

# 3-2-3- Social life of the Osteoporosis patients

Osteoporosis has lot of negative effects which impair patients' quality life on different dimensions including: health, professional, and social level. An osteoporosis patient suffers constantly from pain which can limit his physical abilities. The high possibility of getting fractures hinders patients from engaging in many types of physical activities out of fear since a simple fall or even mild stresses like coughing can cause a fracture. Occupations which involve extra physical efforts and in some cases even those which demand a limited effort cannot be executed by an osteoporosis person which restrains the work opportunities and affects even the daily life of the patient. On social level, Osteoporosis patients are so fragile and in permanent need for special care. (Bone Health and Osteoporosis Foundation, 2022)

#### 3-2-4- Preventive Measures

There are certain prevention measures that people can take into consideration in order to avoid getting osteoporosis (Osteoporosis, 2021).

- Consuming the required amounts of vitamin D and calcium.
- Exposure to sunlight to get vitamin D from a natural source.
- Balanced diet and exercising.
- Regular medical tests to detect deficiencies in early stages.

# 3-3- Irritable Bowel Syndrome (IBS)

"Irritable Bowel Syndrome (IBS) is a common, chronic gastrointestinal condition defined by disturbances in bowel habits and abdominal pain" (Weaver et al., 2017, p.1). According to research, this chronic gastrointestinal disorder affects 9%-23% of the population across the world (Saha, 2014). This disorder which affects the digestive system has been associated with psychological factors and modern apathetic lifestyle.

# 3-3-1 Symptoms and Diagnosis

The diagnosis of the irritable bowel syndrome has been refined over the past few years through the development of some criteria and guidelines (Grundmann & Yoon, 2010, p.691). This type of diagnosis; made according to a symptom-based classification system; is called the "Rome Criteria" (Weaver et al., 2017, p.4). The recently released version of this diagnosis, Rome IV, have identified some Physiological and psychological variables as crucial in the gastrointestinal disorder etiology which highlights the brain role in the health discourse. (Weaver et al., 2017, p.1).

The evolution of the diagnosis criteria have distinguished the IBS from gastrointestinal disorders in general, and FBD (inflammatory Bowel Disease) in specific. The latter presents with increased phagocyte-specific protein in the feces, the former does not involve inflammations. According to Rome III, symptoms of IBS include: unspecific abdominal discomfort that occurring with periods of increased or decreased activity, alleviation of pain and discomfort with defecation, and onset of symptoms with changes in stool frequency and appearance. (Grundmann & Yoon, 2010, p. 692). In the recent IBS diagnosis system Rome IV, however; a number of physiological and psychological variables have been identified in an attempt to improve and distinguish the diagnosis of the irritable bowel syndrome.

Based on the patient's symptoms, IBS can be classified into three groups for treatment: purposes: constipation-predominant, diarrhea-predominant, mixed or unclassified (irritable bowel syndrome - Diagnosis and Treatment -, 2022).

<sup>1</sup> Rome Criteria has been created by The Rome Foundation which is "The Rome Foundation is an independent not-for-profit organization dedicated to supporting the creation of scientific data and educational information to assist in diagnosing and treating Disorders of Gut-Brain Interaction (DGBIs), formerly called Functional Gastrointestinal Disorders (FGIDs) (The Rome Foundation, 2023).

### 3-3-2 IBS and the Modern Lifestyle

Considering aspects of modern lifestyle at the crossroads of crowded congregations characterized by stress, pressure factors, and mental disorders and unbalanced food system provide valuable insights on the triggers of the irritable bowel syndrome. As a matter of fact, In comparative research from Usai et al. on the prevalence of IBS between rural and urban congregations, higher rates were found in urban areas. (2010, p.325). A study of the same objective was recently conducted in order to compare between Rural and Urban Setting in Bangladesh. Predictably, higher rates were recorded in urban communities (Ghosh et al., 2022, p.72). Although it is hard to assume the determinant factors behind IBS prevalence in larger communities, we may assume that this disorder, since associated with mental health, is closely related to environmental and dietary aspects. Noise pollution and the stressful lifestyle in urban cities may be linked to gastrointestinal disorder. In research on a total of 64 rats aiming to investigate the effect of firing noise on gastrointestinal transit, results indicated that noise induces plasma hormone levels disturbance and gastrointestinal transit disorder which explains higher incidence of digestive system disease in war time than in peace time (Xie, 2006).

