

Epidemiological Transition in Algeria
"From Communicable to Non-Communicable Diseases - An Analytical Study-"

الانتقال الوبائي في الجزائر

"من الأمراض المعدية إلى الأمراض المستعصية - دراسة تحليلية -"

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Abstract

This study aimed to describe and analyze the epidemiological situation in Algeria through official health databases, and to reveal the spread of communicable and non-communicable diseases.

The importance of the study stems from the fact that addressing the topic of epidemiological transition in Algeria is not merely a monitoring of diseases; rather, it is a tool to discover the map of disease prevalence in the country, focusing on a period of more than the past 20 years.

Therefore, this study enables us to monitor the evolution of incidence rates of both communicable and non-communicable diseases.

Keywords: Transition, Epidemiological, Spread, Diseases, Communicable, Non-Communicable.

الملخص:

سعت هذه الدراسة إلى وصف وتحليل الوضعية الوبائية في الجزائر من خلال قواعد معطيات صحية رسمية، والكشف عن خارطة انتشار الأمراض المعدية والأمراض غير المعدية، وتأتي أهمية الدراسة كونها تناول موضوع التحول الوبائي في الجزائر ليس مجرد رصد للأمراض؛ بل هو أداة لاكتشاف خارطة الانتشار

المرضية في البلد، حيث تم التركيز على مدة زمنية أكثر من 20 سنة ماضية. ولهذا تمكنا هذه الدراسة
من مراقبة تطور معدلات الإصابة بالأمراض المعدية والأمراض المستعصية على سواء.
الكلمات المفتاحية: تحول، وبائي، انتشار، أمراض، معدية، مستعصية

1. Introduction:

The Immediately after independence, Algeria was within the first stage of the epidemiological transition, characterized by a wide spread of communicable diseases as well as epidemics, with a high mortality rate resulting from that situation. The health situation of society was very fragile at various levels, with minimal infrastructure, in addition to the poor geographical distribution of material and human resources across the national territory at that time

2. Problem Statement:

"In 1962, Algeria inherited a deteriorated and declining health situation, as the existing health system was mainly concentrated in major cities such as Algiers, Oran, and Constantine. It consisted primarily of public medicine provided in hospitals and clinics supervised by municipalities, offering free medical assistance. There were also school medicine and psychological centers supervised by the Ministry of Education. On the other hand, there was private medicine provided by about 600 doctors working in private clinics, most of whom were foreigners.⁽¹⁾ In that context, it was imperative for the country's authorities to develop action plans and a strategy to improve public health for citizens and build a health system to confront the phase of widespread communicable diseases and epidemics.

The epidemiological situation transitioned in the early 1980s and 1990s to a phase of epidemic recession as a result of the adopted health interventions and policies, with a significant decrease in deaths caused by communicable diseases.

With the beginning of the new millennium, the country entered the third stage of the epidemiological transition, characterized by the spread of non-communicable diseases, also called diseases of urbanization, such as various types of hypertension, cancer, and diabetes. Based on the foregoing, we can start from the following question: In light of the recession of

epidemics and the wide emergence of non-communicable diseases, to what extent does the health map reflect the epidemiological situation in Algeria?

3. Methodology of the Study:

This is a descriptive and analytical study through which we aimed to describe the stage of epidemiological transition that Algeria is undergoing, relying on official data on communicable and non-communicable diseases, and monitoring the numbers and indicators of prevalence at the national level.

4. Data Sources:

- Ministère de la Santé de la Population et de la Réforme Hospitalière et l'Unicef et Fonds des Nations Unies pour la population (UNFPA), Enquête par Grappes à Indicateurs Multiples (MICS6) 2018-2019, Rapport final, Alegria, 2020.
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- Institut National de Santé publique, Situation Epidémiologique, Relevés Epidémiologiques Mensuels, Alegria, 2024.
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5. Epidemiological Transition in Algeria:

The Algeria, as an emerging country like all countries of the world, "is undergoing a health transition period of 20 years revealed by various studies. ⁽²⁾