Beside noise pollution, recent researches have suggested a strong association between the irritable bowel syndrome condition and modern food intolerance. According to statistics, more than 60% of patients with IBS report the onset or worsening of symptoms after meals due to several factors including impaired gut barrier function and changes in the gut microbiome. Some irritable bowel syndrome patients have demonstrated intestinal hypersensitivity and exaggerated reflexes after fat ingestion (Cuomo et al., 2014, pp. 8837-8845). Food has, therefore; a crucial role in triggering IBS symptoms.

### 3-3-3 Social impact of Rome IV irritable bowel syndrome

Measuring the social aspect of the IBS on the quality of life has recently dominated academic investigations. As a matter of fact, the irritable bowel syndrome can have a great impact of the quality of the patient's social life. Besides fibromyalgia, back pain, and urogenital, the gastrointestinal disorder has a number of psychological comorbidities.

In research from Ballou, results showed that 40%-60% of IBS patients report comorbid psychiatric diagnoses including anxiety, depression, and traumatic Stress Disorder. They are also more likely to report low quality of life and up to 38% of IBS patients in tertiary care settings have contemplated suicide as a result of their symptoms (2015, p.121). Therefore, IBS negatively influences the quality of life and work productivity.

# 3-3-4 prevention measures

Before considering the medical treatment, reviewing one's lifestyle and diet is crucial to prevent the irritable bowel syndrome. Grundmann and Yoon have investigated determinants of both types of IBS as the following figure demonstrates.

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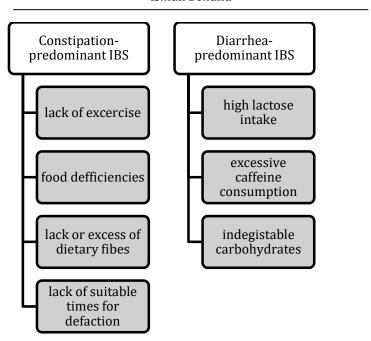


Fig 3. determinants of both types of IBS. Source: Adapted from (Grundmann and Yoon, 2010, p. 693).

According to the figure above and the aforementioned characteristics, we may conclude that patients suffering from IBS, besides considering psychological and clinical approach, have to follow a certain type of lifestyle for symptomatic relief which may include:

- Enough amount of exercising.
- dietary strategies, tailored according to each patient's condition, will be convenient.
- There is great need to provide more accurate and developed medical treatment since researches unveil unsatisfactory results of the available treatment.
- Since the key issue has a psychological dimension, encouragement of psychological therapy is mandatory.

### 4- Conclusion:

Modern life issues including increasing urbanization and food system constitute significant variables in health discourse. Recent academic debates have associated the modern sedentary lifestyle with increasing rates of chronic diseases across the globe.

Undoubtedly, aspects featuring modern urban life including stressors, the unbalanced industrialized food, and pollution with all its types, have shaped the quality of life. Noise pollution in contemporary cities is evidently associated to the prevalence of hypertension, cardiovascular diseases. Similarly, modern unhealthy eating habits and lack of exercising are key etiologies of gastrointestinal disorders such IBS. Such diseases impose challenging barriers on both micro and macro levels for they not only impair the individual's quality life but also impose socioeconomic burden in some cases such as the psoriasis.

#### Urbanized Health Discourse: Chronic Diseases and Preventive Measures

In an attempt to a prevent further prevalence of chronic diseases, a number of precautions and prevention measures should be taken into consideration. The degree of public awareness of a certain disease' triggers through leaflets, medical associations, and charity organizations may critically lead to dramatic decrease of its prevalence or at least its impact such as in the psoriasis case. Similarly, dietary strategies and developed healthcare can curb the tide of chronic illnesses.

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