The most common chronic diseases increasingly affecting the health of Algerians are circulatory system diseases, chronic respiratory infections, cancer, diabetes, and kidney diseases. The epidemiological transition That Algeria has been witnessing over the past ten years - i.e., before the year 2000 - is evident in the increasing impact of these non-communicable diseases. According to data from the last general population and housing census (1998), this group of diseases, characterized by being critical, affected 512,972 people in 1998, of whom 262,525 were women, i.e., 51.18% of those with chronic diseases. Generally, 60.5% of chronic disease patients identified in 1998 were over 40 years old. ⁽³⁾

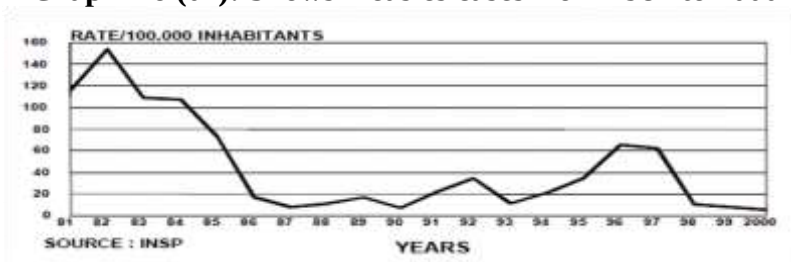
Indeed, the era of pests and famine has been largely overcome, and communicable diseases and maternal and child health problems have significantly decreased through improved living conditions, health coverage, and the implementation of national public health programs. As a result, the general mortality rate dropped from 16.45 per thousand at the end of the 1960s to 4.41 per thousand of the population in 2002, accompanied by a gradual increase in life expectancy (from less than 50 years in 1962 to 74.6 in 2005).⁽⁴⁾

5.1- Communicable Diseases:

5.1.1- Controlled and Vaccine-Preventable Diseases:

There has been a very significant decrease in the measles incidence rate over recent decades. In 1982, the incidence rate was nearly 160 cases per 100,000 population. It then declined significantly and noticeably in 2010, when the incidence rate was estimated at 4.16 cases per 100,000 population. However, it rose again in 2018 and witnessed a nationwide outbreak, spreading in several wilayas starting from the south and moving northwards. The incidence rate increased from 1.87 cases per 100,000 population in 2017 to 63.25 cases per 100,000 population, with an estimated 26,945 cases throughout the country. In 2024, it decreased significantly, recording an incidence rate of 1.12 cases per 100,000 population.⁽⁵⁾

Graph No (01): Shows measles cases from 1981 to 2000



Source: National Institute of Public Health

As for whooping cough, the incidence rate in 1981 was five cases per 100,000 population. It then began to decrease, reaching 0.10 cases in 1990, then remained stable in 2000. Only seven cases were reported in 1999, but it soon rose again in 2013 to reach 105 cases per 100,000 population.

Since the introduction of vaccination in 1969, the prevalence of whooping cough and related deaths have significantly decreased. Despite high vaccination coverage, it has re-emerged since 2000, with 141 cases reported after that year. In 2009, 117 cases were reported, and in 2010, 34 cases were recorded. The affected group is often infants under one year old and sometimes less than 3 months old. The epidemiology of whooping cough in Algeria is expected to be similar to that recorded in Europe and the United States.⁽⁶⁾

Regarding tuberculosis, which is a public health priority, the national tuberculosis control program established in 1965 contributed to reducing incidence rates. Since 1970, these measures have led to a significant decrease in the disease, from 150 cases of pulmonary tuberculosis per 100,000 population between 1964 and 1966, gradually declining to 22 cases per 100,000 population in 1990.⁽⁷⁾

It then rose in 2000 to reach 59.26 cases per 100,000, corresponding to approximately 17,916 cases. In 2010, the incidence rate increased slightly to 61 cases per 100,000 population, with 21,786 cases for all types of tuberculosis. It then decreased again to 41.10 cases per 100,000 population. This leads us to question this increase despite the availability of vaccines, or whether it is due to the health behavior of citizens, particularly with the rise in smoking and alcohol consumption in recent years, which might be among the reasons for the increase in case numbers.

For tetanus, in 2010, the rate was 0.6 cases per 100,000 population,⁽⁸⁾ then it rose slightly to 9 cases in 2014. Polio is almost non-existent in Algeria across all statistics. The Ministry of Health has launched national vaccination campaigns in three phases, starting at the end of November 2025 and continuing until January 31, 2026, targeting children aged between two months and 59 months.

Table N° (01): Shows controlled and vaccine-preventable diseases:

Diseases	years (Rate par 100.000 population)					
	1990	1995	2000	2004	2012	2014
Measles	7.46	34.51	11.28	9.14	5.04	0.39
Whooping	0.1	0.04	0.1	0.02	0.35	-
Tuberculosis	22	-	25	44.23	57.11	57.41
Diphtheria	0.12	3.49	0.01	0.02	0	0

Source: Table prepared by the researcher for the years (2014, 2012, 2004) based on the article by Leila Houti and Saada Chougrani (cahiers de crasc)

5.1.2. Waterborne Diseases:

Water pollution causes numerous diseases depending on the type of pollution, whether from household waste, chemical substances, or pollution due to high temperatures. One of the most prominent waterborne diseases is typhoid fever, which is one of the oldest diseases afflicting humanity throughout the ages. Regarding its spread in Algeria, despite efforts made, its presence persists.

A notable decrease in the incidence of typhoid fever was observed, dropping from 2.28 cases per 100,000 population in 2009 to 0.62 cases. The monthly incidence rates recorded during 2010 were very low, ranging between 0.01 and 0.12 cases per 100,000 population.⁸ The incidence rate of typhoid fever remained stable, decreasing to 0.04 cases per 100,000 population, with 18 cases reported in 2024.⁽⁹⁾

Concerning cholera, which is also considered an ancient epidemic disease causing acute diarrhea, it can lead to death within hours if left untreated. In Algeria, it is worth noting that the last case of cholera was recorded in 1996, and no cases have been diagnosed since then. According to a statement by the relevant ministry, the lack of hygiene conditions in some consumed products led to the spread of the disease. However, in 2018, a cholera outbreak occurred, mainly in Blida wilaya and neighboring wilayas during August and September.

During this outbreak, a total of 299 suspected cases of cholera were recorded, among which 277 patients were hospitalized and examined between August and September. Among these, 105 cases were confirmed by the reference laboratory of the Pasteur Institute of Algeria, representing a national incidence rate of 0.25 cases per 100,000 population. Three deaths were also recorded with confirmed cholera infection.⁽¹⁰⁾

Regarding another waterborne disease, viral hepatitis, which causes damage to liver cells, incidence rates of Hepatitis A have seen a notable increase, rising from 5.19 in 2010 to 17.60 cases per 100,000 population in 2024.⁽¹¹⁾

Malaria is considered the first disease to be eliminated, based on active case finding, mass treatment, and vector control. This program is now in its consolidation phase, and in a maintenance phase in the south, where

infections still occur among the local population (local transmission). 99 cases were recorded in 2004 compared to 427 cases in 2003. Currently, imported malaria dominates the epidemiological situation, coinciding with increased trade with sub-Saharan African countries.⁽¹²⁾ In 2014, the National Malaria Reference Center recorded 266 cases of malaria. All these cases were classified as "imported" except for 6 cases that were not classified due to lack of information.⁽¹³⁾ During 2024, the National Malaria Reference Center at the National Institute of Public Health recorded 3107 cases of malaria, including 3106 imported cases and one relapse case due to *Plasmodium vivax*.⁽¹⁴⁾

Concerning food poisoning, in a correspondence from the Director General of the General Directorate for Prevention and Health Promotion at the Ministry of Health to the Wali (governors) and all general directors in the wilayas in 2015, they were informed that each year approximately 3000 to 4000 poisoning cases occur, 40% due to family gatherings and the remaining 60% occurring in collective restaurants.¹⁵ In the latest statistics, an incidence rate of 23.79 cases per 100,000 population was recorded in 2024. p9

Food contamination can occur at any stage, from production, manufacturing, storage, and canning, due to lack of hygiene conditions or laxity in taking precautions, often due to the scarcity of sufficient water for cleaning, especially among families or restaurants during feasts and weddings, particularly in the summer season.

Table No. (02): Shows waterborne diseases:

Diseases	years (Rate par 100.000 population)					
	1990	1995	2000	2004	2012	2014
Typhoid	17.62	15.08	8.52	3.75	0.62	0.31
Cholera	6.6	0.018	0	0	0	0
Viral Hepatitis	15.69	11.85	8.94	6.56	-	-
Food Poisoning	-	-	-	22.8	12.38	15.45

Source: Table prepared by the researcher for the years (2014, 2012, 2004) based on the article by Leila Houti and Saada Chougrani (cahiers de crasc)

5.1.3. Zoonotic Diseases (Transmitted via Animals):

Leishmaniasis is among the most prominent common zoonotic diseases, and its most widespread type is cutaneous leishmaniasis, which is also common in Algeria. The incidence rate of this disease in 2010 was 58.93 cases per 100,000 population, while in 2024 an incidence rate of 26.76 cases per 100,000 population was recorded.¹⁶

Regarding dysentery, which causes severe diarrhea, the incidence rate in 2000 was 8.65 cases per 100,000 population. In 2010, it decreased significantly to 1.57 cases per 100,000 population, and the latest statistics for 2024 recorded a rate of 0.23 cases per 100,000 population.⁽¹⁷⁾

For brucellosis, an incidence rate of 10.97 cases per 100,000 population was recorded in 2000. In 2004, the rate rose to 12 cases per 100,000 population, and in 2014, a rate of 14.15 cases per 100,000 population was recorded.

Table No. (03): Shows zoonotic diseases:

Diseases	years (Rate par 100.000 population)					
	1990	1995	2000	2004	2012	2014
Leishmaniasis	8.39	5.4	14.44	46.31	45.39	11.62
Brucellosis	0.66	9.3	10.97	10.99	12	14.15

Source: Table prepared by the researcher for the years (2014, 2012, 2004) based on the article by Leila Houti and Saada Chougrani (cahiers de crasc)

5.2. Non-Communicable Diseases:

As for non-communicable diseases, including cardiovascular diseases, according to the World Health Organization, they have now become major public health problems in both developing and industrialized countries alike. With general progress in socio-economic development, an increase in victims of cardiovascular diseases is expected to follow.

5.2.1. Heart Diseases:

Hypertension is "the most prevalent cardiovascular disease, affecting the majority of the world's population, including Algeria. Arterial hypertension means a chronic elevation of systolic pressure, diastolic pressure, or both. The higher the arterial blood pressure, whether systolic or diastolic, the greater the risk of cardiovascular diseases and the resulting mortality rate in all age groups and both sexes".⁽¹⁸⁾

In Algeria, "statistics show that one-third of Algerians suffer from hypertension, i.e., nearly 7 million people. Data indicate that this disease, labeled the silent killer, is affecting more and more young people." ⁽¹⁹⁾ In the same context, the Tahina survey revealed earlier in 2007 that 16.23% of people in the 35-70 age group had arterial hypertension. ⁽²⁰⁾ According to data from the Multiple Indicator Cluster Survey 2019-2020 (MICS6), it appears that 20% of the studied sample suffer from chronic diseases.

5.2.2. Diabetes:

Diabetes mellitus, an integral part of non-communicable diseases, exists in both wealthy and developing countries. In Algeria, "diabetes ranked fourth among non-communicable diseases in the 1990 health survey. A study conducted in Constantine wilaya between 1996 and 2000 revealed an incidence of non-insulin-dependent diabetes of 9.1 cases per 100,000 population among those aged 15 years and over. In Setif, 5.4 cases per 100,000 population under 30 were found between 1995 and 1998. For insulin-dependent diabetes, the prevalence rate is between 7 and 8% of the population aged 30 to 65 years". ⁽²¹⁾

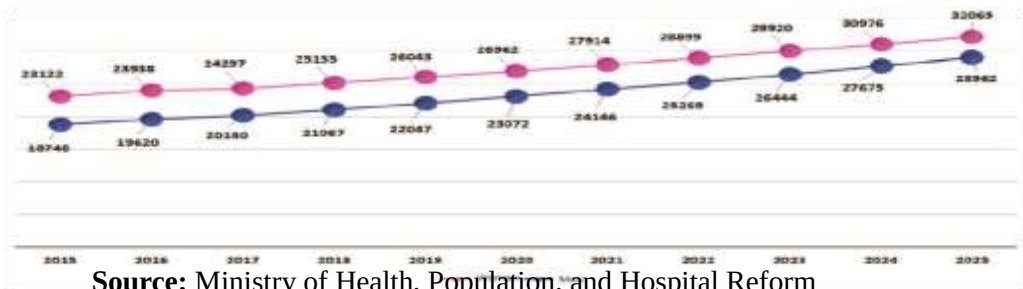
Diabetes poses a real public health problem due to the chronic complications that result from it, such as cardiovascular complications, diabetic foot, chronic renal failure, and retinopathy. According to a survey conducted by the National Institute of Public Health, diabetes ranks fourth among chronic non-communicable diseases. According to surveys conducted in the east and west of the country, the prevalence of type 2 diabetes ranges from 6.4% to 8.2% among people aged 30 to 64 years. In the south, among the Tuareg, it is prevalent in the same age group at 1.3%, confirming the impact of lifestyle and physical activity on the development of the disease. ⁽²²⁾

A WHO study conducted in 2003 in two pilot wilayas (Setif and Mostaganem) among the population aged 25 to 64 years showed a prevalence of 7.1%. Regarding the incidence of type 1 diabetes, it ranges between 8.1 and 11.9 per 100,000 among young people under 15 years old, and 6.11 cases per 100,000 population aged 15-29 in Setif wilaya. ⁽²³⁾ As for the figures reported in the TAHINA study, it was reported that 8.78% of Algerians suffer from diabetes. ⁽²⁴⁾ The latest statistics, from the Multiple Indicator Cluster Survey 2019-2020, recorded a diabetes prevalence rate of 05%. ⁽²⁵⁾

5.2.3. Cancer:

Concerning cancer in Algeria, as part of the country's health planning in 1975, cancer was identified as the seventeenth health problem. It was only in the year 2000 that specialists realized the magnitude of the problem. As an indicator, in 1997 during the regional preparatory conferences for the National Health Conference held in 1998, only one of the country's five health regions, the eastern region, cited cancer as the main health problem. However, it is important to note that the incidence and mortality rates of cancer have seen a rapid and alarming increase in recent years in our country. ⁽²⁶⁾ The Multiple Indicator Cluster Survey 2019-2020 (MICS6) showed that 0.3% of the studied sample suffer from cancer.

Figure No. (02): Estimated trend in the number of cancer cases for the years 2015-2025



Source: Ministry of Health, Population, and Hospital Reform

An increase rate in the incidence of this disease has been observed, moving from 80 new cases per 100,000 population in 1990 to more than 130 new cases per 100,000 population in 2010, and it is expected to progress rapidly to reach 50,000 cases annually. The national survey conducted by the National Institute of Public Health in 2004 on cancer incidence and prevalence revealed 31,000 cancer cases recorded in 2002. It found that only one-third of cancer cases were diagnosed at an early stage, and the remaining two-thirds were at invasive and metastatic stages. ⁽²⁷⁾ Cancer incidence rates in Algeria have increased steadily for 10 years, with nearly 128 new cases per 100,000 men and 132 cases per 100,000 women in 2011. The distribution of cancers by age group highlights the trend observed since registration began: an increase in the number of cases among women at age 39 compared to men at age 49. In addition, a growing number of children and adolescents are affected by cancer. The cancer incidence rate increases each year by 1% in children and 1.5% in adolescents. The most common

forms of cancer in children are those of the hematopoietic system, lymph nodes, brain, bones, and kidneys. Males represent 59.4%, while females represent 58.3% of all childhood cancers.⁽²⁸⁾

5.3. Respiratory Diseases:

Concerning chronic respiratory diseases, especially asthma, which is a very prevalent pathological disorder in Algeria, approximately 600,000 people were recorded as having asthma in 2000, i.e., about 2% of the total population. About 200,000 people suffered from bronchitis and chronic obstructive pulmonary disease in 2000. Therefore, large cities and cities with polluting industries are areas at risk for developing respiratory diseases. Particular mention should be made of the cases of Algiers and Annaba wilayas, given the emission of pollutants in a way that poses a risk to the health of their populations.⁽²⁹⁾

Since the 1990s, Algeria has experienced a rapid and profound demographic shift that has structurally changed the epidemiological profile of its population. This has seen a significant decline and decrease in the general mortality rate, which was divided by 4 within 50 years (from 16.45 per thousand at the end of the 1960s to 4.41 per thousand of the population in 2008). Infant mortality is associated with a gradual increase in life expectancy estimated at 25 years over the past fifty years, leading to a gradual aging of the population, with an increasing number of people over 60 in the age pyramid.⁽³⁰⁾

There are so-called risk factors that increase the likelihood of exposure to diseases upon contact. Among these, we find several, outlined as follows:

1. Smoking:

Tobacco consumption leads to the risk of diseases, particularly heart diseases like hypertension and various forms of cancer, especially lung cancer. In Algeria, according to the Tahina survey, 11.22% of Algerians smoke, with males smoking at a rate of 26.4% compared to females at 0.43%. In 2022, Professor Youcef Tarfani, the official in charge of non-communicable diseases at the General Directorate for Prevention and Health Promotion at the Ministry of Health, stated that there are more than 4 million smokers in Algeria.⁽³¹⁾

However, we believe that these rates do not reflect reality due to the reluctance of many segments of society to admit to smoking, especially

women, because in societal belief, this subject is one of the societal taboos that should be avoided discussing.

2. Alcohol:

According to the World Health Organization, alcohol consumption is a causal factor for more than 200 diseases. Drinking alcohol is associated with the risk of developing health problems such as mental and behavioral disorders, major non-communicable diseases like liver cirrhosis, some types of cancer, and cardiovascular diseases, as well as injuries resulting from violence, road traffic accidents, and collisions. ⁽³²⁾ The proportion of Algerians consuming alcohol, according to the Tahina survey, is estimated at about 6.50%, with prevalence much higher among males compared to females. We reiterate that these numbers also do not reflect the true reality of the nature of Algerian society, which also considers such topics as taboos.

5. Obesity:

Obesity is a risk factor that increases the likelihood of developing diseases. It has a specific index for measurement to determine whether a person suffers from obesity or not. According to Tahina survey data, 21.24% of the population in the 35-70 age group are obese. It is higher among females, recording a rate of 30.08% compared to males at 9.07%. ⁽³³⁾ It is worth noting that Algerian society has witnessed a profound change in collective and individual lifestyle, including an increase in smoking, stress, sedentary lifestyle, urbanization, etc., as well as unbalanced eating habits, such as consumption of fast food, excessive intake of carbohydrates, meat, fats, and soft drinks, and abandonment of traditional foods based on vegetables, in addition to pressures and lack of physical activity. All this increases the likelihood of exposure to non-communicable diseases. Today, these behaviors constitute more than 80% of the causes of diseases and share a number of risk factors, hence the need for a common preventive policy against them.

6. Burden of Mortality:

Previous data show the continued emergence of communicable diseases at significant, though not particularly remarkable, rates, unlike the emergence of non-communicable diseases (cancers, diabetes, cardiovascular diseases, respiratory diseases, neurological and chronic diseases). This foretells the fragility of society's health based on the figures from the surveys.

The burden of these diseases, which require expensive and costly medical care, will increase, placing a double burden on the country, especially on disadvantaged and low-income social groups, in obtaining necessary care. This, in addition to increased pressure on health facilities, all require a new approach to intervention strategies, focusing on redeveloping prevention programs by initiating specific programs for early detection and management of emerging non-communicable diseases. This approach will ultimately limit the disease burden as well as the financial burden related to managing all these diseases.⁽³⁴⁾

On the other hand, mortality rates for non-communicable diseases are rising compared to communicable diseases, as we will see from the data. To further explore the state of the epidemiological transition, we will below reveal mortality rates for communicable and non-communicable diseases. Data on medical causes of death constitute an essential and important source of epidemiological information to determine the characteristics of public health problems at the national level. Therefore, all the figures provided are drawn from national surveys and investigations.

It became clear from the Tahina investigation that 1.3% of all deaths from communicable diseases were caused by measles infection, while tuberculosis, which came in fourth place in this investigation, still claims many lives, causing an estimated 20% of all deaths from communicable diseases, sharing the mortality rate with diarrhea. Among the diseases also is viral hepatitis "B" at a rate of 3.4%. It also showed that meningitis claimed the lives of 4.4% of those infected. However, lower respiratory tract infection ranked first in this regard, with 34.9% of all deaths from communicable diseases.

As for non-communicable diseases, the same investigation conducted in 12 wilayas showed that out of 13,358 deaths recorded in 2002, 7,829 deaths were due to non-communicable diseases, a rate of 58.6%, compared to communicable diseases, which represented 22.7% of total deaths.

It is now known that the risk of death from non-communicable diseases increases with age; half of deaths from these diseases occur after the age of seventy. For deaths of children under five years of age from non-communicable diseases, the mortality rate was estimated at 9.7% of total deaths.

Deaths from cardiovascular diseases represent 44.5% of all deaths from non-communicable diseases and 26% of all recorded deaths, while cancer claims the lives of 16% and 9.4% of all recorded deaths. Mortality rates due to respiratory system disorders and diabetes represent 7.6% and 4.3%, respectively.

The latest report published on the main medical causes of death by the National Institute of Public Health in Algeria shows the distribution of deaths by disease group, classified according to the International Classification of Diseases (ICD-10). It indicates that the main cause of death is cardiovascular diseases, accounting for 21% of total deaths. Perinatal conditions come in second place with nearly 12%. The third main cause of death is neoplasms (tumors) at 11.6%, followed by endocrine diseases at 4.45%. Respiratory diseases account for 6%, and digestive system diseases for 3.2%. External causes of death account for about 5.6%. Ill-defined causes represent 23%. This highlights the importance of continued training for doctors and raising their awareness to improve this important public health indicator. ⁽³⁵⁾

To illustrate the trend in mortality rates from non-communicable diseases, with a focus on the diseases causing death before the 2015-2016 report, we present the following table:

Table No. (04): Shows the trend in mortality rates from some non-communicable diseases

Diseases	years (Rate par 100.000 population)					
	1990	1995	2000	2004	2012	2014
Heart Diseases	17.2	26	22	22	22.3	22.6
Cancer	0.6	9.4	8	9	9	9.3
Respiratory Diseases	-	7.6	6	6	6	5.6
Diabetes	6.9	4.3	-	-	5	5.6

Source: Table prepared by the researcher for the years (2012, 2011, 2010, 2009, 2002) based on the article by Leila Houti and Saada Chougrani

Finally, we note from the foregoing the high incidence rates for most of the diseases discussed in Algeria during the 1990s. Perhaps this was due to the low living conditions in that period generated by the security disturbances and instability causing the high incidence of these diseases, while some attribute it to the shortage of vaccines at that time. Then, the rates for many diseases began to decline after the year 2000, reflecting the beginning of the country's security recovery and economic prosperity at that time, which was

reflected in health coverage rates, in addition to the studies and surveys conducted to understand the reality of diseases and then develop programs to combat them.

7. Conclusion:

In conclusion, it can be acknowledged that Algeria has achieved good levels in health coverage, combating the spread of epidemics and communicable diseases, and establishing policies and programs for the control and treatment of non-communicable diseases, or so-called chronic diseases. All this has directly reflected on the health of citizens, manifesting in an increase in life expectancy. Therefore, the health situation in Algeria can be placed in the third stage of the epidemiological transition, which is characterized by specific diseases or so-called non-communicable diseases such as heart disease, cancer, hypertension, liver diseases, and other diseases termed diseases of urbanization.

An observer of the current health map in Algeria would note that it is adapting to the epidemiological conditions and health reality of the country. However, conversely, there is a need to launch a health policy based on a predictive approach to face health developments, i.e., preventive medicine, in addition to urgently adopting comprehensive digitalization of the sector in light of global epidemiological challenges. Evidence of this was the sudden and rapid spread of the coronavirus epidemic in Algeria and its consequent repercussions on hospitalized patients or those infected who were in dire and urgent need of medical care at that time.

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